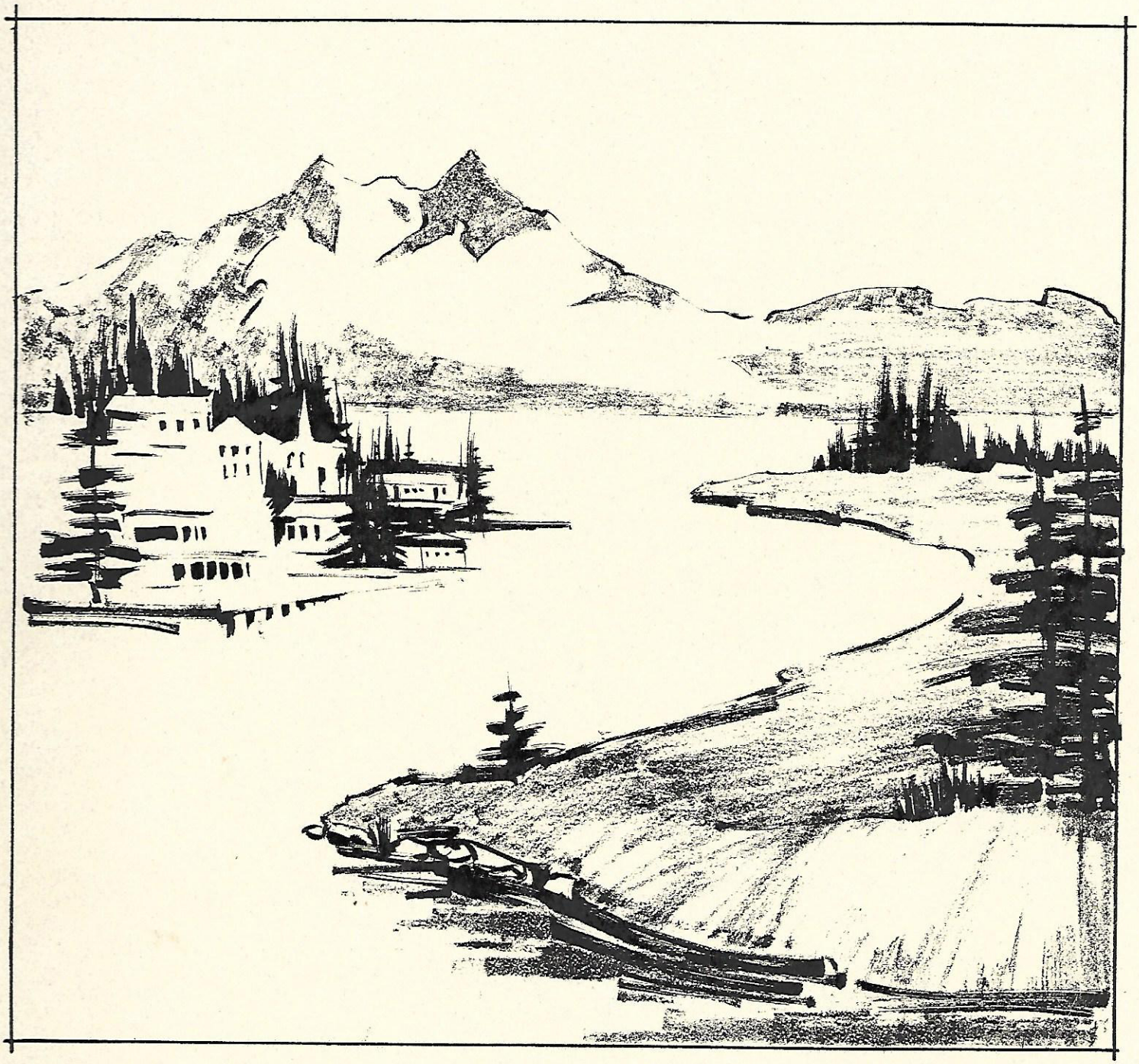

Kitsap County

COMPREHENSIVE PLAN

May 7, 1999
Revised July 21, 1999

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CHAPTER 3: CAPITAL IMPROVEMENTS

CHAPTER 4: IMPLEMENTATION PROGRAMS

EXECUTIVE SUMMARY

The Capital Facilities Plan (CFP) is one of the elements of Kitsap County's comprehensive plan that is required by Washington's Growth Management Act (GMA). *Capital facilities generally* have very long useful lives, significant costs, and are not mobile. The definition of "capital improvement" is given in Policy 1.1.

The focus of the CFP is the planning and provision of needed public facilities for the County's unincorporated and County-wide populations, irrespective of land use patterns. A high priority of the CFP is to provide adequate public facilities to support the adopted level of service (LOS) for each type of capital facility. The County's population base and other demand factors, together with the adopted LOS, is the principal basis for the CFP.

CONTENTS

The CFP Element of the comprehensive plan is presented in four sections:

I.	Introduction	Purpose of the CFP, statutory requirements, methodology.
II.	Goals and Policies	Statements of requirements, level of service standards, guidelines, and criteria that are used to develop and implement the CFP.
III.	Capital Improvements	List of proposed capital projects, including financing plan, and reconciliation of project capacity to level of service standards.
IV.	Implementation Programs	Summary of tools that will be used to implement the CFP.

GROWTH ASSUMPTION

This CFP is based on the following population data:

Year	County-Wide	Unincorporated County
1994	213,200	148,655
2000	248,390	171,492
2012	292,224	190,906

The population forecasts approved by the Kitsap Regional *Coordinating* Council (*KRCC*) for use in complying with the Growth Hearings Board order to revise the Comprehensive Plan by April 3, 1998 were used as the source for capital facilities planning purposes. The DCD/GIS Division of the County's Department of Community Development allocated these population forecasts for 1992 and 2012 to the various public facility areas, and also interpolated a 2000 forecast. The *KRCC* forecasts include the 1992 and 2012 population estimates for each subarea and each

incorporated city. Using the 2/3 urban, 1/3 rural formula, and subtracting city population from the urban portion within each subarea, it was possible to derive the urban, rural, and incorporated portions for each subarea. In order to allocate these forecasts to various service areas referenced in the Capital Facilities Plan (CFP), it was necessary to distribute the population forecasts to the lowest common denominator: the ownership parcel.

CAPITAL COSTS OF KITSAP COUNTY FACILITIES

The cost of County-owned and managed capital improvements for 1995-2000 is:

Type of Facility	1995-2000 Cost (x $1,000)
Corrections Facility	12,000.0
Juvenile Facility	15,947.6
Parks and Recreation	24,715.3
Public Buildings	0.0
Sanitary Sewer	*67,851.0*
Sheriff Offices	883.0
Solid Waste	779.7
Stormwater Management	3,919.2
Transportation	38,654.4
Total	***$164,750.2***

The sources of these capital costs are found in the tables in Chapter 3 of this Plan.

FINANCING FOR KITSAP COUNTY CAPITAL FACILITIES

Pursuant to Policy 2.7 of this Capital Facilities Plan, the six-year Plan will be financed within the County's financial capacity. If the projected funding is inadequate to finance needed capital facilities based on adopted level of service and forecasted growth, adjustments will be made to the level of service, the land use element, the sources of revenue, or any appropriate combination, to achieve a balance between available revenue and needed capital facilities. This policy constitutes Kitsap County's response to the requirement of RCW 36.70A.030 (3)e.

The table below shows the financing plan for these capital improvements, which includes a variety of revenue sources. The table shows the type of revenue source, amount of revenue to be available to pay for project costs, and the type of capital facilities projects to be financed.

Revenue Source	1995-2000 Revenue (x $1,000)	Capital Facility
Existing Revenues:		
G.O. Bond Issue	15,947.6	Law Enforcement
Real Estate Excise Tax	633.0	Law Enforcement
Sale of Property	250.0	Law Enforcement
CFT Bond Issue - 1992*	909.0	Parks and Recreation
New CFT Bond Issue (1997)**	4,529.9	Parks and Recreation
Donation	553.0	Parks and Recreation
General Fund	75.0	Parks and Recreation
IAC Grant	696.0	Parks and Recreation
Impact Fees (Parks)	4,144.5	Parks and Recreation
Impact Fees (Transportation)	1,858.9	Transportation
LTGO 1991-92	726.5	Parks and Recreation
Cash***	*24,567.0*	Sanitary Sewer
Tipping Fee	371.9	Solid Waste
WA Department of Ecology Grant	407.8	Solid Waste
Stormwater Utility Fee	3,919.2	Stormwater
Local Discretionary Revenue****	18,638.4	Transportation
ISTEA - STP	6,489.8	Transportation
Local Assessment	956.0	Transportation
Trust Fund	98.0	Transportation
SEPA	120.0	Transportation
State (RAP, TIA, UATA)	10,493.3	Transportation
Subtotal	*96,384.8*	
New Revenues:		
1/10% Sales Tax	12,000.0	Law Enforcement
IAC Grants	4,353.9	Parks and Recreation
WDFW/IAC Grants	2,000.0	Parks and Recreation
ISTEA Grant	2,000.0	Parks and Recreation
ALEA Grants	300.0	Parks and Recreation
State DNR Grants	300.0	Parks and Recreation
Voted G.O. Bond Issue (Parks)	4,127.5	Parks and Recreation
Revenue Bonds	*43,284.0*	Sanitary Sewer
Subtotal	*68,365.4*	
Total	***$164,750.2***	

* Conservation Futures Property Tax

** Paid for by Existing Conservation Futures Property Tax

*** Includes rates, assessments, current connection fees, contract charges, and surplus revenues, plus future connection fees

**** Local Discretionary Revenues: County Road Tax and Motor Vehicle Fuel Tax

LEVEL OF SERVICE CONSEQUENCES OF THE CFP

The CFP will enable Kitsap County to accommodate 16.5% growth during the next six years, resulting in a County-wide 2000 population of 248,390 people, while increasing the 1994 level of service for the following County-owned public facilities:

Facility	LOS Units	1994 LOS	CFP LOS
Corrections Facility	Beds/1,000 pop.	0.75	1.45
Juvenile Facility	Beds/1,000 pop.	0.108	0.4
Local Parks	Acres/1,000 pop.	1.8	1.83
Open Space	Acres/1,000 pop.	0.0	5.08
Regional Parks	Acres/1,000 pop.	3.79	8.4
Sheriff Offices	Sq Ft/1,000 pop.	121.8	150.9

The level of service for the following facilities will be maintained as a result of the CFP:

Facility	LOS Units	1994 LOS	CFP LOS
Sanitary Sewer	Gals/Day/Connection	250.0	250.0
Solid Waste	Lbs/Person/Day	6.49	6.49
Stormwater Mgt	N/A		
Transportation	N/A		

The level of service for the following facilities will be reduced as a result of the CFP:

Facility	LOS Units	1994 LOS	CFP LOS
Administrative Offices	Sq Ft/1,000 pop.	1,095.0	940.0
Community Centers	Sq Ft/1,000 pop.	304.5	261.3
District Courts	Courtrooms/1,000 pop.	0.019	0.016
Maintenance Building	Sq Ft/1,000 pop.	21.6	18.5
Superior Courts	Courtrooms/1,000 pop.	0.038	0.032
Work Release Facility	Sq Ft/1,000 pop.	46.4.	39.9

CFP ELEMENT SOURCE DOCUMENTS

The source documents primarily used in preparing this Capital Facilities Plan (CFP) are the six-year capital improvement plans prepared routinely, and updated annually as required by the State, and which are necessary for obtaining funding from the State. These individual capital improvement plans define projects and proposed funding for those projects required first to rehabilitate existing facilities and secondly to provide level of service (LOS) capacity to accommodate new growth in the County.

Generally, the proposed new capacity, replacement, and rehabilitation capital facilities and financing for the next six years (1995-2000) reflect the general planning goals and policies, as well as land use infrastructure requirements, identified in longer-range planning documents, including the Land Use Plan, Transportation Plan, Countywide Comprehensive Parks and Recreation Plan, Comprehensive Wastewater for the Cities, and the Wastewater Facilities and Engineering Reports for the County Wastewater Facilities. For example, each of the sewered areas for which the County provides facilities and services has a Wastewater Facilities Plan and Engineering Report that (1) identifies existing facilities, needs for rehabilitation and new capacity facilities, (2) evaluates alternatives to meet those needs, and (3) recommends capital facilities, estimates costs, and funding options. Typically, these plans cover a time period of 20 years for treatment plants and 50 years for sewers.

The CFP planning process described above, combined with the level of service (LOS) methodology used to identify the requirements for, and affordability of future capital facilities constitutes the capital facilities planning process. This process enables the County to make more (1) informed decisions about its investment of public dollars, and (2) timely decisions about maintaining levels of service in accordance with the goals, policies, and implementation programs of this CFP.

LONGER TERM CAPITAL FACILITY NEEDS

The longer term needs for capital facilities are generally addressed in specific agency plans. Many of the responsible agencies do not have plans that extend beyond six years. Capital facility planning has generally been driven by the requirements of funding agencies at the State or Federal level. Each type of capital facility then has a different time frame for planning, and that time frame has to do with funding requirements and the nature of the facilities. The County is not responsible for many of the capital facilities described in this document, but has worked collaboratively to provide the best information possible about the facilities planned and their ability to meet the required levels of service. The following paragraphs describe the planning horizons for each of the types of facilities, the driving forces for planning, and the general status of planning.

County Public Buildings

In general there are no long term planning efforts for providing new county public buildings. The demonstrated need for space occurs after a certain level of overcrowding occurs, at which time there will be a call for a study and possibly the raising of funds to construct the facility.

Fire Protection Facilities

There is no requirement for planning future fire protection facilities. However, most fire districts have ongoing and aggressive programs to obtain equipment and structures to provide a high level of service, rapid response, and effective response. Certain levels of service are defined and the fire districts work hard to maintain or reach these standard levels of service. For a detailed explanation see page 46 of this document.

Law Enforcement Facilities

Planning for the long term capital facilities for law enforcement is similar to the Fire Protection planning. Major facilities such as jails, juvenile facilities, and courts is very much dependent on the moment and responsive to overcrowding conditions. Generally, these facilities are provided as needed after the need is publicly demonstrated. New facilities are designed for a projected twenty- year period based on estimates of at risk population and sentencing history.

Parks and Recreation Facilities

Planning for parks and recreation facilities is restricted to a 6-year window in response to the IAC funding requirements. These plans are updated annually. The capital facility plans are based on attaining nationally set standards for parks per population.

Sanitary Sewer Facilities

Facility plans are developed for the major sewers and treatment facilities on a twenty-year schedule. The permits for these facilities require that planning begin when the facility has reached 85% of its designed capacity. Major sewers are generally designed for a 50-year period due to the major disruption and associated costs of tearing up and replacing sewers.

The sizing of sewers and plants is based on service area population projections provided by the planning arm of the government. Comprehensive sewer plans are upgraded on a twenty-year cycle and depict the detailed sewering of the defined sewer areas. The County is currently using a sewering comprehensive plan prepared in 1970. The County intended to upgrade this plan significantly in the early 1990's. Efforts to upgrade this plan were ended because of the inability of the County to get a valid land use plan that defined areas where sewers could or could not be provided. The County intends to develop a new sewer comprehensive sewer plan as soon as validity is obtained. In the meantime, construction of capital facilities is ongoing in compliance with twenty-year facility plans that serve areas within the UGA's.

The Capital facilities defined in these plans are incorporated into a 6-year Capital Improvement

Plan that is adopted annually by the Board of County Commissioners. Studies of particular areas of concern, such as the health hazard area of Gorst and the economic centers of the Port of Bremerton and surrounding areas are being conducted . Funding is generally by revenue bonds and connection fees. Expenditures shown in the 6-year period of this plan will be paid for over a twenty-year period with user fees and connection fees.

The Cities of Bremerton, Port Orchard, Poulsbo and Bainbridge Island, and the sewer districts are all subject to the same planning requirements. Sewer extensions are not permitted unless they are in a UGA or are addressing a specific health or environmental problem. In these cases, the problems have to be serious before any action is taken. Sewers may be extended to serve an employment area provided the area served is identified in the service providers comprehensive and facility plans and is identified as an urban growth area by the government in whose territory the property lies.

School Facilities

Schools have only recently begun to plan for a 6-year period as a condition of receiving impact fee money. They have always had to project numbers of unhoused students in order to receive state matching funds. Schools are like fire and law enforcement facilities, responsive to urgent needs. Schools are particularly vulnerable because of public referendum funding subject to a 60% voter approval. Planning is facility specific and is designed to provide a State mandated level of service.

Solid Waste Facilities

Solid Waste plans are updated every six years and address a 20-year horizon. These plans address programs as well as capital facilities. The planning effort is rigorous because of the multiplicity of players, regulations, and programs. The County is updating its Solid Waste Plan in 1998. Planning is a requirement of State law and it's conduct is spelled out in detail by the regulations. The goal is to provide a certainty of solid waste reduction, recycling, and removal in a manner conducive to the protection of the public health and the environment. The plan is currently being updated. Capital facility needs are being developed for the year 2001 and beyond.

Storm water Facilities

The first 6-year plan for storm water capital facilities is being produced in 1998. The plan has been adopted and will be updated annually. Capital projects have been identified, costed, and prioritized within the limits of the available funding.

Transportation Facilities

Transportation facilities are addressed in a twenty-year plan and in an annually updated 6-year Transportation Improvements Plan. This planning is conducted using land use, population, and economic data provided by the planning arm of the government. The methodology is spelled out by the funding agencies and adhered to closely by any agency expecting to receive funding. It is

coordinated through the State and regional agencies since the facilities are so interdependent. The results have been reported in volume I.

Water Facilities

All Class 1 water facilities serving 15 people or more are required to prepare a 6-year water comprehensive plan by the State Health Department. In fact, it is only the larger districts that comply. The County has reported on the status of each of these districts and the quantity of water available to their service areas. We are not aware of any longer term plans for any area. There have been studies of groundwater quantity and quality, but no capital facilities plans beyond the 6-year horizon. The water rights dilemma has complicated the ability of any agency to plan in a meaningful way.

CFP ELEMENT SUPPORT DOCUMENTS

Kitsap County's CFP consists of this CFP Element of the comprehensive plan, and one support document:

Revenue Sources for Capital Facilities: Forecasts of each source of revenue that the County can legally use for capital facilities, including sources now in use as well as other sources the County does not now use.

CHAPTER 1

INTRODUCTION

DEFINITION AND PURPOSE OF CAPITAL FACILITIES PLAN

The CFP is a 6-year plan (1995-2000) for capital improvements that support Kitsap County's current and future population and economy. The capital improvements are fully funded (i.e., not a "wish list"). One of the principal criteria for identifying needed capital improvements are standards for levels of service (LOS). The CFP contains LOS standards for each public facility, and requires that new development be served by adequate facilities (i.e., the "concurrency" requirement). The CFP also contains broad goals and specific policies that guide and implement the provision of adequate public facilities.

The purpose of the CFP is to use sound fiscal policies to provide adequate public facilities consistent with the land use element and concurrent with, or prior to the impacts of development in order to achieve and maintain adopted standards for levels of service, and to exceed the adopted standards, when possible.

WHY PLAN FOR CAPITAL FACILITIES?

There are at least three reasons to plan for capital facilities: (1) growth management, (2) good management, and (3) eligibility for grants and loans.

Growth Management

A CFP is required by the GMA. The CFP is one of six required elements of Kitsap County's comprehensive plan:

a. Land Use
b. Housing
c. Transportation
d. Utilities
e. Rural (counties only)
f. Capital Facilities Plan

Capital facilities plans are required in the comprehensive plan in order to:

1. Provide capital facilities for land development that is envisioned or authorized by the land use element of the comprehensive plan.

2. Maintain the quality of life for existing and future development by establishing and maintaining standards for the level of service of capital facilities.

3. Coordinate and provide consistency among the many plans for capital improvements,

including:

- Other elements of the comprehensive plan (i.e., transportation and utilities elements), of the comprehensive plan,
- Master plans and other studies of the local government,
- Plans for capital facilities of state and/or regional significance,
- Plans of other adjacent local governments, and
- Plans of special districts.

4. Insure the timely provision of adequate facilities as required in the GMA.

5. Document all capital projects and their financing (including projects to be financed by impact fees and/or real estate excise taxes that are authorized by GMA).

The CFP is the element that makes the rest of the comprehensive plan "real". By establishing levels of service as the basis for providing capital facilities and for achieving concurrency, the CFP determines the quality of life in the community. The requirement to fully finance the CFP (or revise the land use plan) provides a reality check on the vision set forth in the comprehensive plan. The capacity of capital facilities that are provided in the CFP affects the size and configuration of the urban growth area.

Good Management

Planning for major capital facilities and their costs enables Kitsap County to:

a. demonstrate the need for facilities and the need for revenues to pay for them;

b. estimate future operation/maintenance costs of new facilities that will impact the annual budget;

c. take advantage of sources of revenue (i.e., grants, impact fees, real estate excise taxes) that require a CFP in order to qualify for the revenue; and

d. get better ratings on bond issues when the County borrows money for capital facilities (thus reducing interest rates and the cost of borrowing money).

Eligibility for Grants and Loans

DCTED's Public Works Trust Fund requires that local governments have some type of CFP in order to be eligible for loans. Some other grants and loans have similar requirements, or give preference to governments that have a CFP.

STATUTORY REQUIREMENTS FOR CAPITAL FACILITIES PLANS

The GMA requires the CFP to identify public facilities that will be required during the six years following adoption of the new plan (1995 through 2000). The CFP must include the location and cost of the facilities, and the sources of revenue that will be used to fund the facilities.

RCW 36.70A.070(3)(d) requires the capital facilities plan to include "a six-year plan that will finance such capital facilities within projected funding capacities and clearly identifies sources of public money for such purposes." RCW 36.70A.070(3)(e) requires that all capital facilities have "probable funding" to pay for capital facility needs, or else the County must "reassess the land use element."

Since "reassessing" to increase development would only make the imbalance of funding and needs worse, the law infers that the County must plan for less development so as to match "probable funding" with needed capital improvements. The law does not preclude the County from taking other steps before "reassessing" the land use element, including reduction of level of service standards, reducing the quality of facilities that meet the quantitative standards, or reducing demand by reducing consumption.

In the event that "reassessment" is required for facilities provided by entities other than the County (i.e., fire districts, water districts, sewer districts, school districts, etc.), the County and the special district that provides the facility will collaborate in order to develop an appropriate strategy to enable the County to serve at least the minimum population forecast provided by the State of Washington Office of Financial Management.

Other requirements of the GMA mandate forecasts of future needs for capital facilities, and the use of standards for levels of service of facility capacity as the basis for public facilities contained in the CFP (see RCW 36.70A.020 (12). As a result, public facilities in the CFP must be based on quantifiable, objective measures of capacity, such as traffic volume capacity per mile of road, and acres of park per capita.

One of the goals of the GMA is to have capital facilities in place concurrent with development. This concept is known as concurrency (also called "adequate public facilities"). In Kitsap County, concurrency requires: (1) facilities to serve the development to be in place at the time of development (or for some types of facilities, that a financial commitment is made to provide the facilities within a specified period of time); and (2) such facilities have sufficient capacity to serve development without decreasing levels of service below minimum standards adopted in the CFP.

The GMA requires concurrency for transportation facilities. GMA also requires all other public facilities to be "adequate" (see RCW 19.27.097, 36.70A.020, 36.70A.030, and 58.17.110). Concurrency management procedures will be developed to ensure that sufficient public facility capacity is available for each proposed development.

After the CFP is completed, and adopted as part of the comprehensive plan, the County must adopt development regulations to implement the plan. The development regulations must be

completed within one year of the adoption of the comprehensive plan. The development regulations will provide detailed regulations and procedures for implementing the requirements of the plan.

Each year the CFP must be updated. The annual update will be completed before the County's budget is adopted in order to incorporate the capital improvements from the updated CFP in the County's annual budget.

NEW CAPITAL FACILITIES PLANS (CFP) vs. TRADITIONAL CAPITAL IMPROVEMENTS PROGRAMS (CIP)

Traditional capital improvements programs (which are often "wish lists") will not meet these requirements. Table 1-1 compares traditional CIP's to the new CFP.

Table 1-1: Traditional CFP vs. New CFP

FEATURE OF PLAN	CAPITAL IMPROVEMENTS PROGRAM	CAPITAL FACILITIES PLAN
Which facilities?	None Required	All Facilities Required
What priorities?	Any Criteria (or None)	Level of Service Standards
Financing Required?	Not Required	Financing Plan Required
Implementation Required?	Not Required	Concurrency Required For All Facilities

There are traditional and non-traditional approaches to developing capital facilities plans. Two traditional approaches (used to develop CIP's) are: (1) needs-driven, and (2) revenue-driven.

1. Needs-driven: first develop needed capital projects, then try to finance them. This approach is sometimes called a "wish list."

2. Revenue-driven: first determine financial capacity, then develop capital projects that do not exceed available revenue. This approach is called "financially constrained."

Because of the non-traditional requirements of capital facilities planning under the GMA, the traditional approaches to developing capital improvements can cause problems.

The needs-driven approach may exceed the County's capacity to pay for the projects. If the County cannot pay for the facilities it needs to achieve the level of service standards that it adopted, the County must impose a moratorium in order to comply with the concurrency requirement.

The revenue-driven approach may limit the County to capital projects that provide a lower level of service than the community desires. The County may be willing to raise more revenue if it knows that the financial constraints of existing revenues limit the levels of service.

A hybrid approach that overcomes these problems is: (3) scenario-driven.

3. Scenario-driven: develop two or more scenarios using different assumptions about needs (levels of service) and revenues. Use the scenarios to identify the best combination of level of service and financing plan.

The development of multiple scenarios allows the community and decisionmakers to review more than one version of the County's future. Each version is like a choice on a menu in a restaurant: the most desirable choices are often the most expensive, and the most affordable choices are often not as appealing.

The same is true with the County's CFP: the highest levels of service provide the best quality of life, but the greatest cost (and the greatest risk of a development moratorium if the cost is not paid), while the lowest cost provide less desirable quality of life. The scenario-driven approach enables the County to balance its desire for high levels of service with its willingness and ability to pay for those levels of service.

Other advantages of the scenario-driven approach include:

- Helping the County analyze which approach achieves the best balance among GMA goals;
- Helping prepare analyses required by SEPA (State Environmental Protection Act; and
- Evaluating scenarios for the Land Use Element.

The scenario-driven approach also provides a non-traditional method of policy development. The other approaches begin by setting policies (i.e., needs or revenues) then building a plan to implement the policies. The scenario-driven approach uses alternative potential policy assumptions as the basis for different scenarios.

The establishment of County policies is accomplished by reviewing all scenarios. Then, the Board of County Commissioners selects the preferred scenario, and then the policies are written that will implement the preferred scenario.

The scenarios are used to test alternative policies, and lead to selection of the policy that the community believes they can achieve. The formal language of policies is written after the

scenarios are evaluated and the preferred scenarios (and accompanying policies) have been identified.

LEVEL OF SERVICE (SCENARIO-DRIVEN) METHOD FOR ANALYZING CAPITAL FACILITIES

Explanation of Levels of Service

Levels of service are usually quantifiable measures of the amount of public facilities that are provided to the community. Levels of service may also measure the quality of some public facilities.

Typically, measures of levels of service are expressed as ratios of facility capacity to demand (i.e., actual or potential users). Figure 2 lists examples of levels of service measures for some capital facilities:

Each of these level of service measures needs one additional piece of information: The specific quantity that measures the current or proposed level of service. For example, the *standard* for parks might be 5 acres per 1,000 population, but the *current* level of service may be 2.68 acres per 1,000, which is less than the standard.

In order to make use of the level of service method, the County selects the way in which it will measure each facility (i.e., acres, gallons, etc.), and it identifies the amount of the current and proposed (i.e., standard) level of service for each measurement.

There are other ways to measure the level of service of many of these capital facilities. The examples in Figure 2 are provided in order to give greater depth to the following discussion of the use of levels of service as a method for determining the County's need for capital facilities.

Table 1-2: Sample Level of Service Measurements

Type of Capital Facility	Sample Level of Service Measure
Corrections	Beds per 1,000 population
Fire and Rescue	Average response time
Hospitals	Beds per 1,000 population
Law Enforcement	Officers per 1,000 population
Library	Collection size per capita
	Building square feet per capita
Parks	Acres per 1,000 population
Roads and Streets	Ratio of actual volume to design capacity
Schools	Students per Classroom
Sewer	Gallons per customer per day
	Effluent quality
Solid Waste	Tons (or cubic yards) per capita or per customer
Surface Water & River Levees	Design storm (i.e., 100-year storm)
	Runoff water quality
Transit	Ridership
Water	Gallons per customer per day
	Water quality

Method for Using Levels of Service

The level of service method answers two questions in order to develop a financially feasible CFP. The GMA requires the CFP to be based on standards for service levels that are measurable and financially feasible for the six fiscal years following adoption of the plan. The County is required to adopt its plan to meet its capital needs for the fiscal years 1995 through 2000.

There are two questions that must be answered in order to meet the GMA requirements:

1. What is the quantity of public facilities that will be required by the end of the 6th

2. Is it financially feasible to provide the quantity of facilities that are required by the end of the 6th year (i.e., 2000)?

The answer to each question can be calculated by using objective data and formulas. Each type of public facility is examined separately (i.e., roads are examined separately from parks). The costs of all the types of facilities are then added together in order to determine the overall financial feasibility of the CFP.

The method is displayed, as follows:

Question 1. What is the quantity of public facilities that will be required by the end of the 6th year (i.e., 2000)?

Formula 1.1: Demand X Standard = Requirement

Where Demand is the estimated 2000 population or other appropriate measure of need (i.e., dwelling units),

and Standard is the amount of facility per unit of demand (i.e., acres of park per capita)

The answer to this formula is the total amount of public facilities that are needed, regardless of the amount of facilities that are already in place and being used by the public.

Formula 1.2: Requirement - Inventory = Surplus or Deficiency

Where Requirement is the result of Formula 1.1,

and Inventory is the quantity of facilities available as of December 31, 1993 (the beginning of the six years covered by the plan).

This formula uses the inventory of existing public facilities, plus facilities that were completed by December 31, 1994, to offset the total requirement of Formula 1.1. The answer to Formula 1.2 is the net surplus of public facilities, or the net deficit that must be eliminated by additional facilities before December 31, 2000. If a net deficiency exists, it represents the combined needs of existing development and anticipated new development. Detailed analysis will reveal the portion of the net deficiency that is attributable to current development compared to the portion needed for new development (see the CFP support document "Capital Facilities Requirements" for the delineation between current development and new development).

Question 2. Is it financially feasible to provide the quantity of facilities that are required by the end of the 6th year (i.e., 2000)?

A "preliminary" answer to Question 2 is prepared in order to test the financial feasibility of tentative or proposed standards of service. The preliminary answers use "average costs" of facilities, rather than specific project costs. This approach avoids the problem of developing detailed projects and costs that would be unusable if the standard proved to be financially infeasible. If the standards are feasible at the preliminary level, detailed projects are prepared for the "final" answer to Question 2. If, however, the preliminary answer indicate that a standard of service is not financially feasible, six options are available to the County:

1. Reduce the standard of service, which will reduce the cost, or

2. Increase revenues to pay for the proposed standard of service (higher rates for existing revenues, and/or new sources of revenue), or

3. Reduce the average cost of the public facility (i.e., alternative technology or

alternative ownership or financing), thus reducing the total cost, and possibly the quality, or

4. Reduce the demand by restricting population (i.e., revise the land use element), which may cause growth to occur in other jurisdictions, or

5. Reduce the demand by reducing consumption (i.e., transportation demand management techniques, recycling solid waste, water conservation, etc.) which may cost more money initially, but may save money later, or

6. Any combination of options 1-5.

The preliminary answer to Question 2 is prepared using the following formulas (P = preliminary):

Formula 2.1P:	Deficiency	X	Average Cost per Unit	=	Deficiency Cost

Where Deficiency is the Result of Formula 1.2,

and Average Cost/Unit is the usual cost of one unit of facility (i.e., mile of road, acre of park)

The answer to Formula 2.1P is the approximate cost of eliminating all deficiencies of public facilities, based on the use of an "average" cost for each unit of public facility that is needed.

Formula 2.2P:	Deficiency Cost	-	Revenue	=	Net Surplus or Deficiency

Where Deficiency Cost is the result of Formula 2.1P,

and Revenue is the money currently available for public facilities.

The result of Formula 2.2P is the preliminary answer to the test of financial feasibility of the standards of service. A surplus of revenue in excess of cost means the standard of service is affordable with money remaining (the surplus), therefore the standard is financially feasible. A deficiency of revenue compared to cost means that not enough money is available to build the facilities, therefore the standard is not financially feasible. Any standard that is not financially feasible will need to be adjusted using the 6 strategies listed above.

The "final" demonstration of financial feasibility uses detailed costs of specific capital projects in lieu of the "average" costs of facilities used in the preliminary answer, as follows (F = final):

Formula 2.1F:	Capacity Projects	+	Non-capacity Projects	=	Project Cost

Where Capacity Projects is the cost of all projects needed to eliminate the deficiency for existing and future development (Formula 1.2), including upgrades and/or expansion of existing facilities as well as new facilities,

and Non-capacity Projects is the cost of remodeling, renovation or replacement

needed to maintain the inventory of existing facilities.

Formula 2.2F:	Project Cost	-	Revenue	=	Net Surplus or Deficiency

Where Project Cost is the result of Formula 2.1F,

and Revenue is the money available for public facilities from current/proposed sources.

The "final" answer to Question 2 validates the financial feasibility of the standards for levels of service that are used for each public facility in the CFP and in the other elements of the comprehensive plan. The financially feasible standards for levels of service and the resulting capital improvement projects are used as the basis for policies and implementation programs in the final Capital Facilities Plan.

Setting the Standards for Levels of Service (LOS)

Because the need for capital facilities is largely determined by the LOS that are adopted, the key to influencing the CFP is to influence the selection of the level of service standards. Level of service standards are measures of the quality of life of the community. The standards should be based on the community's vision of its future and its values. Traditional approaches to capital facilities planning rely on technical experts (i.e., staff and consultants) to determine the need for capital improvements. In the scenario-driven approach, these experts play an important advisory role, but they do not control the determination. Their role is to define and implement a process for the review of various scenarios, to analyze data and make suggestions based on technical considerations.

An individual has many opportunities to influence the LOS (and other aspects of the Growth Management Plan). These opportunities include attending and participating in meetings, writing letters, responding to surveys or questionnaires, joining organizations that participate in the CFP process, being appointed/elected to an advisory group, making comments/ presentation/ testimony at the meetings of any group or government agency that influences the LOS decision and giving input during the SEPA review process.

In the future, the scenario-driven approach to developing the level of service standards will provide decision-makers and anyone else who wishes to participate with a clear statement of the outcomes of various levels of service for each type of public facility. This approach reduces the tendency for decisions to be controlled by expert staff or consultants, and opens up the decision-making process to the public and advisory groups, and places the decisions before the County Commission.

Selection of a specific level of service to be the "adopted standard" should be accomplished by a 10-step process:

(1) The "current" actual level of service is calculated.

(2) Departmental service providers are given national/regional standards or guidelines and examples of local LOS from other local governments.

(3) Departmental service providers research local standards from County studies, master plans, ordinances and development regulations.

(4) Departmental service providers recommend a standard for the County's CFP.

(5) The first draft of the Capital Facilities Requirements support document will forecast needed capacity and approximate costs of two levels of service (e.g., the actual LOS, and the department's recommended LOS)

(6) The County Commission reviews and comments on the first draft Capital Facilities Requirements report.

(7) Departmental service providers prepare specific capital improvements projects to support the LOS (unless the County Commission indicates an interest in a different LOS for the purpose of preparing the first draft CFP).

(8) The first draft CFP is prepared using the current LOS (unless the County Commission indicates an interest in a different LOS). The LOS in the first draft CFP serves as the basis of capital projects, their costs, and a financing plan necessary to pay for the costs.

(9) The draft CFP is reviewed/discussed during County Commission-Planning Commission joint workshop(s) prior to formal reading/hearing of CFP by the County Commission.

(10) The County Commission formally adopts levels of services as part of the CFP.

The final standards for levels of service are adopted in Policy 1.3. The adopted standards (1) determine the need for capital improvements projects (see Policy 1.4 and the Capital Improvements section) and (2) are the benchmark for testing the adequacy of public facilities for each proposed development pursuant to the "concurrency" requirement (see Policy 3.3). The adopted standards can be amended, if necessary, once each year as part of the annual amendment of the comprehensive plan.

CHAPTER 2

GOALS AND POLICIES

PUBLIC FACILITY NEEDS

Goal 1 Define types of public facilities, establish standards for levels of service for each type of public facility, and determine what capital improvements are needed in order to achieve and maintain the standards for existing and future populations, and to repair or replace existing public facilities.

Policy 1.1 Definitions The following definitions apply throughout this Capital Facilities Plan.

1.1.1 "Capital improvement" means land, improvements to land, structures (including design, permitting, and construction), initial furnishings and selected equipment. Capital improvements have an expected useful life of at least 10 years. Other "capital" costs, such as motor vehicles and motorized equipment, computers and office equipment, office furnishings, and small tools are considered to be minor capital expenses in the County's annual budget, but such items are not "capital improvements" for the purposes of the Comprehensive Plan, or the issuance of development permits.

1.1.2 "Category of public facilities" means a specific group of public facilities, as follows:

1.1.2.a Category A public facilities are facilities owned or operated by Kitsap County and subject to the requirement for concurrency.

1.1.2.b Category B public facilities are facilities owned or operated by Federal, State, or City governments, independent districts, or private organizations and subject to the requirement for concurrency.

1.1.2.c Category C public facilities are facilities owned or operated by Kitsap County but not subject to the requirement for concurrency.

1.1.2.d Category B public facilities are facilities owned or operated by Federal, State, or City governments, independent districts, or private organizations but not subject to the requirement for concurrency.

1.1.3 "Development permit" means any document granting, or granting with conditions, an application for a land use designation or redesignation, zoning or rezoning, subdivision plat, short plat, site plan, building permit, special exception, variance, or any other official action of the County having the effect of authorizing the development of land.

1.1.3.a "Final development permit" means a building permit, site plan approval, final subdivision approval, short subdivision approval, variance, or any other development

permit which results in an immediate and continuing impact upon public facilities.

1.1.3.b "Preliminary development permit" means a land use designation or redesignation, zoning or rezoning, or subdivision preliminary plat.

1.1.4 "Effective date" means

1.1.5 "Public facility" means the capital improvements and systems of each of the following:

1.1.5 a Communications (CENCOM)
1.1.4.b Community centers
1.1.4.c Corrections facilities
1.1.4.d County buildings
1.1.4.e Courts (Superior/District)
1.1.4.f Fire protection and emergency medical services
1.1.4.g Parks
1.1.4.h Roads
1.1.4.i Sanitary sewer
1.1.4.j Schools
1.1.4.k Solid waste
1.1.4.l Surface water management
1.1.4.m Water

Policy 1.2 Application of Standards The County shall establish standards for levels of service for Categories A, B C and D of public facilities, and shall apply the standards as follows:

1.2.1 Category A. The standards for levels of service of each type of public facility in Category A shall apply to development permits issued by the County after April 3, 1998 (as described in Policy 3.3), the County's annual budget beginning with the 1999 fiscal year , the County's Capital Improvements Program beginning with the 1999 fiscal year , and other elements of this Comprehensive Plan.

1.2.2 Category B. The standards for levels of service of each type of public facility in Category B shall apply to development permits issued by the County after April 3, 1998 (as described in Policy 3.3), and other elements of this Comprehensive Plan. Category B public facilities are provided by entities other than Kitsap County, therefore the standards for levels of service shall not apply to the County's annual budget or the County's Capital Improvements Program, however the standards for levels of service shall apply to the annual budgets and Capital Improvements Programs of the entities which provide the public facilities.

1.2.3 Category C. The standards for levels of service of each type of public facility in Category C shall not apply to the concurrency management system as set forth in Policy 3.3, however the standards for levels of service shall apply to the County's annual budget beginning with the 1999 fiscal year , the County's Capital improvements Program beginning with the 1999 fiscal year , GMA and other statutory requirements (i.e., GMA Planning Goal 12, Subdivision Approvals, Impact Fees), regarding the provision of appropriate and adequate public facilities, and other

elements of the Comprehensive Plan.

1.2.4 Category D. The standards for levels of service of each type of public facility in Category D shall not apply to the concurrency management system as set forth in Policy 3.3. Category D Public facilities are provided by entities other than Kitsap County, therefore the standards for levels of service shall not apply to the County's annual budget or the County's Capital Improvements Program, however the standards for levels of service shall apply to the annual budgets and Capital Improvements Programs of the entities which provide the public facilities, GMA and other statutory requirements (i.e., GMA Planning Goal 12, Subdivision Approvals, Impact Fees) regarding the provision of appropriate and adequate public facilities, and other elements of the Comprehensive Plan.

Policy 1.3 Standards for Levels of Service The standards for levels of service of public facilities shall be as follows ("per person" or "per 1,000 population" means population of the jurisdiction that provides the public facility, unless otherwise indicated). The County may create separate standards for levels of service in the urban and rural areas of the County.

1.3.1 Category A Public Facilities

1.3.1.a Roads (Local)

Principal Arterials: Maximum V/C Ratio/LOS
Urban: .89/D
Rural : .79/C

Minor Arterial
Urban: .89/D
Rural : .79/C

Collector
Urban: .89/D
Rural : .79/C

Minor Collector
Urban: .89/D
Rural : .79/C

Residential/Local
Urban: .79/C
Rural : .79/C

1.3.2 Category B Public Facilities

1.3.2.a Roads (State)

Principal Arterials: Maximum V/C Ratio/LOS
Urban: .89/D
Rural : .79/C

Minor Arterial
Urban: .89/D
Rural : .79/C

1.3.3 Category C Public Facilities

1.3.3.a Community Centers:
261.3 square feet per 1,000 population

1.3.3.b Corrections Facilities:
Adult Jail Facility
--1.45 beds per 1,000 population
Work Release Facility
--39.9 square feet per 1,000 population
Juvenile Facility
--0.4 beds per 1,000 population

1.3.3.c County Buildings:
Administrative Offices - General Government
--940 square feet per 1,000 population
Administrative & Operations Offices - Sheriff
--151 square feet per 1,000 population
Maintenance Shop Facilities
--18.5 square feet per 1,000 population

1.3.3.d Courts:
District Court
--0.016 courtrooms per 1,000 population
Superior Court
--0.032 courtrooms per 1,000 population

1.3.3.e Parks:
Local Parks
--1.83 acres per 1,000 population.
Regional Parks
--8.4 acres per 1,000 population
Open Space
--5.08 acres per 1,000 population

1.3.3.f Sanitary Sewer (County-owned)
Wastewater Flow: 250 gallons per day per connection

1.3.3.g Solid Waste:
Generation Rate: 6.49 pounds per capita per day

1.3.3.h Surface Water Management:
Stormwater Management (quality)
--WSDOE Stormwater Management Manual for the Puget Sound Basin
Flood Control (quantitative design storm)
--WSDOE Stormwater Management Manual for the Puget Sound Basin

1.3.4 Category D Public Facilities

1.3.4.a Fire and Emergency Medical Services:
Fire District 1 (Silverdale):
--0.410 fire units in service per 1,000 population
Fire District 7 (South Kitsap):
--0.559 fire units in service per 1,000 population
North Kitsap Fire & Rescue:
--0.467 fire units in service per 1,000 population
Fire District 12 (Central Kitsap):
--0.916 fire units in service per 1,000 population
Fire District 14 (Hansville):
--1.28 fire units in service per 1,000 population
Fire District 15 (Brownsville):
--0.448 fire units in service per 1,000 population
Fire District 18 (North Kitsap/Poulsbo):
--0.497 fire units in service per 1,000 population

1.3.4.b Sanitary Sewer:
Bremerton Municipal Utilities:
--200 gallons per day per connection
Sewer District 5:
--200 gallons per day per connection
Kingston Sewer District:
--250 gallons per day per connection
Manchester ULID:
--250 gallons per day per connection
Suquamish ULID:
--250 gallons per day per connection
ULID 6:
--200 gallons per day per connection
Central Kitsap:
--250 gallons per day per connection

1.3.4.c School District facilities:
North Kitsap School District No 400:
--Elementary: 25 students per classroom
--Secondary: 25 students per classroom
--Senior: 25 students per classroom
Central Kitsap School District No 401:
--Elementary: 25 students per classroom
--Secondary: 28 students per classroom
--Senior: 28 students per classroom
South Kitsap School District No 402:
--Elementary: 26 students per classroom

--Secondary: 29 students per classroom
--Senior: 29 students per classroom
Bremerton School District No 100:
--Elementary: 23 students per classroom
--Secondary: 32 students per classroom
--Senior: 32 students per classroom

1.3.4.d Water:
Annapolis :
--800 gallons per day per connection
Bella Vista (PUD #1) :
--800 gallons per day per connection
Cedar Glen MHP:
--800 gallons per day per connection
City of Bremerton :
--800 gallons per day per connection
City of Port Orchard :
--800 gallons per day per connection
City of Poulsbo :
--800 gallons per day per connection
Dawn Park Water :
--800 gallons per day per connection
Erland Point (PUD #1) :
--800 gallons per day per connection
Edgewater (PUD #1) :
--800 gallons per day per connection
Eldorado Hills (PUD #1) :
--800 gallons per day per connection
Frog Pond Water :
--800 gallons per day per connection
Gamblewood (PUD #1) :
--800 gallons per day per connection
Hansville :
--800 gallons per day per connection
Horizon West (Harbor Water) :
--800 gallons per day per connection
Indianola :
--800 gallons per day per connection
Island Lake :
--800 gallons per day per connection
Jefferson Beach :
--800 gallons per day per connection
Keyport Water District :
--800 gallons per day per connection
Kingston :
--800 gallons per day per connection

Long Lake View Estates :
--800 gallons per day per connection
Manchester :
--800 gallons per day per connection
McCormick Woods :
--800 gallons per day per connection
Miller Bay Estates (PUD #1) :
--800 gallons per day per connection
North Perry Avenue :
--800 gallons per day per connection
Parkview Terrace (Harbor Water) :
--800 gallons per day per connection
Rocky Point :
--800 gallons per day per connection
Silverdale :
--800 gallons per day per connection
Sunnyslope :
--800 gallons per day per connection
Suquamish (PUD #1) :
--800 gallons per day per connection
Tahuyeh Community Club :
--800 gallons per day per connection
Tracyton :
--800 gallons per day per connection
Wicks Lake (Harbor Water) :
--800 gallons per day per connection

Policy 1.4 Determining Public Facility Needs The County shall determine the quantity of capital improvements that is needed as follows:

1.4.1 The quantity of capital improvements needed to eliminate existing deficiencies and to meet the needs of future growth shall be determined for each public facility by the following calculation: $Q = (S \times D) - I$.

Where Q is the quantity of capital improvements needed,
S is the standard for level of service,
D is the demand, such as the population, and
I is the inventory of existing facilities.

The calculation shall be used for existing demand in order to determine existing deficiencies. The calculation shall be used for projected demand in order to determine needs of future growth. The estimates of projected demand shall account for demand that is likely to occur from previously issued development permits as well as future growth.

1.4.2 There are two circumstances in which the standards for levels of service are not the exclusive determinant of need for a capital improvement:

1.4.2.a Repair, remodeling, renovation, and replacement of obsolete or worn out facilities shall be determined by the County Commission upon the recommendation of the Director of Public Works.

1.4.2.b Capital improvements that provide levels of service in excess of the standards adopted in this Comprehensive Plan may be constructed or acquired at any time as long as the following conditions are met:

1.4.2.b.(1) the capital improvement does not make financially infeasible any other capital improvement that is needed to achieve or maintain the standards for levels of service adopted in this Comprehensive Plan, and

1.4.2.b.(2) the capital improvement does not contradict, limit or substantially change the goals and policies of any element of this Comprehensive Plan, and

1.4.2.b.(3) one of the following conditions is met:

1.4.2.b.(3)(a) the excess capacity is an integral part of a capital improvement that is needed to achieve or maintain standards for levels of service (i.e., the minimum capacity of a capital project is larger than the capacity required to provide the level of service), or

1.4.2.b.(3)(b) the excess capacity provides economies of scale making it less expensive than a comparable amount of capacity if acquired at a later date, or

1.4.2.b.(3)(c) the asset acquired is land that is environmentally sensitive, or designated by the County as necessary for conservation, or recreation, or

1.4.2.b.(3)(d) the excess capacity is part of a capital project financed by general obligation bonds approved by referendum.

Policy 1.5 Priorities The relative priorities among capital improvements projects are as follows:

1.5.1 Priorities Among Types of Public Facilities. Legal restrictions on the use of many revenue sources limit the extent to which types of facilities compete for priority with other types of facilities because they do not compete for the same revenues. All capital improvements that are necessary for achieving and maintaining a standard for levels of service adopted in this Comprehensive Plan are included in the financially feasible schedule of capital improvements contained in this Capital Facilities Plan. The relative priorities among types of public facilities (i.e., roads, sanitary sewer, etc.) were established by adjusting the standards for levels of service and the available revenues until the resulting public facilities needs became financially feasible. This process is repeated with each update of the Capital Facilities Plan, thus allowing for changes in priorities among types of public facilities.

1.5.2 Priorities of Capital Improvements Within a Type of Public Facility. Capital improvements

within a type of public facility are to be evaluated on the following criteria and considered in the order of priority listed below. The County shall establish the final priority of all capital facility improvements using the following criteria as general guidelines. Any revenue source that cannot be used for a high priority facility shall be used beginning with the highest priority for which the revenue can legally be expended.

1.5.2.a Reconstruction, rehabilitation, remodeling, renovation, or replacement of obsolete or worn out facilities that contribute to achieving or maintaining standards for levels of service adopted in this Comprehensive Plan.

1.5.2.b New or expanded facilities that reduce or eliminate deficiencies in levels of service for existing demand. Expenditures in this priority category include equipment, furnishings, and other improvements necessary for the completion of a public facility (i.e., recreational facilities and park sites).

1.5.2.c New public facilities, and improvements to existing public facilities, that eliminate public hazards if such hazards were not otherwise eliminated by facility improvements prioritized according to Policies a or b, above.

1.5.2.d New or expanded facilities that provide the adopted levels of service for new development and redevelopment during the next six fiscal years, as updated by the annual review of this Capital Facilities Plan. The County may acquire land or right-of-way in advance of the need to develop a facility for new development. The location of facilities constructed pursuant to this Policy shall conform to the Land Use Element, and specific project locations shall serve projected growth areas within the allowable land use categories. In the event that the planned capacity of public facilities is insufficient to serve all applicants for development permits, the capital improvements shall be scheduled to serve the following priority order:

1.5.2.d.(1) previously approved permits for redevelopment,
1.5.2.d.(2) previously approved permits for new development,

1.5.2.d.(3) new permits for redevelopment, and

1.5.2.d.(4) new permits for new development.

1.5.2.e Improvements to existing facilities, and new facilities that significantly reduce the operating cost of providing a service or facility, or otherwise mitigate impacts of public facilities on future operating budgets.

1.5.2.f New facilities that exceed the adopted levels of service for new growth during the next six fiscal years by either

1.5.2.f.(1) providing excess public facility capacity that is needed by future growth beyond the next six fiscal years, or

1.5.2.f.(2) providing higher quality public facilities than are contemplated in the County's normal design criteria for such facilities.

1.5.2.g Facilities not described in Policies a through f, above, but which the County is obligated to complete, provided that such obligation is evidenced by a written agreement the County executed prior to the adoption of this Comprehensive Plan.

1.5.3 All facilities scheduled for construction or improvement in accordance with this Policy shall be evaluated to identify any plans of State or local governments or districts that affect, or will be affected by, the proposed County capital improvement.

1.5.4 Project evaluation may also involve additional criteria that are unique to each type of public facility, as described in other elements of this Comprehensive Plan.

FINANCIAL FEASIBILITY

Goal 2 Provide needed public facilities that are within the ability of the County to fund the facilities, or within the County's authority to require others to provide the facilities.

Policy 2.1 Financial Feasibility The estimated costs of all needed capital improvements shall not exceed conservative estimates of revenues from sources that are available to the County pursuant to current statutes, and which have not been rejected by referendum, if a referendum is required to enact a source of revenue. Conservative estimates need not be the most pessimistic estimate, but cannot exceed the most likely estimate.

Policy 2.2 Financial Responsibility Existing and future development shall both pay for the costs of needed capital improvements.

2.2.1 Existing development.

2.2.1.a Existing development shall pay for the capital improvements that reduce or eliminate existing deficiencies, some or all of the replacement of obsolete or worn out facilities, and may pay a portion of the cost of capital improvements needed by future development.

2.2.1.b Existing development's payments may take the form of user fees, charges for services, special assessments and taxes.

2.2.2 Future development

2.2.2.a Future development shall pay its fair share of the capital improvements needed to address the impact of such development, and may pay a portion of the cost of the replacement of obsolete or worn out facilities. Upon completion of construction, "future" development becomes "existing" development, and shall contribute to paying the costs of the replacement of obsolete or worn out facilities as described in Policy 2.2.1.a, above.

2.2.2.b Future development's payments may take the form of, but are not limited to,

voluntary contributions for the benefit of any public facility, impact fees, mitigation payments, capacity fees, dedications of land, provision of public facilities, and future payments of user fees, charges for services special assessments and taxes. Future development shall not pay impact fees for the portion of any public facility that reduces or eliminates existing deficiencies.

2.2.3 Both existing and future development may have part of their costs paid by grants, entitlements or public facilities from other levels of government and independent districts.
Policy 2.3 Financing Policies Capital improvements shall be financed, and debt shall be managed as follows:

2.3.1 Capital improvements financed by County enterprise funds (i.e., sanitary sewer, solid waste, surface water management) shall be financed by:

2.3.1.a debt to be repaid by user fees and charges and/or connection or capacity fees for enterprise services, or

2.3.1.b current assets (i.e., reserves, equity or surpluses, and current revenue, including grants, loans, donations and interlocal agreements), or

2.3.1.c a combination of debt and current assets.

2.3.2 Capital improvements financed by non-enterprise funds shall be financed from either current assets: (i.e., current revenue, fund equity and reserves), or debt, or a combination thereof. Financing decisions shall include consideration for which funding source (current assets, debt, or both) will be a) most cost effective, b) consistent with prudent asset and liability management, c) appropriate to the useful life of the project(s) to be financed, and d) the most efficient use of the County's ability to borrow funds.

2.3.3 Debt financing shall not be used to provide more capacity than is needed within the schedule of capital improvements for non-enterprise public facilities unless one of the conditions of Policy 1.4.2.b.(3) is met.

Policy 2.4 Operating and Maintenance Costs The County shall not provide a public facility, nor shall it accept the provision of a public facility by others, if the County or other provider is unable to pay for the subsequent annual operating and maintenance costs of the facility.

Policy 2.5 Revenues Requiring Referendum In the event that sources of revenue listed under "Projected Costs and Revenues" require voter approval in a local referendum that has not been held, and a referendum is not held, or is held and is not successful, this Comprehensive Plan shall be revised at the next annual amendment to adjust for the lack of such revenues, in any of the following ways:

2.5.1 Reduce the level of service for one or more public facilities;

2.5.2 Increase the use of other sources of revenue;

2.5.3 Decrease the cost, and therefore the quality of some types of public facilities while retaining the quantity of the facilities that is inherent in the standard for level of service;

2.5.4 Decrease the demand for and subsequent use of capital facilities;
2.5.5 A combination of the above alternatives.

Policy 2.6 Uncommitted Revenue All development permits issued by the County which require capital improvements that will be financed by sources of revenue which have not been approved or implemented (such as future debt requiring referenda) shall be conditioned on the approval or implementation of the indicated revenue sources, or the substitution of a comparable amount of revenue from existing sources.

Policy 2.7 Available Revenue and Capital Facilities to Support Land Use Finance the six-year Capital Facilities Plan within the County's financial capacity. If the projected funding is inadequate to finance needed capital facilities based on adopted level of service and forecasted growth, make adjustments to the level of service, the land use element, the sources of revenue, or any combination, to achieve a balance between available revenue and needed capital facilities. This policy constitutes Kitsap County's response to the requirement of RCW 36.70A.030 (3)e.

PROVIDE NEEDED IMPROVEMENTS AND CONCURRENCY MANAGEMENT

Goal 3 Provide adequate public facilities by constructing needed capital improvements which (1) repair or replace obsolete or worn out facilities, (2) eliminate existing deficiencies, and (3) meet the needs of future development and redevelopment caused by previously issued and new development permits. The County's ability to provide needed improvements will be demonstrated by maintaining a financially feasible schedule of capital improvements in this Capital Facilities Plan.

Policy 3.1 Schedule of Capital Improvements The County shall provide, or arrange for others to provide, the capital improvements listed in the schedule of capital improvements in this Capital Facilities Plan. The schedule of capital improvements may be modified as follows:
3.1.1 The schedule of capital improvements shall be updated annually beginning in conjunction with the annual budget process.

3.1.2 Pursuant to the Growth Management Act, the schedule of capital improvements may be amended one time during any calendar year.

3.1.3 The schedule of capital improvements may be adjusted by ordinance not deemed to be an amendment to the Comprehensive Plan for corrections, updates, and modifications concerning costs; revenue sources; acceptance of facilities pursuant to dedications which are consistent with the plan; or the date of construction (so long as it is completed within the 6-year period) of any facility enumerated in the schedule of capital improvements.

Policy 3.2 Budget Appropriation of Capital Improvement Projects The County shall include in the capital appropriations of its annual budget all the capital improvements projects listed in the schedule of capital improvements for expenditure during the appropriate fiscal year, except that the County may omit from its annual budget any capital improvements for which a binding agreement has been executed with another party to provide the same project in the same fiscal year. The County may also include in the capital appropriations of its annual budget additional public facility projects that conform to Policy 1.4.2.b and Policy 1.5.2.f.

Policy 3.3 Adequate Public Facility Concurrency The County Commission finds that the impacts of development on public facilities within the County occur at the same time as occupancy of development authorized by a final development permit. The County shall issue development permits only after a determination that there is sufficient capacity of Category A and Category B public facilities to meet the standards for levels of service for existing development and the impacts of the proposed development concurrent with the proposed development. For the purpose of this policy and the County's land development regulations, "concurrent with" shall be defined as follows:

3.3.1 The availability of public facility capacity to support development concurrent with the impacts of such development shall be determined in accordance with the following:

3.3.1.a For roads:

3.3.1.a(1) The necessary facilities and services are in place at the time a development permit is issued; or

3.3.1.a(2) The necessary facilities are under construction at the time a development permit is issued, and the necessary facilities will be in place when the impacts of the development occur; or

3.3.1.a(3) Development permits are issued subject to the condition that the necessary facilities and services will be in place when the impacts of the development occur; or

3.3.1.a(4) The County has in place binding financial commitments to complete the necessary public facilities within six years.

3.3.2 No final development permit shall be issued by the County after April 3, 1998 , unless there shall be sufficient capacity of Category A and Category B public facilities available to meet the standards for levels of service for existing development and for the proposed development.

3.3.3 No preliminary development permit shall be issued by the County after April 3, 1998 , unless the applicant complies with one of the following Policies:

3.3.3.a The applicant may voluntarily request a determination of the capacity of Category A and Category B public facilities as part of the review and approval of the preliminary development permit, including the requirements of Policy 3.3.4, or

3.3.3.b The applicant may elect to request approval of a preliminary development permit without a determination of capacity of Category A and Category B public facilities provided that any such order is issued subject to requirements in the applicable land development regulation or to specific conditions contained in the preliminary development permit that:

3.3.3.b.(1) Final development permits for the subject property are subject to a determination of capacity of Category A and Category B public facilities, as required by Policy 3.3.2. and Policy 3.3.4., and

3.3.3.b.(2) No rights to obtain final development permits, nor any other rights to develop the subject property have been granted or implied by the County's approval of the preliminary development permit without determining the capacity of public facilities.

3.3.4 Development permits issued pursuant to Policies 3.3.2 and 3.3.3.a shall be subject to the following requirements:

3.3.4.a The determination that facility capacity is available shall apply only to specific uses, densities and intensities based on information provided by the applicant and included in the development permit.

3.3.4.b The determination that facility capacity is available shall be valid for the same period of time as the underlying development permit, including any extensions of the underlying development permit. If the underlying development permit does not have an expiration date, the capacity shall be valid for a period not to exceed two (2) years.

3.3.4.c The standards for levels of service of Category A and Category B public facilities shall be applied to the issuance of development permits on the following geographical basis: Roads: applicable roads and areas impacted by the proposed development

3.3.5 No later than *June* 3, 1998 , the County shall adopt land development regulations that establish the criteria for determining the vested rights of previously issued development permits and establishing the procedures for reserving capacity of public facilities needed to address the impacts of the vested development permits.

COORDINATE CAPITAL IMPROVEMENTS WITH LAND DEVELOPMENT

Goal 4 Manage the land development process to insure that all development receives public facility levels of service equal to, or greater than the standards adopted in Policy 1.3 by implementing the schedule of capital improvements contained in this Capital Facilities Plan, and by using the fiscal resources provided for in Goal 2 and its supporting policies.

Policy 4.1 Consistency All Category A and Category C public facility capital improvements shall be consistent with the adopted land use map and the goals and policies of other elements of this Comprehensive Plan. The location of, and level of service provided by projects in the schedule of capital improvements shall maintain adopted standards for levels of service for existing and future development in a manner and location consistent with the Land Use Element of this Comprehensive Plan.

Policy 4.2 Integration and Implementation The County shall integrate its land use planning and decisions with its planning and decisions for public facility capital improvements by developing, adopting and using the programs listed in the "Implementation Programs" section of this Capital Facilities Plan.

Policy 4.3 Coordination of School Facilities with Other Public Facilities The County and School Districts shall coordinate the purchase of land for co-location of schools with other community facilities and services.

SITING OF ESSENTIAL PUBLIC FACILITIES

Goal 5 Develop criteria and processes for siting regional and community facilities.

Policy 5.1 Designation of Land The County shall identify lands useful for public purposes and incorporate such designations in the comprehensive plan.

Policy 5.2 State Facilities The County shall develop and adopt regulations and establish a process to identify and site essential public facilities on the list maintained by the State Office of Financial Management. The process shall include the following components:

5.2.1 A requirement that the State provide a justifiable need for a public facility and for its location in Kitsap County based upon forecasted needs and a logical service area;

5.2.2 A requirement that the State establish a public process by which the residents of the County and of affected and "host" municipalities have a reasonable opportunity to participate in the site selection process.

Policy 5.3 Consistency with Comprehensive Plan The County shall develop and adopt regulations that ensure that the facility siting is consistent with the adopted County comprehensive plan, including;

5.3.1 The future land use map;

5.3.2 The Capital Facilities Plan Element and budget;

5.3.3 The Utilities Element;

5.3.4 The Transportation Element;

5.3.5 The Housing Element;

5.3.6 The Rural Element;

5.3.7 The Economic Development Element;

5.3.8 The comprehensive plans of adjacent jurisdictions that may be affected by the facility siting;

5.3.9 Regional general welfare considerations.

Policy 5.4 Facility Requirements and Impacts The County shall adopt regulations based upon

the following criteria:

5.4.1 Specific facility requirements
- 5.4.1.a Minimum acreage
- 5.4.1.b Accessibility
- 5.4.1.c Transportation needs and services
- 5.4.1.d Supporting public facility and public service needs and the availability thereof
- 5.4.1.e Health and safety
- 5.4.1.f Site design
- 5.4.1.g Zoning of the site
- 5.4.1.h Availability of alternative sites
- 5.4.1.i Community-wide distribution of facilities
- 5.4.1.j Capacity and location of equivalent facilities

5.4.2 Impacts of the facility

- 5.4.2.a Land use compatibility
- 5.4.2.b Existing land use and development in adjacent and surrounding areas
- 5.4.2.c Existing zoning of surrounding areas
- 5.4.2.d Existing Comprehensive Plan designation for surrounding areas

- 5.4.2.e Present and proposed population density of surrounding area
- 5.4.2.f Environmental impacts and opportunities to mitigate environmental impacts
- 5.4.2.g Effect on agricultural, forest or mineral lands, critical areas and historic, archaeological and cultural sites.
- 5.4.2.h Effect on areas outside of Kitsap County
- 5.4.2.i Effect on the likelihood of associated development
- 5.4.2.j Effect on public costs including operating and maintenance

5.4.3 Impacts of the facility siting on urban growth area designations and policies

- 5.4.3.a Urban nature of facility
- 5.4.3.b Existing urban growth near facility site
- 5.4.3.c Compatibility or urban growth with the facility
- 5.4.3.d Compatibility of facility siting with respect to urban growth area boundaries

Policy 5.5 Development Regulations The County shall adopt regulations and criteria which relate to:

5.5.1 The time required for construction;

5.5.2 Property acquisition;

5.5.3 Control of on-site and off-site impacts during construction;

5.5.4 Expediting and streamlining necessary government approvals and permits if all other elements of the County policies have been met.

5.5.5 The quasi-public or public nature of the facility, balancing the need for the facility against the external impacts generated by its siting and the availability of alternative sites with lesser impacts.

Policy 5.6 Development Regulations The County shall adopt regulations which include standards and criteria related to:

5.6.1 Facility operations;

5.6.2 Health and safety;

5.6.3 Nuisance effects;

5.6.4 Maintenance of standards congruent with applicable governmental regulations, particularly as they may change and become more stringent over time.

Policy 5.7 Siting of Public Facilities Outside of UGAs Essential public facilities sited outside of urban growth areas must be self supporting and not require the extension, construction, or maintenance of urban services and facilities unless no practicable alternative exists.

Policy 5.8 Coordination The County's policies and regulations on facility siting shall be coordinated with and advance other planning goals including, but not necessarily limited to, the following:

5.8.1 Reduction of sprawl development

5.8.2 Promotion of economic development and employment opportunities

5.8.3 Protection of the environment

5.8.4 Positive fiscal impact and on-going benefit to the host jurisdiction

5.8.5 Serving population groups needing affordable housing

5.8.6 Receipt of financial or other incentives from the State and/or other local governments

5.8.7 Fair distribution of such public facilities throughout the County

5.8.8 Requiring State and Federal projects to be consistent with this policy.

Goal 6 Provide adequate public facilities to urban growth areas.

Policy 6.1 Designate Urban Growth Areas The County and each municipality in the County shall designate urban growth areas to discourage urban sprawl and leapfrog development and encourage adequate public facilities and services concurrent with development as follows:

Policy 6.2 Levels of Service Levels of service for public facilities in the unincorporated portion of the urban growth areas shall be the same as the County's adopted standards.

Policy 6.3 Facility and Service Providers The primary provider of public facilities and services in the unincorporated portion of the Urban Growth Area shall be:

	Public Facility	Provider
6.3.1:	Community centers	Kitsap County
6.3.2:	Corrections facilities	Kitsap County
6.3.3:	County buildings	Kitsap County
6.3.4:	Courts (Superior/District)	Kitsap County
6.3.5:	Fire protection and emergency medical services	Fire Districts
6.3.6:	Parks	Kitsap County
6.3.7:	Local roads:	Kitsap County
6.3.8:	State highways:	Washington State
6.3.9:	Sanitary sewer	Kitsap County, Districts, Bremerton, *Port Orchard*
6.3.10:	Schools	School Districts
6.3.11:	Solid waste disposal	Kitsap County
6.3.12:	Surface water management	Kitsap County
6.3.18:	Water	Districts, Bremerton, Port Orchard, Poulsbo

Policy 6.4 Public Facilities Outside of Urban Growth Areas New urban public facilities will not be extended beyond urban growth area boundaries unless they:

6.4.1 are deemed as an essential public service to mitigate a threat to the public health, safety or welfare, or

6.4.2 protect an area of environmental sensitivity, or

6.4.3 provides tightlined sewer to schools in rural areas after a finding is made that no reasonable alternative technologies are feasible.

Policy 6.5 Schools Located Outside of Urban Growth Areas. All schools located outside of

urban growth areas shall be compatible with rural character and rural land use patterns.

Policy 6.6 Financing Providers of public facilities are responsible for paying for their facilities. Providers may use sources of revenue that require users of facilities to pay for a portion of the cost of the facilities. As provided by law, some providers may require new development to pay impact fees and/or mitigation payments for a portion of the cost of public facilities.

Policy 6.7 Planning Coordination The County will enter into interlocal/joint planning agreements with municipalities and other providers of public facilities to coordinate planning for and development of the Urban Growth Area.

Policy 6.8 Fiscal Coordination The County and each municipality in the County will address fiscal issues including tax revenue sharing, the provision of regional services and annexations through the development of interlocal agreements.

CHAPTER 3

CAPITAL IMPROVEMENTS

INTRODUCTION

Chapter 3 of the CFP presents capital improvements projects, and the financing plan to pay for those projects. It also contains the inventory of existing facilities, a map of existing and planned facilities, the level of service standard, concurrency requirements, estimates of future operating and maintenance costs of new capital projects, and non-capital alternatives to achieving the LOS standard.

Each type of public facility is presented in a separate subsection which follows a standard format. Throughout this section, tables of data are identified with abbreviations that correspond to the type of facility: Table PR-1 refers to Table 1 for PR (Parks and Recreation). Each abbreviation corresponds to the name of the type of facility.

Narrative Summary

Overview of the data, with sections devoted to Current Facilities, Level of Service, Capital Facilities Projects and Financing.

Inventory of Current Facilities

A list of existing capital facilities, including the name, capacity (for reference to levels of service), and location. The location is also shown on the map (see number 5, below) using the same letter that identifies the facility in the inventory table.

Level of Service Capacity Analysis

A table analyzing facility capacity requirements is presented for each type of public facility. The analysis begins with the same analytical technique and format as the support document "Capital Facilities Requirements." The statistical table at the top calculates the amount of facility capacity that is required to achieve and maintain the standard for level of service. The capital improvements projects that provide the needed capacity are listed below the requirements table, and their capacities are reconciled to the total requirement in the table.

Capital Projects and Financing Plan

A list of capital improvements that will eliminate existing deficiencies, make available adequate facilities for future growth, and repair or replace obsolete or worn out facilities through December 31, 2000. Each list of capital improvements begins with a financing plan, then itemizes the individual projects.

Financing Plan. Specific sources and amounts of revenue are shown that will be used to pay for the proposed capital projects. The amounts of the revenue forecasts are based on data from one support document, "Revenue Sources for Capital Facilities.

"Revenue Sources for Capital Facilities" forecasts new sources of revenue that the County could generate for capital facilities projects.

Capital Projects. Each capital improvement project is named, and briefly described. Project locations are specified in the name or description of the project. The cost for each of the next six fiscal years is shown in thousands of dollars ($1,000). All cost data is in current dollars; no inflation factor has been applied because the costs will be revised as part of the annual review and update of the Capital Facilities Plan.

All capital improvements projects were prepared by the department that provides the public facility.

The location of each project is also shown on the map (see number 5, below) using the same number that identifies the project in the table.

Location of Current and Planned Capital Facilities (Map)

The County's Comprehensive Plan "Part III Figure Book" graphically shows the location of existing County public buildings facilities, as well as any proposed 1995-2000 County capital facilities.

SELECTING REVENUE SOURCES FOR THE FINANCING PLAN

One of the most important requirements of the Capital Facilities Plan is that it must be financially feasible; GMA requires a balanced capital budget. The following are excerpts from GMA pertaining to financing of capital improvements.

GMA requires "a six-year plan that will finance...capital facilities within projected funding capacities and clearly identifies sources of public money for such purposes."

For roads, GMA allows development when "a financial *commitment* is in place to complete the improvements...within six years" (emphasis added).

The County must be able to afford the standards of service that it adopts, or "if probable funding falls short of meeting existing needs" the County must "reassess the land use element" (which most likely will cause further limits on development).

In keeping with these requirements, the County's CFP Policy 2.1 (see Goals and Policies, above) requires "conservative estimates of revenues from sources that are available to the County pursuant to current statutes, and which have not been rejected by referendum, if a referendum is required to enact a source of revenue."

Sources of revenue are analyzed in the support document "Revenue Sources for Capital Facilities."

"Revenue Sources for Capital Facilities" forecasts new sources of revenue that Kitsap County could generate for capital facilities projects.

The process of identifying specific revenues for the financing plan is as follows:

1. Calculate total costs for each type of public facility.

2. Match existing restricted revenue sources to the type of facility to which they are restricted.

3. Subtract existing restricted revenues from costs to identify unfunded "deficit." (item 1 minus item 2 equals item 3).

4. Apply new restricted revenues to the type of facility to which they are restricted.

5. Subtract new restricted revenues from costs to identify remaining unfunded "deficits" (item 3 minus item 4 equals item 5).

6. Allocate new unrestricted revenue to unfunded deficits. The allocation in this draft uses two new unrestricted revenues as a total "package"--the second 0.25¢ real estate excise tax, and new bond issues (either councilmanic, or voted, or a combination). Decision makers can choose which of the two (REET or bonds) to assign to specific capital projects for the final CFP.

COUNTY PUBLIC BUILDINGS

CURRENT FACILITIES INVENTORY

The current 1994 inventory of county public buildings includes county government administrative offices (233,462 square feet), maintenance building (4,600 sq ft), district (four) and superior (eight) courtrooms, and community centers (64,920 sq ft). Table PB-1, "Current Facilities Inventory," lists the facilities along with their current capacity and location. The County's Comprehensive Plan "Part III Figure Book" graphically shows the location of existing County public buildings facilities, as well as any proposed 1995-2000 County public buildings capital facilities.

Table PB-1. Current Facilities Inventory--County Public Buildings

Name	Location	Size, sq ft
Administrative		
Courthouse Campus	614 Division Street, Port Orchard, WA 98366	
Courthouse		99,300
Bullard Building (prosecutors/ probation/GIS)		10,982
619 Division Street		3,000
Public Works		43,580
Cooperative Extension		4,050
Human Services		2,250
Coroner		1,600
Fair and Parks Offices	1200 NW Fairgrounds, Bremerton, WA 98311	4,000
CENCOM	1720 Warren Avenue, Bremerton, WA 98310	7,800
Diversion/Conservation	812 Sidney Avenue, Port Orchard, WA 98366	1,500
Kitsap Mental Health Services	5451 Almira Drive, Bremerton, WA 98311	42,000
Recovery Center	1975 Fuson Road, Bremerton, WA 98310	13,400
Givens Community Center	206 Sidney Avenue, Port Orchard, WA 98366	46,850
Silverdale Community Center	9729 Silverdale Way, Silverdale, WA 98383	15,070
Kingston Community Center	Kingston	3,000
Total Administrative		298,382
Courtrooms		
District Court	Four rooms	
Superior Court	Eight rooms	
Maintenance Building		
Main Facility @ Courthouse	614 Division Street, Port Orchard, WA 98366	4,600

Administrative Offices

The current LOS of 1,095 square feet per 1,000 population (Table PB-2) is based on the existing inventory divided by the 1994 actual countywide population (213,200). The proposed LOS of 940 square feet per 1,000 population, which is 155 square feet per 1,000 population lower (14 percent) than the County's current LOS, does not require any additional square feet of space through the year 2000 (see Table PB-3).

Maintenance Building

The current LOS of 22 square feet per 1,000 population (Table PB-4) is based on the existing inventory divided by the 1994 actual countywide population (213,200). The proposed LOS of 18.5 square feet per 1,000 population, which is 3.5 square feet per 1,000 population lower (16 percent) than the County's current LOS, does not require any additional square feet of space through the year 2000 (see Table PB-5).

District and Superior Courtrooms

The current LOS of 0.019 district courtrooms per 1,000 population (Table PB-6) is based on the existing inventory divided by the 1994 actual countywide population (213,200). The proposed LOS of 0.016 district courtrooms per 1,000 population, which is 0.003 courtrooms per 1,000 population lower (16 percent) than the County's current LOS, does not require any additional courtrooms through the year 2000 (see Table PB-7).

The current LOS of 0.038 superior courtrooms per 1,000 population (Table PB-8) is based on the existing inventory divided by the 1994 actual countywide population (213,200). The proposed LOS of 0.032 superior courtrooms per 1,000 population, which is 0.006 courtrooms per 1,000 population lower (16 percent) than the County's current LOS, does not require any additional courtrooms through the year 2000 (see Table PB-9).

Community Centers

The current LOS of 305 square feet per 1,000 population (Table PB-10) is based on the existing inventory divided by the 1994 actual countywide population (213,200). The proposed LOS of 261.3 square feet per 1,000 population, which is 43.7 square feet per 1,000 population lower (14 percent) than the County's current LOS, does not require any additional square feet through the year 2000 (see Table PB-11).

Table PB-2. Kitsap County Analysis of Capital Facility Requirements
County Government Administrative Offices

Current LOS = 1,095 square feet per 1,000 population				
(1) Time period	(2) Countywide population	(3) Square feet required @ 1.095038 per capita	(4) Square feet available	(5) Net reserve or deficiency
1994 Actual	213,200	233,462	233,462	0
1995-2000: Growth	35,190	38,534	0	-38,534
Total as of 2000	248,390	271,996	233,462	-38,534

Table PB-3. Kitsap County Capital Projects LOS Capacity Analysis
County Government Administrative Offices

County Proposed LOS = 940 square feet per 1,000 population				
(1) Time period	(2) Countywide population	(3) Square feet required @ 0.93990 per capita	(4) Current square feet available	(5) Net reserve/ deficiency
1994 Actual	213,200	200,387	233,462	33,075
1995-2000: Growth	35,190	33,075	0	-33,075
Total as of 2000	248,390	233,462	233,462	0
Capacity projects None				

Table PB-4. Kitsap County Analysis of Capital Facility Requirements
County Government Maintenance Building

Current LOS = 22 square feet per 1,000 population				
(1) Time period	(2) Countywide population	(3) Square feet required @ 0.021576 per capita	(4) Square feet available	(5) Net reserve or deficiency
1994 Actual	213,200	4,600	4,600	0
1995-2000: Growth	35,190	759	0	-759
Total as of 2000	248,390	5,359	4,600	-759

Table PB-5. Kitsap County Capital Projects LOS Capacity Analysis
County Government Maintenance Building

County Proposed LOS = 18.5 square feet per 1,000 population				
(1) Time period	(2) Countywide population	(3) Square feet required @ 0.01852 per capita	(4) Current square feet available	(5) Net reserve/ deficiency
1994 Actual	213,200	3,948	4,600	652
1995-2000: Growth	35,190	652	0	-652
Total as of 2000	248,390	4,600	4,600	0
Capacity projects None				

Table PB-6. Kitsap County Analysis of Capital Facility Requirements
Courts: District Courtrooms

Current LOS = 0.019 courtrooms per 1,000 population				
(1) Time period	(2) Countywide population	(3) Courtrooms required @ 0.000019 per capita	(4) Courtrooms available	(5) Net reserve or deficiency
1994 Actual	213,200	4	4	0
1995-2000: Growth	35,190	1	0	-1
Total as of 2000	248,390	5	4	-1

Table PB-7. Kitsap County Capital Projects LOS Capacity Analysis
Courts: District Courtrooms

County Proposed LOS = 0.016 courtrooms per 1,000 population				
(1) Time period	(2) Countywide population	(3) Courtrooms required @ 0.000016 per capita	(4) Current courtrooms available	(5) Net reserve/ deficiency
1994 Actual	213,200	4	4	0
1995-2000: Growth	35,190	0	0	0
Total as of 2000	248,390	4	4	0
Capacity projects None				

Table PB-8. Kitsap County Analysis of Capital Facility Requirements
Courts: Superior Courtrooms

Current LOS = 0.038 courtrooms per 1,000 population				
(1) Time period	(2) Countywide population	(3) Courtrooms required @ 0.000038 per capita	(4) Courtrooms available	(5) Net reserve or deficiency
1994 Actual	213,200	8	8	0
1995-2000: Growth	35,190	1	0	-1
Total as of 2000	248,390	9	8	-1

Table PB-9. County Capital Projects LOS Capacity Analysis
Courts: Superior Courtrooms

County Proposed LOS = 0.032 courtrooms per 1,000 population				
(1) Time period	(2) Countywide population	(3) Courtrooms required @ 0.00032 per capita	(4) Current courtrooms available	(5) Net reserve/ deficiency
1994 Actual	213,200	7	8	1
1995-2000: Growth	35,190	1	0	-1
Total as of 2000	248,390	8	8	0
Capacity projects None				

Table PB-10. Kitsap County Analysis of Capital Facility Requirements Community Centers

Current LOS = 305 square feet per 1,000 population				
(1) Time period	(2) Countywide population	(3) Square feet required @ 0.304503 per capita	(4) Square feet available	(5) Net reserve or deficiency
1994 Actual	213,200	64,920	64,920	0
1995-2000: Growth	35,190	10,715	0	-10,715
Total as of 2000	248,390	75,635	64,920	-10,715

Table PB-11. Kitsap County Capital Projects LOS Capacity Analysis Community Centers

County Proposed LOS = 261 square feet per 1,000 population				
(1) Time period	(2) Countywide population	(3) Square feet required @ 0.26136 per capita	(4) Current square feet available	(5) Net reserve/ deficiency
1994 Actual	213,200	55,723	64,920	9,197
1995-2000: Growth	35,190	9,197	0	-9,197
Total as of 2000	248,390	64,920	64,920	-0
Capacity projects None				

CAPITAL FACILITIES PROJECTS AND FINANCING

The county-proposed levels of service for public buildings, including administrative offices, maintenance facilities, courtrooms, and community centers, do not require any additional capital facilities for office space through the year 2000. Therefore, there are no "capacity" capital projects proposed in the six-year Capital Facilities Plan (1995-2000).

FIRE PROTECTION FACILITIES

BACKGROUND

There are eight fire protection districts in Kitsap County, seven of which serve the unincorporated areas of the county (namely Districts 1, 7, 12, 14, 15, 18, and North Kitsap Fire and Rescue). The City of Bremerton and the City of Port Orchard have their own fire departments. The City of Bainbridge Island and the City of Poulsbo receive fire protection from Districts 2 and 18, respectively. Fire district mergers have been occurring since 1978 to improve fire protection efficiency. There are a total of 12 staffed and 34 unstaffed (volunteer) fire stations in the county.

Each city and fire protection district is assigned a numerical fire protection rating (Class 1 rating is the best) by the Washington Surveying and Ratings Bureau. Insurance companies fund the bureau to perform on-site inspections of fire districts to determine the rating. The bureau analyzes five main areas: average response time, water supply, communication network, schedule of fire inspections, and existing condition of fire stations. Fire station evaluations focus on age of vehicles, amount of personnel training, and whether the facilities are staffed or unstaffed. Insurance companies use the fire protection rating to help determine insurance rates on all fire insurance policies. Quality of fire service can have a significant impact on fire insurance rates.

Fire protection districts in Kitsap County have entered into agreements with Washington State Department of Natural Resources (DNR) to jointly fight fires on state-owned land and private forest land. DNR has no responsibility or authority in incorporated areas of the county. Each municipality is responsible for all fires within its boundaries. For the unincorporated lands, DNR and some fire districts have split up fire protection and suppression responsibility through creation of a fire protection zone (FPZ). DNR has protection responsibility within a FPZ. The fire district protects everything else as well as structures within the FPZ. DNR policy is that they will not fight structure fires. Any structure within a fire district's boundaries is the responsibility of the district. DNR also protects certain state land parcels regardless of location. DNR is a signator on the countywide mutual aid agreement and will respond as mutual aid when requested.

City Fire Protection Service Areas

The Cities of Bainbridge Island (Kitsap County Fire District No. 2), Bremerton, and Port Orchard provide fire services within their respective city limits. The City of Poulsbo and Fire Protection District No. 18 jointly provide emergency services within the city limits of Poulsbo and within the district. In addition, District No. 18 provides contract emergency services to the Port Gamble Townsite.

Table FP-1 summarizes the facilities for each fire district. It also includes each district's fire rating and service area population. The County's Comprehensive Plan "Part III Figure Book" graphically shows the location of existing County fire protection facilities, as well as any proposed 1995-2000 County fire protection capital facilities.

Fire Protection District No. 1 - Central Kitsap

Fire Protection District No. 1 covers approximately 85 square miles (see Figure FP-1). It serves a total population of approximately 25,722, which includes a majority of the Silverdale area and the west half of the Central Kitsap subarea. District No. 1 borders Fire District No. 15 to the east of the Ridgetop development and extends west to Hood Canal. District No. 1 extends north to the community of Bangor and south to the Mason County line. The southwest portion of the district includes Lake Tahuya and Camp Union. The Silverdale Water District is the largest water purveyor in District No. 1.

District No. 1 operates at five locations--a headquarters and four substations. The stations are organized into two battalions. Battalion I includes Station Nos. 1 and 2; and Battalion II includes Station Nos. 3, 4, and 5.

District No. 1 equipment includes:

- six engines
- one ladder truck
- water tenders
- two rescue units
- eight miscellaneous vehicles

District No. 1 has a total of staff--20 career and 65 volunteer.

About 40 of the combined career and volunteer staff are trained as emergency medical technicians and/or first responder personnel. The Emergency Medical Service (EMS) Division operates two advanced life support vehicles and three basic life support vehicles. District No. 1 provides Medic-1 services to District No. 12 under a contractual agreement.

Fire Protection District No. 7 - South Kitsap

Kitsap County Fire District No. 7 is located in the southern portion of Kitsap County (see Figure FP-1). District No. 7 covers 150 square miles of land area and serves a population of 50,157. There are 22 miles of tidal waterfront with adjacent saltwater area, plus numerous small lakes and ponds. District No. 7 also covers a considerable amount of Washington DNR land on a contractual basis. *The Port of Bremerton's Airport and Olympic View Industrial Park are served by District 7 under contract, and the District keeps an engine at the Port's Fire Station.*

Fourteen percent of the water for fire fighting is provided by a number of water districts and

systems. Fire district tenders provide water for fire fighting in the remaining 86 percent of the district. The major water purveyors in South Kitsap are the Annapolis Water District; the Manchester Water District; the City of Port Orchard; *including McCormick Woods*; Bremerton Water; and privately owned water systems such as Harbor Water, Crown Properties Incorporated, Long Lake View Estates, Rainier View Water, Sunnyslope Water, and Watauga Beach Community Water. *The City of Port Orchard contracts with Fire District #7 for service.*

District No. 7 responds to all types of fire, medical and related emergency situations from 15 stations throughout the district. Five stations are staffed with paid employees 24 hours/day and ten stations are unstaffed.

District No. 7 equipment includes:

- fire engines (four of which are rated in poor condition)
- eight water tenders
- eight EMS ambulances

District No. 7 is staffed by 37 paid employees and 100 volunteers.

North Kitsap Fire and Rescue (formerly Fire Protection District No. 10) - Kingston

North Kitsap Fire and Rescue covers an area of approximately 25 square miles and serves a population of 13,747. The district serves the community of Kingston (see Figure FP-1). North Kitsap Fire and Rescue also provides advanced life support for the S'Klallam Indian Tribe at Little Boston and for Fire Protection District No. 14. This adds approximately 30 square miles to the district's coverage area. Emergency medical responses amount to about 80 percent of the district's activity. The boundary extends to the west of the southern end of Port Gamble Bay and northward to the southern boundary of the Port Madison Indian Reservation. North Kitsap Fire and Rescue includes properties to the south of Miller Bay, including Indianola and President Point to the southeast. There are a total of five fire stations in the district. The major equipment located at the stations are the following:

- six fire engines
- water tenders
- three miscellaneous vehicles
- three aid units
- one MCI unit
- one brush truck

North Kitsap Fire and Rescue has a total of 51 staff members, 12 of whom are career.

Fire Protection District No. 12 - Chico/Kitsap Lake

Fire Protection District No. 12 covers approximately 12 square miles and serves a population of 5,659 (see Figure FP-1). District No. 12 boundary is irregular shaped, and serves properties on Chico Bay of Dyes Inlet. The District serves the west side of Kitsap Lake. The boundary also extends west of Camp Wesley Harris Naval Reservation to the Wildcat Lake area. Water purveyors in District No. 12 include Erland Point, Bremerton, Silverdale, Eldorado Hills, and PUD No. 1. District No. 12 operates at three locations--a headquarters and two substations.

District No. 12 equipment includes:

- three engines
- three water tenders
- one rescue vehicle
- two miscellaneous vehicles

District No. 12 is staffed by 44 volunteer firefighters and 2 paid support staffers.

Medic-1 service is contracted through Fire District No. 1.

Fire Protection District No. 14 - Hansville

Fire Protection District No. 14 serves the Hansville community at the northern tip of the Kitsap Peninsula (see Figure FP-1). District No. 14 covers approximately 25 square miles and serves a population of about 4,038. District No. 14 borders District No. 10 to the south and the S'Klallam Port Madison Indian Reservation to the east. The major water purveyor in District No. 14 is the Hansville Water District. District No. 14 maintains two stations--a headquarters and one substation.

District No. 14 equipment includes:

- two engines
- water tenders
- one medic unit

District No. 14 is staffed by 19 volunteers and 2 paid support staffers.

District No. 14 is actively recruiting volunteers to increase staff to an optimum level of 45 volunteers. Medic-1 service is contracted through North Kitsap Fire and Rescue.

Fire Protection District No. 15 - Meadowdale/North Perry Avenue

Fire Protection District No. 15 covers 18.3 square miles and serves a population of approximately 29,830 (which includes the unincorporated areas north of the Bremerton city limits in the Manette area, northward up to the Keyport U.S. Naval Reservation). District No. 15 service area also includes the east side of Silverdale and Island Lake, Brownsville, Tracyton, and Illahee communities (see Figure FP-1).

Water purveyors in District No. 15 include North Perry Avenue, Island Lake Water, Silverdale Water, PUD No. 1, Bremerton Water Department, and Tracyton Water. District No. 15 maintains five fire stations--a headquarters and four substations.

District No. 15 equipment includes:

- seven engines
- one water tender
- medic units
- two rescue units
- six miscellaneous vehicles

District No. 15 is staffed by 17 career staff and 79 volunteers. Over half of the volunteers are emergency medical technicians and a majority of the others are first responder trained.

Fire Protection District No. 18 - North Kitsap/City of Poulsbo

Fire Protection District No. 18 is a joint operation of the City of Poulsbo and the district. The Department covers an estimated 50 square miles (3 square miles within incorporated city limits and 47 miles of unincorporated county) and encompasses a population of 19,210 (see Figure FP-1). District No. 18 extends north of Poulsbo to Port Gamble, west to Bangor Naval Base/Clear Creek Road, and south to Mountain View Road. The eastern boundary is approximately 3 miles east of Poulsbo. The District provides fire service to the town of Keyport. District No. 18 maintains four fire stations.

District No. 18 equipment includes:

- four engines
- three water tenders
- three medic units
- 4x4 rescue unit
- three miscellaneous vehicles

City of Poulsbo equipment includes:

- two engines
- three medic units
- five miscellaneous vehicles

District No. 18 is staffed by 22 paid positions, 8 resident apprentices (non-paid positions that receive a stipend) and 50 to 60 volunteers.

Table FP-1. Kitsap County Fire Protection Facilities Inventory

Fire protection provider	Fire rating	Number of fire units	EMS services provided	Service area population (1994)
Fire Protection District No. 1, Central Kitsap	4	11	yes	25,722
Fire Protection District No. 7, South Kitsap	5	31	yes	50,157
North Kitsap Fire and Rescue	5	8	yes	13,747
Fire Protection District No. 12, Chico/Erlands Pt/ Kitsap Lake	6	7	Contracted through District 1	5,659
Fire Protection District No. 14, Hansville	6 Inside hydrant zone 8 Outside hydrant zone	6	Contracted through North Kitsap Fire and Rescue	4,038
Fire Protection District No. 15, Meadowdale/Brownsville	4	14	yes	29,830
Fire Protection District No. 18, City of Poulsbo	4 Within City limits 5 Outside City limits	11 The city station is jointly owned and operated with District 18	yes	19,210

Source: Individual fire districts.

LEVELS OF SERVICE

Two methods generally used in determining level of service for fire districts are fire units per capita and response time. Since many districts operate using a level of service (LOS) tied to response time, it is included in this discussion; however, for capital facilities forecasting, the per capita method provides a more quantifiable LOS that can be easily related to cost.

Fire Units Per Capita

Determination of a LOS using the fire units per capita method is calculated by dividing the number of fire units operated in a district by the district's population. Multiplying the established LOS by future population projections is a proven method for reasonably predicting growth-related fire and emergency service capital facilities requirements.

This method uses only fire/emergency units (e.g., fire engines, water tenders, and medic units). Fire stations are included in the **Capital Facilities Needs** section of this document; however, they are not included in the LOS calculation. Although personnel is an integral component to the operation of any fire district, personnel is not considered a capital facility item under the requirements of the Growth Management Act (GMA).

Response Time

Response time can be defined as the amount of time that elapses between the initial call for assistance and arrival of the first emergency unit on site. A five-minute response time in urban areas and a ten-minute response time in rural areas is a level of service goal that several districts try to meet. Fire stations in rural areas tend to be staffed primarily by volunteers, which generally results in a longer response time.

Planning for fire protection and medical services facilities that use this method is often tied to a geographic distribution of stations and the equipment housed at each facility. Stations should be located within a five-mile radius of each other to provide blanket coverage throughout the county. With this method, a population increase does not have as direct an effect on fire protection facility needs as it would on other types of capital facilities, such as water systems and schools. Population increases will more directly affect the number of emergency service calls that a district receives, which in turn affects the number of personnel and amount of equipment needed to maintain an adequate response time.

Tables FP-2 through FP-8 show the current levels of service for each fire district (e.g., fire units per 1,000 population) and an accompanying analysis of fire units required during 1995 to 2000 to maintain the current level of service.

Table FP-2. Kitsap County Analysis of Capital Facility Requirements Fire and Emergency Services: District #1

Current LOS = 0.428 fire units in service per 1,000 population				
(1) Time period	(2) Service area population	(3) Fire units required at 0.000428 per capita	(4) Fire units available	(5) Net reserve or deficiency
1994 actual	25,722	11.0	11.0	0
1995-2000: Growth non-capacity costs	4,421	1.9	0	-1.9
Total as of 2000	30,143	12.9	11	-1.9
2001-2012: Growth	2,574	1.1	0	-1.1
Total as of 2012	32,717	14.0	11	-3.0

Table FP-3. County Analysis of Capital Facility Requirements Fire and Emergency Services: District #7

Current LOS = 0.614 fire units in service per 1,000 population				
(1) Time period	(2) Service area population	(3) Fire units required at 0.000614 per capita	(4) Fire units available	(5) Net reserve or deficiency
1994 actual	50,157	31	31	0
1995-2000: Growth non-capacity costs	7,135	4.4	0	-4.4
Total as of 2000	57,292	35.4	31	-4.4
2001-2012: Growth	2,196	1.3	0	-1.3
Total as of 2012	59,488	36.7	31	-5.7

Table FP-4. Kitsap County Analysis of Capital Facility Requirements Fire and Emergency Services: North Kitsap Fire and Rescue

Current LOS = 0.582 fire units in service per 1,000 population				
(1) Time period	(2) Service area population	(3) Fire units required at 0.000582 per capita	(4) Fire units available	(5) Net reserve or deficiency
1994 actual	13,747	8	8	0
1995-2000: Growth non-capacity costs	1,512	0.9	0	-0.9
Total as of 2000	15,259	8.9	8	-0.9
2001-2012: Growth	1,318	.8	0	-.8
Total as of 2012	16,577	9.7	8	-1.7

Table FP-5. Kitsap County Analysis of Capital Facility Requirements Fire and Emergency Services: District #12

Current LOS = 1.237 fire units in service per 1,000 population				
(1) Time period	(2) Service area population	(3) Fire units required at 0.001237 per capita	(4) Fire units available	(5) Net reserve or deficiency
1994 actual	5,659	7	7	0
1995-2000: Growth non-capacity costs	613	0.8	0	-0.8
Total as of 2000	6,272	7.8	7	-0.8
2001-2012: Growth	210	.3	0	-.3
Total as of 2012	6,482	8.1	7	-1.1

Table FP-6. Kitsap County Analysis of Capital Facility Requirements Fire and Emergency Services: District #14

Current LOS = 1.486 fire units in service per 1,000 population				
(1) Time period	(2) Service area population	(3) Fire units required at 0.001486 per capita	(4) Fire units available	(5) Net reserve or deficiency
1994 actual	4,038	6	6	0
1995-2000: Growth non-capacity costs	697	1	0	-1
Total as of 2000	4,737	7	6	-1
2001-2012: Growth	362	0.5	0	-0.5
Total as of 2012	5,097	7.5	6	-1.5

Table FP-7. County Analysis of Capital Facility Requirements Fire and Emergency Services: District #15

Current LOS = 0.469 fire units in service per 1,000 population				
(1) Time period	(2) Service area population	(3) Fire units required at 0.000469 per capita	(4) Fire units available	(5) Net reserve or deficiency
1994 actual	29,830	14	14	0
1995-2000: Growth non-capacity costs	3,851	1.8	0	-1.8
Total as of 2000	33,681	15.7	14	-1.7
2001-2012: Growth	2752	1.3	0	-1.3
Total as of 2012	36,433	17	14	-3.0

Table FP-8. Kitsap County Analysis of Capital Facility Requirements
Fire and Emergency Services: District #18

Current LOS = 0.573 fire units in service per 1,000 population				
(1) Time period	(2) Service area population	(3) Fire units required at 0.000573 per capita	(4) Fire units available	(5) Net reserve or deficiency
1994 actual	19,210	11	11	0
1995-2000: Growth non-capacity costs	3,400	1.9	0	-1.9
Total as of 2000	22,618	12.9	11	-1.9
2001-2012: Growth	1,766	1.0	0	-1.0
Total as of 2012	24,384	13.9	11	-2.9

Proposed Levels of Service

The proposed levels of service for each of the seven Kitsap County fire districts are also based on fire units per 1,000 population. The County-proposed levels of service and corresponding capital facility requirements through the year 2000 are as follows:

Fire District #1. The County-proposed LOS equates to 0.410 fire units in service per 1,000 population. This LOS will require an additional 1.9 fire units through the year 2000 (Table FP-9).

Fire District #7. The County-proposed LOS equates to 0.559 fire units in service per 1,000 population. This LOS will require 1.0 additional fire units through the year 2000 (Table FP-10).

North Kitsap Fire and Rescue District. The County-proposed LOS equates to 0.467 fire units in service per 1,000 population. This LOS will require 0.9 additional fire units through the year 2000 (Table FP-11).

Fire District #12. The County-proposed LOS equates to 0.916 fire units in service per 1,000 population. This LOS will not require any additional fire units through the year 2000 (Table FP-12).

Fire District #14. The County-proposed LOS equates to 1.28 fire units in service per 1,000 population. This LOS will require 0.1 fire units through the year 2000 (Table FP-13).

Fire District #15. The County-proposed LOS equates to 0.448 fire units in service per 1,000 population. This LOS will require 0.2 fire units through the year 2000 (Table FP-14).

Fire District #18. The County-proposed LOS equates to 0.497 fire units in service per 1,000 population. This LOS will require 1.9 fire units through the year 2000 (Table FP-15).

Table FP-9. Kitsap County Capital Projects LOS Capacity Analysis
Fire and Emergency Services: District #1

County-proposed LOS = 0.410 fire units in service per 1,000 population				
(1) Time period	(2) Service area population	(3) Fire units required at 0.000410 per capita	(4) Fire units available	(5) Net reserve or deficiency
1994 actual	25,722	10.5	11	.5
1995-2000: Growth	4,421	1.8	0	-1.8
Total as of 2000	30,143	12.3	11	-1.3

Table FP-10. County Capital Projects LOS Capacity Analysis
Fire and Emergency Services: District #7

County-proposed LOS = 0.559 fire units in service per 1,000 population				
(1) Time period	(2) Service area population	(3) Fire units required at 0.000559 per capita	(4) Fire units available	(5) Net reserve or deficiency
1994 actual	50,157	28	31	3
1995-2000: Growth	7,135	3.9	0	-3.9
Total as of 2000	57,292	32	31	-1

Table FP-11. Kitsap County Capital Projects LOS Capacity Analysis
Fire and Emergency Services: North Kitsap Fire and Rescue

County-proposed LOS = 0.467 fire units in service per 1,000 population				
(1) Time period	(2) Service area population	(3) Fire units required at 0.000467 per capita	(4) Fire units available	(5) Net reserve or deficiency
1994 actual	13,747	8	8	0.0
1995-2000: Growth	1,512	0.9	0	-.9
Total as of 2000	15,259	8.9	8	-0.9

Table FP-12. Kitsap County Capital Projects LOS Capacity Analysis
Fire and Emergency Services: District #12

County-proposed LOS = 0.916 fire units in service per 1,000 population				
(1) Time period	(2) Service area population	(3) Fire units required at 0.000916 per capita	(4) Fire units available	(5) Net reserve or deficiency
1994 actual	5,659	5.2	7	1.8
1995-2000: Growth	613	0.6	0	-0.6
Total as of 2000	6,272	5.8	7	1.2

Table FP-13. Kitsap County Capital Projects LOS Capacity Analysis
Fire and Emergency Services: District #14

County-proposed LOS = 1.28 fire units in service per 1,000 population				
(1) Time period	(2) Service area population	(3) Fire units required at 0.001281 per capita	(4) Fire units available	(5) Net reserve or deficiency
1994 actual	4,038	5.2	6	0.8
1995-2000: Growth	699	0.9	0	-0.9
Total as of 2000	4,737	6.0	6	-0.1

Table FP-14. Kitsap County Capital Projects LOS Capacity Analysis
Fire and Emergency Services: District #15

County-proposed LOS = 0.448 fire units in service per 1,000 population				
(1) Time period	(2) Service area population	(3) Fire units required at 0.000448 per capita	(4) Fire units available	(5) Net reserve or deficiency
1994 actual	29,830	13.4	15	1.6
1995-2000: Growth	3,851	1.7	0	-0.1
Total as of 2000	33,681	15.1	15	-0.1

Table FP-15. Kitsap County Capital Projects LOS Capacity Analysis
Fire and Emergency Services: District #18

County-proposed LOS = 0.497 fire units in service per 1,000 population				
(1) Time period	(2) Service area population	(3) Fire units required at 0.000497 per capita	(4) Fire units available	(5) Net reserve or deficiency
1994 actual	19,210	9.5	11	1.5
1995-2000: Growth	3,408	1.7	0	-1.7
Total as of 2000	22,618	11.2	11	-.2
Medic unit/basic life support vehicle			1	0.9
Medic unit/basic life support vehicle			1	1.9
Medic unit/basic life support vehicle			1	2.9

Each fire district's proposed level of service (LOS) is dependent upon the funding and implementation of its six-year capital facilities plan (CFP) for 1995-2000. Each fire district's CFP is shown in this section of the Kitsap County Capital Facilities Plan.

Fire District No. 1

Fire protection facilities include two "capacity" and four "non-capacity" capital projects at a cost of $1,565,000. The proposed financing plan is shown on Table FP-16.

Fire District No. 7

Fire protection facilities include two "non-capacity" capital projects at a cost of $1,100,000. The proposed financing plan is shown on Table FP-17

North Kitsap Fire and Rescue District

Fire protection facilities include two "non-capacity" capital projects at a cost of $2,175,000. The proposed financing plan is shown on Table FP-18.

Fire District No. 12

Fire protection facilities include one "non-capacity" capital project at a cost of $500,000. The proposed financing plan is shown on Table FP-19.

Fire District No. 14

Fire protection facilities include one "non-capacity" capital project at a cost of $750,000. The proposed financing plan is shown on Table FP-20.

Fire District No. 15

Fire protection facilities include one "non-capacity" capital project at a cost of $700,000. The proposed financing plan is shown on Table FP-21.

Fire District No. 18

Fire protection facilities include three "capacity" and two "non-capacity" capital projects at a cost of $600,000. The proposed financing plan is shown on Table FP-22

TABLE FP-16
CFP PROJECTS AND FINANCING PLAN
(All Amounts Are Times $1,000)

FIRE AND EMERGENCY SERVICES: FIRE DISTRICT NO. 1

(1) COST/REVENUES	(2) 1995-2000	(5) TOTAL
Capacity Projects:		
1. Water Tender Apparatus Acquisition		
Cost	125.0	125.0
Rev - Fire District Levy	125.0	125.0
2. EMS Unit Acquisition		
Cost	100.0	100.0
Rev - Fire District Levy	100.0	100.0
Non-Capacity Projects:		
3. Fire Station #52 Relocation		
Cost	300.0	300.0
Rev - Fire District Levy	300.0	300.0
4. Fire Station #53 Relocation		
Cost	470.0	470.0
Rev - Fire District Levy	470.0	470.0
5. Fire Station #54 Relocation		
Cost	100.0	100.0
Rev - Fire District Levy	100.0	100.0
6. New Fire Station Construction		
Cost	470.0	470.0
Rev - Fire District Levy	470.0	470.0
SUMMARY: COSTS/REVENUES		
Costs	1,565.0	1,565.0
Existing Revenues:		
Fire District Levy	1,565.0	1,565.0
Total Revenues	1,565.0	1,565.0
BALANCE	0.0	0.0

TABLE FP-17
CFP PROJECTS AND FINANCING PLAN
(All Amounts Are Times $1,000)
FIRE AND EMERGENCY SERVICES: FIRE DISTRICT NO. 7

(1) COST/REVENUES	(2) 1995-2000	(5) TOTAL
Non-Capacity Projects:		
1. Fire Stations Remodeling (2)		
Cost	100.0	100.0
Rev - Fire District Levy	100.0	100.0
2. Fire Stations Construction (2)		
Cost	1,000.0	1,000.0
Rev - Fire District Levy	1,000.0	1,000.0
SUMMARY: COSTS/REVENUES		
Costs	1,100.0	1,100.0
Existing Revenues:		
Fire District Levy	1,100.0	1,100.0
Total Revenues	1,100.0	1,100.0
BALANCE	0.0	0.0

TABLE FP-18
CFP PROJECTS AND FINANCING PLAN
(All Amounts Are Times $1,000)
FIRE AND EMERGENCY SERVICES: NORTH KITSAP FIRE AND RESCUE

(1) COST/REVENUES	(2) 1995-2000	(5) TOTAL
Non-Capacity Projects:		
1. Headquarters Fire Station Relocation (New Station)		
Cost	2,000.0	2,000.0
Rev - Fire District Levy	2,000.0	2,000.0
2. Suquamish Fire Station Remodeling		
Cost	175.0	175.0
Rev - Fire District Levy	175.0	175.0
SUMMARY: COSTS/REVENUES		
Costs	2,175.0	2,175.0
Existing Revenues:		
Fire District Levy	2,175.0	2,175.0
Total Revenues	2,175.0	2,175.0
BALANCE	0.0	0.0

TABLE FP-19
CFP PROJECTS AND FINANCING PLAN
(All Amounts Are Times $1,000)

FIRE AND EMERGENCY SERVICES: FIRE DISTRICT NO. 12

(1) COST/REVENUES	(2) 1995-2000	(5) TOTAL
Non-Capacity Projects:		
1. Headquarters Fire Station Remodeling/Expansion		
Cost	500.0	500.0
Rev - Fire District Levy	500.0	500.0
SUMMARY: COSTS/REVENUES		
Costs	500.0	500.0
Existing Revenues:		
Fire District Levy	500.0	500.0
Total Revenues	500.0	500.0
BALANCE	0.0	0.0

TABLE FP-20
CFP PROJECTS AND FINANCING PLAN
(All Amounts Are Times $1,000)

FIRE AND EMERGENCY SERVICES: FIRE DISTRICT NO. 14

(1) COST/REVENUES	(2) 1995-2000	(5) TOTAL
Non-Capacity Projects:		
1. Headquarters Fire Station Remodeling/Expansion		
Cost	750.0	750.0
Rev - Fire District Levy	750.0	750.0
SUMMARY: COSTS/REVENUES		
Costs	750.0	750.0
Existing Revenues:		
Fire District Levy	750.0	750.0
Total Revenues	750.0	750.0
BALANCE	0.0	0.0

TABLE FP-21
CFP PROJECTS AND FINANCING PLAN
(All Amounts Are Times $1,000)

FIRE AND EMERGENCY SERVICES: FIRE DISTRICT NO. 15

(1) COST/REVENUES	(2) 1995-2000	(5) TOTAL
Non-Capacity Projects:		
1. Fire Station #42 Relocation (New Station)		
Cost	700.0	700.0
Rev - Fire District Levy	700.0	700.0
SUMMARY: COSTS/REVENUES		
Costs	700.0	700.0
Existing Revenues:		
Fire District Levy	700.0	700.0
Total Revenues	700.0	700.0
BALANCE	0.0	0.0

TABLE FP-22
CFP PROJECTS AND FINANCING PLAN
(All Amounts Are Times $1,000)

FIRE AND EMERGENCY SERVICES: FIRE DISTRICT NO. 18

(1) COST/REVENUES	(2) 1995-2000	(5) TOTAL
Capacity Projects:		
1. Medic Unit (BLS Vehicle) Acquisition		
Cost	100.0	100.0
Rev - Fire District Levy	100.0	100.0
2. Medic Unit (BLS Vehicle) Acquisition		
Cost	100.0	100.0
Rev - Fire District Levy	100.0	100.0
3. Medic Unit (BLS Vehicle) Acquisition		
Cost	100.0	100.0
Rev - Fire District Levy	100.0	100.0
Non-Capacity Projects:		
4. Fire Station Remodeling (Keyport)		
Cost	100.0	100.0
Rev - Fire District Levy	100.0	100.0
5. Fire Station Remodeling (Finn Hill Road)		
Cost	200.0	200.0
Rev - Fire District Levy	200.0	200.0
SUMMARY: COSTS/REVENUES		
Costs	600.0	600.0
Existing Revenues:		
Fire District Levy	600.0	600.0
Total Revenues	600.0	600.0
BALANCE	0.0	0.0

LAW ENFORCEMENT

BACKGROUND

The major responsibilities of the sheriff's department are law enforcement, maintenance of order, crime investigation and prevention, traffic control, marine enforcement, process and service of civil papers for the courts, service of criminal warrants, and other emergency services. The sheriff's department is made up of several divisions which are all under the administration of the sheriff. The other facilities being planned for separately from the sheriff's facility include the Kitsap County correctional and work release facilities.

The sheriff's main office facility located in Port Orchard houses the sheriff, undersheriff, records, detectives, patrol, patrol chief, administration, corrections, and the evidence/storage rooms. The central office located in Silverdale houses a patrol division, while the patrol chief maintains his administrative office at the courthouse. The Silverdale office space includes the patrol captain, reception area, civil and records extension, patrol shift supervisor offices, and the deputies report/meeting room. The north office located in Kingston and the west office located in Camp Union are portable satellite stations for patrol units. The deputies working the areas use the offices to make phone calls, write reports, and contact the public.

The Kitsap County correctional facilities serve the population of incorporated cities and the unincorporated county. The correctional facilities located on the Kitsap County campus are primarily two separate structures, the jail and the work release building. The jail is attached to the second floor of the courthouse and is accessible from the sheriff's office. The existing jail capacity is 160 beds. The structure is designed with three pods, including approximately 50 beds per pod.

The work release facility is a separate two-story building on the courthouse campus. The existing population is approximately 42 people and is at capacity. Unlike the sheriff's office facilities, the work release facility is utilized by all law enforcement agencies within the Kitsap County region. These facilities include corrections administration, warrant service, prisoner booking, prisoner housing, reception and visiting, food service, medical and psychiatric care, recreation, and library.

CURRENT FACILITIES INVENTORY

The current 1994 inventory of law enforcement facilities includes sheriff administration and operations offices (18,100 square feet), corrections facility (160 beds), work release facility (9,900 sq ft), and juvenile facility (23 beds). Table LE-1, "Current Facilities Inventory," lists the facilities along with their current capacity and location. The County's Comprehensive Plan "Part III Figure Book" graphically shows the location of existing County law enforcement facilities, as well as any proposed 1995-2000 County law enforcement capital facilities.

Table LE-1. Current Facilities Inventory--Law Enforcement Facilities

Facilities	Location	Size
Sheriff		
Main Office (lease)	614 Division Street, Port Orchard	14,000 sq ft
Central Office (lease)	3133 Randall Way, Silverdale	2,800 sq ft
North Office (own)	26100 West First Street, Kingston	900 sq ft
West Office (donated)	Holly Road, Camp Union	400 sq ft
Total Sheriff		18,100 sq ft
Corrections		
Jail (lease)	614 Division Street, Port Orchard	160 beds
Work Release Facility (lease)	Courthouse Campus	9,900 sq ft
Juvenile Facility	1338 Old Clifton Road, Port Orchard	23 beds

Source: Kitsap Sheriff's Department.

LEVEL OF SERVICE (LOS)

Sheriff Offices

The current LOS of 122 square feet per 1,000 population (Table LE-2) is based on the existing inventory divided by the 1994 actual unincorporated county population (148,655). The proposed LOS of 151 square feet per 1,000 population, which is 29 square feet per 1,000 population higher (24 percent) than the County's current LOS, requires an additional 7,780 square feet of space through the year 2000 (see Table LE-3). This LOS will enable the County to respond to the need for additional square feet of sheriff administrative and operations offices work space as the unincorporated county population continues to increase over time.

Corrections Facility

The current LOS of 0.75 beds per 1,000 population (Table LE-4) is based on the existing inventory divided by the 1994 actual countywide population (213,200). The proposed LOS of 1.45 beds per 1,000 population, which is 0.7 beds per 1,000 population higher (93 percent) than the County's current LOS, requires an additional 200 beds through the year 2000 (see Table LE-5). This LOS will enable the County to respond to the need for additional jail beds as the countywide population continues to increase over time.

Work Release Facility

The current LOS of 46.4 square feet per 1,000 population (Table LE-6) is based on the existing inventory divided by the 1994 actual countywide population (213,200). The proposed LOS of 39.9 square feet per 1,000 population, which is 6.5 square feet per 1,000 population lower (14 percent) than the County's current LOS, does not require any additional square feet of space through the year 2000 (see Table LE-7).

Juvenile Facility

The current LOS of 0.108 beds per 1,000 population (Table LE-8) is based on the existing inventory divided by the 1994 actual countywide population (213,200). The proposed LOS of 0.4 beds per 1,000 population, which is 0.292 beds per 1,000 population higher (270 percent) than the County's current LOS, requires an additional 77 beds through the year 2000 (see Table LE-9). This LOS will enable the County to respond to the need for additional juvenile facility beds as the countywide population continues to increase over time.

Table LE-2. Kitsap County Analysis of Capital Facility Requirements
Law Enforcement: Sheriff Offices

Current LOS = 122 square feet per 1,000 population				
(1) Time period	(2) Unincorporated population	(3) Square feet required @ 0.121758 per capita	(4) Square feet available	(5) Net reserve or deficiency
1994 Actual	148,655	18,100	18,100	0
1995-2000: Growth	22,837	2,781	0	-2,781
Total as of 2000	171,492	20,881	18,100	-2,781

Table LE-3. Kitsap County Capital Projects LOS Capacity Analysis
Law Enforcement: Sheriff Offices

County Proposed LOS = 151 square feet per 1,000 population				
(1) Time period	(2) Unincorporated population	(3) Square feet required @ 0.15091 per capita	(4) Current square feet available	(5) Net reserve/ deficiency
1994 Actual	148,655	22,434	18,100	-4,334
1995-2000: Growth	22,837	3,446	0	-3,446
Total as of 2000	171,492	25,880	18,100	-7,780
Capacity projects				
Sheriff Admin Office Expansion			2,160	-5,620
Silverdale Precinct Building Construction			5,620	0

Table LE-4. Kitsap County Analysis of Capital Facility Requirements Law Enforcement: Corrections Facility

Current LOS = 0.75 beds per 1,000 population				
(1) Time period	(2) Countywide population	(3) Beds required @ 0.00075 per capita	(4) Beds available	(5) Net reserve or deficiency
1994 Actual	213,200	160	160	0
1995-2000: Growth	35,190	26	0	-26
Total as of 2000	248,390	186	160	-26

Table LE-5. Kitsap County Capital Projects LOS Capacity Analysis Law Enforcement: Corrections Facility

County Proposed LOS = 1.45 beds per 1,000 population				
(1) Time period	(2) Countywide population	(3) Beds required @ 0.00145 per capita	(4) Current beds available	(5) Net reserve/ deficiency
1994 Actual	213,200	309	160	-149
1995-2000: Growth	35,190	51	0	-51
Total as of 2000	248,390	360	160	-200
Capacity projects				
Construction of 200 additional beds			200	0

Table LE-6. Kitsap County Analysis of Capital Facility Requirements Law Enforcement: Work Release Facility

Current LOS = 46.4 square feet per 1,000 population				
(1) Time period	(2) Countywide population	(3) Square feet required @ 0.046449 per capita	(4) Square feet available	(5) Net reserve or deficiency
1994 Actual	213,200	9,900	9,900	0
1995-2000: Growth	35,190	1,634	0	-1,634
Total as of 2000	248,390	11,534	9,900	-1,634

Table LE-7. Kitsap County Capital Projects LOS Capacity Analysis Law Enforcement: Work Release Facility

County Proposed LOS = 39.9 square feet per 1,000 population				
(1) Time period	(2) Countywide population	(3) Square feet required @ 0.03986 per capita	(4) Current square feet available	(5) Net reserve/ deficiency
1994 Actual	213,200	8,497	9,900	1,403
1995-2000: Growth	35,190	1,403	0	-1,403
Total as of 2000	248,390	9,900	9,900	0
Capacity projects				
None				

Table LE-8.Kitsap County Analysis of Capital Facility Requirements
Law Enforcement: Juvenile Facility

Current LOS = 0.108 beds per 1,000 population				
(1) Time period	(2) Countywide population	(3) Beds required @ 0.000108 per capita	(4) Beds available	(5) Net reserve or deficiency
1994 Actual	213,200	23	23	0
1995-2000: Growth	35,190	4	0	-4
Total as of 2000	248,390	27	23	-4

Table LE-9.Kitsap County Capital Projects LOS Capacity Analysis
Law Enforcement: Juvenile Facility

County Proposed LOS = 0.4 beds per 1,000 population				
(1) Time period	(2) Countywide population	(3) Beds required @ 0.00040 per capita	(4) Current beds available	(5) Net reserve/ deficiency
1994 Actual	213,200	86	23	-63
1995-2000: Growth	35,190	14	0	-14
Total as of 2000	248,390	100	23	-77
Capacity projects Construction of new juvenile facility with 77 additional beds			77	0

CAPITAL FACILITIES PROJECTS AND FINANCING

The County's law enforcement facilities include four capital projects at a cost of $20,386,700. The proposed financing plan is shown in Table LE-10.

TABLE LE-10
CFP PROJECTS AND FINANCING PLAN
(All Amounts Are Times $1,000)

LAW ENFORCEMENT

(1) COST/REVENUES	(2) 1995	(3) 1996	(4) 1997	(5) 1998	(6) 1999	(7) 2000	(8) TOTAL
Capacity Projects:							
1. Sheriff Administrative Office Expansion (+2,160 sq ft)							
Cost			100.0	83.0			183.0
Rev - REET			100.0	83.0			183.0
2. Silverdale Precinct Building Construction (+5,620 sq ft)							
Cost		700.0					700.0
Rev - REET		450.0					450.0
Rev - Sale of Property		250.0					250.0
3. New Correctional Facility Expansion (+200 beds)							
Cost					6,000.0	6,000.0	12,000.0
Rev -1/10% Sales Tax Bond Issue					6,000.0	6,000.0	12,000.0
4. New Juvenile Facility Construction (+77 beds)							
Cost		7,850.5	8,097.1				15,947.6
Rev - G.O. Bond Issue		7,850.5	8,097.1				15,947.6
SUMMARY: COSTS/REVENUES							
Costs	0.0	8,550.5	8,197.1	83.0	6,000.0	6,000.0	28,830.6
Existing Revenues:							
G.O. Bond Issue	0.0	7,850.5	8,097.1	0.0	0.0	0.0	15,947.6
REET	0.0	450.0	100.0	83.0	0.0	0.0	633.0
Sale of Property	0.0	250.0	0.0	0.0	0.0	0.0	250.0
New Revenues:							
1/10% Sales Tax	0.0	0.0	0.0	0.0	6,000.0	6,000.0	12,000.0
Total Revenues	0.0	8,550.5	8,197.1	83.0	6,000.0	6,000.0	28,830.6
BALANCE	0.0	0.0	0.0	0.0	0.0	0.0	0.0

PARKS AND RECREATION

County park lands provide a variety of park and recreational activities, including waterfront beaches, cartop and power boat access, picnic facilities, athletic fields and playgrounds, recreation centers, swimming pools, golf courses, and related park supporting administrative and maintenance facilities.

Park lands in addition to this inventory have been set aside by County, city, school, state, and federal agencies to provide wildlife habitat refuges, commercial timber land, highway transportation corridors, utility transportation corridors, fish hatcheries, stormwater retention systems, educational facilities, and like lands with more passive park attributes.

Current Inventory

The County owns and manages 1,193.1 acres of land devoted exclusively to park and recreation uses. Approximately 809.7 acres (68 percent of the County's park and recreational land inventory) are regionally significant sites and properties used by County residents, regardless of the local municipal jurisdiction in which they reside. A significant portion of these regional sites and facilities are also used by out-of-County populations, including residents of King, Skagit, and Island Counties, and out-of-state visitors and tourists.

Approximately 383.4 acres (32 percent of the park and recreational land inventory) are locally significant sites and properties that are used by residents from the immediate and surrounding area, usually on a neighborhood level.

No inventory exists for open space since acquisitions began in 1995, following the authorization by the County Commissioners in 1991 to collect a Conservation Futures Tax. The County also does not own any lands or independent sites for recreational centers or maintenance support facilities. These uses are incorporated into other park holdings.

Table PR-1, Kitsap County Current Parks Inventory, lists each property, along with location, regional or local status, and acreage. The County's Comprehensive Plan "Part III Figure Book" graphically shows the location of existing County parks and recreation facilities, as well as any proposed 1995-2000 County parks and recreation capital facilities.

Table PR-1. Kitsap County Current Parks Inventory

Name	Location	Local, acres	Regional, acres	Total capacity, acres	Facilities
Anderson Hill Athletic Fields	Central	18.5		18.5	X
Anderson Landing Nature Study	Central		67.8	67.8	
Arness Roadside Park	North	1.0		1.0	X
Buck Lake	North		24.0	24.0	X
Calvinwood	South		118.0	118.0	X
Callison Property	Central		18.0	18.0	
Colchester	South	0.5		0.5	X
Edgewater Ballfields	North	6.5		6.5	
Erlands Point Park	Central		35.0	35.0	X
Fairgrounds Athletic Complex	Central		80.0	80.0	X
Givens Community Center	South		1.0	1.0	X
Gordon Park Fields	Central		40.0	40.0	
Gorst Wetlands	South		8.0	8.0	X
Guillemot Reserve	Central		137.0	137.0	X
Harper Park	South	40.0		40.0	
Healy Property	South	6.5	39.0	6.5	X
Horseshoe Lake	South			39.0	X
Indianola Tennis Court	North	0.3	23.0	0.3	X
Island Lake	North		7.5	23.0	X
JA/Anna Smith Childrens Park	Central			7.5	X
Keyport	North	2.0	3.0	2.0	X
Kingston Kola Kole	North		15.0	3.0	X
Kingston Nike Site	North			15.0	X
Kingston Tennis Courts	North	0.5		0.5	X
Little Valley Ballfield	North	1.5	24.8	1.5	X
Long Lake	South			24.8	
Olalla Beach	South	1.0	36.0	1.0	X
Point No Point	North			36.0	
Ridgetop Park #1	Central	5.0		5.0	
Ridgetop Park #2	Central	4.0		4.0	X
Rotary Park	South	12.0		12.0	
Rude Road Site	North	20.0	6.5	20.0	X
Salsbury Point Park	North			6.5	
Silverdale Rotary Gateway Park	North	9.0	2.3	9.0	X
Silverdale Waterfront	Central		16.8	2.3	X
Snyder Park	North			16.8	
Suquamish Nature Preserve	North	5.5		5.52	
Suquamish Pathway Park	North	0.9		0.85	
Suquamish Property	South	200.0		200.0	
Suquamish/Pat Brandt Park	North	0.2		0.2	
Tracyton County Property	Central	11.0	48.0	11.0	X
Veterans Memorial Park	South		48.0	48.0	X
Village Greens Golf Course	South			48.0	X
ViewPoint Park	South	1.5		1.5	
Wicks Lake	South	10.0	11.0	10.0	X
Wildcat Lake	Central			11.0	
Wynn-Jones Park	South	26.0		26.0	
Total County		383.4	809.7	1,193.1	

Level of Service

Acreage that is currently owned, regardless of its state of development, is counted as "capacity" for the purpose of calculating level of service (LOS) for County-owned parks. The current LOS provided by the County's park system represents the current inventory of County-owned park acres divided by the 1994 County population. This equates to 3.78 acres per 1,000 population for regional parks (Table PR-2), 1.78 acres per 1,000 population for local parks (Table PR-3), and 0.00 acres for open space (Table PR-4).

The County's proposed LOS of 8.4 acres per 1,000 population for regional parks requires acquisition of an additional 1,658.02 acres through 2012 (Table PR-5). This LOS will decrease in future years, as the park land acquisitions that have been identified have been completed, and expenditures will then be concentrated in development following the acquisitions.

Similarly, the proposed LOS of 5.08 acres per 1,000 population for open space (Table PR-6) will decline after year 2012. This will occur because a general obligation bond was issued in 1992 that provided financing for open space acquisitions, resulting in a higher LOS than the annual revenue from Conservation Futures revenue alone could continue to sustain.

The County-proposed LOS for local parks is 1.83 acres per 1,000 population (Table PR-7). To achieve this LOS, an additional 71.5 acres of park land will be required through the year 2000.

A countywide system that establishes a countywide level of service for parks is being considered. This countywide LOS would represent an inventory that accounts for park and recreation facilities provided by all governments in Kitsap County. Therefore, this continued LOS is significantly higher than the LOS based only on County-owned parkland. The proposed LOS is also more ambitious because it addresses local needs within incorporated areas. This system would provide opportunities for governments to cooperate and coordinate in the development and carrying out of their respective capital facilities plans.

Capital Facilities Projects and Financing

The County's parks and recreation facilities include 44 capital projects at a cost of $24,715,300. The proposed financing plan is shown in Table PR-8.

Table PR-2. Kitsap County Capital Facilities Requirements Parks and Recreation: Regional Parks

Current LOS = 3.8 acres per 1,000 population				
(1) Time period	(2) Countywide population	(3) Acres @ 0.0037978 per capita	(4) Current acres available	(5) Net reserve or deficiency
1994 actual	213,200	809.7	809.7	0.0
1995-2000: Growth	35,190	133.6	0.0	-133.6
Total as of 2000	248,390	943.3	809.7	-133.6
2000–2012 Growth	43,834	166.6	0.0	-300.2
Total as of 2012	292,224	1,109.9	809.7	-300.2

Table PR-3. Kitsap County Capital Facilities Requirements Parks and Recreation: Local Parks

Current LOS = 1.78 acres per 1,000 population				
(1) Time period	(2) Countywide population	(3) Acres @ 0.0017983 per capita	(4) Current acres available	(5) Net reserve or deficiency
1994 actual	213,200	383.4	383.4	0.0
1995-2000: Growth	35,190	63.3	0.0	-63.3
Total as of 2000	248,390	446.7	383.4	-63.3
2000–2012 Growth	43,834	78.0	0.0	-141.3
Total as of 2012	292,224	574.7	383.4	-141.3

Table PR-4. Kitsap County Capital Facilities Requirements Parks and Recreation: Open Space

Current LOS = 0.0 acres per 1,000 population				
(1) Time period	(2) Countywide population	(3) Acres @ 0.00 per capita	(4) Current acres available	(5) Net reserve or deficiency
1994 actual	213,200	0	0	0
1995-2000: Growth	35,190	0	0	0
Total as of 2000	248,390	0	0	0
2000-2012 Growth	43,834	0	0	0
Total as of 2012	292,224	0	0	0

Table PR-5. Kitsap County Capital Projects LOS Capacity Analysis Parks and Recreation: Regional Parks

County-proposed LOS = 8.4 acres per 1,000 population				
(1) Time period	(2) Countywide population	(3) Acres @ 0.0084446 per capita	(4) Current acres available	(5) Net reserve or deficiency
1994 actual	213,200	1,800.4	809.7	-990.7
1995-2000: Growth	35,190	297.1	0.0	-297.1
2001-2012	43,834	370.2	0.0	-370.2
Total as of 2012	292,224	2,467.7	809.7	-1,658.0
Capacity projects				
Buck Lake/Hansville Greenway (1995)			133	-1,526
Gazzam Lake (1995)			318	-1,208
Howe Farm (1995)			83	-1,125
Newberry Hill (1996-1999)			1,000	-125
North Kitsap Athletic Complex (1997)			20	-105
Wicks Lake (1998)			100	-50
Liberty Bay Boat Access (2000)			5	0

Table PR-6. Kitsap County Capital Projects LOS Capacity Analysis Parks and Recreation: Open Space

County-proposed LOS = 2.9 acres per 1,000 population				
(1) Time period	(2) Countywide population	(3) Acres @ 0.005075 per capita	(4) Current acres available	(5) Net reserve or deficiency
1994 actual	213,200	1,081.96	0.0	-1,081.96
1995-2000: Growth	35,190	178.58	0.0	-178.58
2001-2012: Growth	43,834	222.46	0.0	-222.46
Total as of 2012	292,224	1,483.0	0.0	-1,483.0
Capacity projects				
Barker Creek Nature Preserve (1999)			80.0	-1403.0
Big Beef Creek (1996)			300.0	-1,103.0
Carpenter Lake (1995)			38.9	-1,064.1
Hood Canal Salmon Streams (1996)			300.0	-764.1
Kingston Slough (1998)			30.0	-734.1
Kitsap County Farms (1999)			100.0	-634.1
Olalla Bay Estuary (1996)			45.0	-589.1
Peterson Farm (1997)			180.0	-409.1
Indianola Forest/Waterfront (1998)			80.5	-328.6
Walaugua Watershed (1998)			27.0	-301.6

Table PR-7. Kitsap County Capital Projects LOS Capacity Analysis Parks and Recreation: Local Parks

County-proposed LOS = 1.83 acres per 1,000 population				
(1) Time period	(2) Countywide population	(3) Acres @ 0.0018313 per capita	(4) Current acres available	(5) Net reserve or deficiency
1994 actual	213.200	390.4	383.4	-7.0
1995-2000: Growth	35.190	64.4	0.0	-64.4
2001-2012	43.834	80.2	0.0	-87.2
Capacity projects				
Old Mill Site			7.0	-144.4
Unidentified park acquisition			144.4	0
Total as of 2012	292.224	535.0	534.8	-303

TABLE PR-8
CFP PROJECTS AND FINANCING PLAN
(All Amounts Are Times $1,000)
PARKS AND RECREATION

(1) COST/REVENUES	(2) 1995	(3) 1996	(4) 1997	(5) 1998	(6) 1999	(7) 2000	(8) TOTAL
Capacity Projects:							
Regional							
1. Buck Lake/Hansville Greenway Acq (133 ac trails No. Kitsap)							
Cost	1,264.0			130.0			1,394.0
Rev - Impact Fees	400.0						400.0
Rev - IAC	631.0			65.0			696.0
Rev - CFT Bond Issue	224.0			65.0			289.0
Rev - Donation	9.0						9.0
2. Gazzam Lake Acq (318 ac park Bainbridge Island)							
Cost	400.0						400.0
Rev - Impact Fee	400.0						400.0
3. Howe Farm Acq (83 Acre park area & ballfields So. Kitsap)							
Cost	850.0						850.0
Rev - Impact Fee				230.0			230.0
Rev - CFT Bond Issue	620.0						620.0
4. Liberty Bay Boat Access (5 ac acq & dev No. Kitsap boat launch facility)							
Cost						800.0	800.0
Rev - Voted G.O. Bond						400.0	400.0
Rev - IAC						400.0	400.0
5. Newberry Hill Phase II (Acq additional 500 ac & dev regional park Central Kitsap)							
Cost						1,500.0	1,500.0
Rev - Voted G.O. Bond						750.0	750.0
Rev - IAC						750.0	750.0
6. North Kitsap Athletic Complex (20 ac acq)							
Cost					300.0		300.0
Rev - Voted G.O. Bond					300.0		300.0
7. Wicks Lake Acquisition (100 acres in South Kitsap)							
Cost						1,200.0	1,200.0
Rev - Voted G.O. Bond						600.0	600.0
Rev - IAC						600.0	600.0
Sub-Total	**2,514.0**	**0.0**	**0.0**	**130.0**	**300.0**	**3,500.0**	**6,444.0**

TABLE PR-8
CFP PROJECTS AND FINANCING PLAN
(All Amounts Are Times $1,000)

PARKS AND RECREATION

COST/REVENUES	(2) 1995	(3) 1996	(4) 1997	(5) 1998	(6) 1999	(7) 2000	(8) TOTAL
Non-Capacity Projects: Regional							
8. Anderson Landing Improvements (trails, parking, restrooms Central Kitsap)							
	17.0					300.0	317.0
Rev - Impact Fee	17.0					300.0	317.0
9 Beach Drive Trail (waterfront trail So. Kitsap)							
Cost						2,250.0	2,250.0
Rev - Impact Fee						250.0	250.0
Rev - ISTEA						2,000.0	2,000.0
10. Buck Lake Restroom							
Cost						175.0	175.0
Rev - Impact Fee						175.0	175.0
11. Clear Creek Trail Acq & Dev (Central Kitsap)							
Cost					720.0		720.0
Rev - Impact Fees					160.0		160.0
Rev - IAC					360.0		360.0
Rev - Donation					200.0		200.0
12. Dyes Inlet Shoreline Trail (Phase I)							
Cost						1,000.0	1,000.0
Rev - Voted G.O. Bond						500.0	500.0
Rev - IAC						500.0	500.0
13. Guillemot Cove Nature Reserve (trails, utilities, bldg. renovation Central Kitsap)							
Cost	43.0				157.0		200.0
Rev - Impact Fees	43.0				157.0		200.0
14. Howe Farm Ballfields							
Cost						400.0	400.0
Rev - Voted G.O. Bond						400.0	400.0
Sub-Total	**60.0**	**0.0**	**0.0**	**0.0**	**877.0**	**4,125.0**	**5,062.0**

TABLE PR-8
CFP PROJECTS AND FINANCING PLAN
(All Amounts Are Times $1,000)

PARKS AND RECREATION

(1) COST/REVENUES	(2) 1995	(3) 1996	(4) 1997	(5) 1998	(6) 1999	(7) 2000	(8) TOTAL
Capacity Projects: Local							
15. Unidentified Local Park Land Acquisition (65 acres)							
Cost						690.0	690.0
Rev - Impact Fees						690.0	690.0
16. Old Mill Site Acq (6.5 ac local park on Dyes Inlet)							
Cost				1,900.0			1,900.0
Rev - New CFT Bond Issue				650.0			650.0
Rev - IAC				950.0			950.0
Rev - State DNR				300.0			300.0
Non-Capacity Projects: Local							
17. Salsbury Pt Park Improvements (boarding float, playground, restrooms, landscape)							
Cost	50.0	116.0		185.0			351.0
Rev - LTGO 1991-92	4.0	56.0		7.5			67.5
Rev - Impact Fees				94.5			94.5
Rev - IAC	46.0	60.0		83.0			189.0
18. Silverdale Waterfront Park Bulkhead							
Cost						95.0	95.0
Rev - Voted G.O. Bond						95.0	95.0
19. Sinclair Inlet Wildlife Area Improvements (benches, trail, signage)							
Cost			3.0				3.0
Rev - Donation			3.0				3.0
20. Veteran's Park Ballfield (2 new softball diamonds)							
Cost						125.0	125.0
Rev - Donation						25.0	25.0
Rev - Voted G.O. Bond						37.5	37.5
Rev - IAC Grant						62.5	62.5
21. Wynn Jones Park (conversion of private home/grounds to conference center)							
Cost			200.0			200.0	400.0
Rev - Impact Fees			200.0			200.0	400.0
Sub-Total	**50.0**	**116.0**	**203.0**	**2,085.0**	**0.0**	**1,110.0**	**3,564.0**

TABLE PR-8
CFP PROJECTS AND FINANCING PLAN
(All Amounts Are Times $1,000)

PARKS AND RECREATION

(1) COST/REVENUES	(2) 1995	(3) 1996	(4) 1997	(5) 1998	(6) 1999	(7) 2000	(8) TOTAL
Non-Capacity Projects: Local							
22. Point No Point Parking (2 ac acq park & greenway parking)							
Cost					50.0		50.0
Rev - Impact Fees					50.0		50.0
23. Anna Smith Park Bulkhead							
Cost					75.0		75.0
Rev - General Fund					75.0		75.0
24. Basketball Courts (5 throughout Cty)							
Cost					50.0		50.0
Rev - Impact Fees					50.0		50.0
25. Bremerton Pendergast Tot Lot							
Cost	25.0						25.0
Rev - Impact Fees	25.0						25.0
26. Erlands Point Park (development of passive park)							
Cost						700.0	700.0
Rev - Impact Fees						350.0	350.0
Rev - IAC						350.0	350.0
27. Harper Park Trail							
Cost			3.0	12.0			15.0
Rev - Impact Fees			3.0	12.0			15.0
28. Horseshoe Lake Park Renovation (new landscape, walkways, picnic shelter)							
Cost	17.0	15.0		172.0			204.0
Rev - LTGO 1991-92	17.0	15.0		172.0			204.0
29. Kingston Community Park (new park abandoned wastewater treatment site)							
Cost						1,000.0	1,000.0
Rev - LTGO 1991-92						355.0	355.0
Rev - Voted G.O. Bond						645.0	645.0
Sub-Total	**42.0**	**15.0**	**3.0**	**184.0**	**175.0**	**1,700.0**	**2,119.0**

TABLE PR-8
CFP PROJECTS AND FINANCING PLAN
(All Amounts Are Times $1,000)

PARKS AND RECREATION

(1) COST/REVENUES	(2) 1995	(3) 1996	(4) 1997	(5) 1998	(6) 1999	(7) 2000	(8) TOTAL
Non-Capacity Projects: Local							
30. No. Kitsap Recreation Bldg							
Cost						200.0	200.0
Rev - Voted G.O. Bond						200.0	200.0
31. No. Kitsap School Dist. Strawberry Fields (restrooms, playground)							
Cost						200.0	200.0
Rev - Voted G.O. Bond						200.0	200.0
32. Quiet Place Park (fencing, trail, bench)							
Cost				3.0			3.0
Rev - Impact Fees				3.0			3.0
33. Silverdale Rotary Park Development							
Cost				431.0			431.0
Rev - Impact Fees				275.0			275.0
Rev - LTGO 1991-92				100.0			100.0
Rev - Donation				56.0			56.0
34. Wildcat Lake Park Picnic Shelter							
Cost				60.0			60.0
Rev - Impact Fees				60.0			60.0
Sub-Total	**0.0**	**0.0**	**0.0**	**494.0**	**0.0**	**400.0**	**894.0**
Capacity Projects: Open Space							
35. Barker Creek Nature Reserve (80 ac acq)							
Cost					500.0		500.0
Rev - New CFT Bond Issue					500.0		500.0
36. Big Beef Creek (150 ac acq)							
Cost			1,000.0				1,000.0
Rev - WDFW/IAC Grant			1,000.0				1,000.0
Sub-Total	**0.0**	**0.0**	**1,000.0**	**0.0**	**500.0**	**0.0**	**1,500.0**

TABLE PR-8
CFP PROJECTS AND FINANCING PLAN
(All Amounts Are Times $1,000)
PARKS AND RECREATION

(1) COST/REVENUES	(2) 1995	(3) 1996	(4) 1997	(5) 1998	(6) 1999	(7) 2000	(8) TOTAL
Capacity Projects: Open Space							
37. Hood Canal Salmon Streams (150 ac acq)							
Cost				1,000.0			1,000.0
Rev - WDFW/IAC Grant				1,000.0			1,000.0
38. Kingston Slough (30 ac acq)							
Cost						800.0	800.0
Rev - New CFT Bond Issue						800.0	800.0
39. Kitsap County Farms (100 acre acq)							
Cost					1,000.0		1,000.0
Rev - New CFT Bond Issue					1,000.0		1,000.0
40. Olalla Bay Estuary (45 ac acq)							
Cost				384.8			384.8
Rev - New CFT Bond Issue				192.4			192.4
Rev - IAC Grant				192.4			192.4
41. Peterson Farm (180 ac acq)							
Cost					650.0		650.0
Rev - New CFT Bond Issue					650.0		650.0
42. Indianola Forest/Waterfront (80.5 ac acq)							
Cost				1,120.0			1,120.0
Rev - New CFT Fund				560.0			560.0
Rev - Donations				260.0			260.0
Rev - ALEA Grant				300.0			300.0
43. Watougua Watershed (27 ac acq)							
Cost				15.0			15.0
Rev - New CFT Fund				15.0			15.0
44. Carpenter Lake (58 ac)							
Cost	162.5						162.5
New CFT Bond Issue	162.5						162.5
Sub-Total	**162.5**	**0.0**	**0.0**	**2,519.8**	**1,650.0**	**800.0**	**5,132.3**

TABLE PR-8
CFP PROJECTS AND FINANCING PLAN
(All Amounts Are Times $1,000)
PARKS AND RECREATION

(1) COST/REVENUES	(2) 1995	(3) 1996	(4) 1997	(5) 1998	(6) 1999	(7) 2000	(8) TOTAL
SUMMARY: COSTS/REVENUES							
Costs:							
Regional Parks	2,574.0	0.0	0.0	130.0	1,177.0	7,625.0	11,506.0
Local Parks	92.0	131.0	206.0	2,763.0	175.0	3,210.0	6,577.0
Open Space	162.5	0.0	1,000.0	2,519.8	2,150.0	800.0	6,632.3
Total Costs	**2,828.5**	**131.0**	**1,206.0**	**5,412.8**	**3,502.0**	**11,635.0**	**24,715.3**
Existing Revenues:							
Conservation Futures Tax Bond Issue (1992) CFT*	844.0	0.0	0.0	65.0	0.0	0.0	909.0
New CFT Bond Issue (1997)**	162.5	0.0	0.0	1,417.4	2,150.0	800.0	4,529.9
Donation	9.0	0.0	3.0	316.0	200.0	25.0	553.0
General Fund	0.0	0.0	0.0	0.0	75.0	0.0	75.0
IAC Grants	631.0	0.0	0.0	65.0	0.0	0.0	696.0
Impact Fees	885.0	0.0	203.0	674.5	417.0	1,965.0	4,144.5
LTGO 1991-92	21.0	71.0	0.0	279.5	0.0	355.0	726.5
Subtotal	2,552.5	71.0	206.0	2,817.4	2,842.0	3,145.0	11,633.9
New Revenues:							
IAC Grants	46.0	60.0	0.0	1,225.4	360.0	2,662.5	4,353.9
WDFW/IAC Grants	0.0	0.0	1,000.0	1,000.0	0.0	0.0	2,000.0
ISTEA Grants	0.0	0.0	0.0	0.0	0.0	2,000.0	2,000.0
ALEA Grants	0.0	0.0	0.0	300.0	0.0	0.0	300.0
State DNR Grants	0.0	0.0	0.0	300.0	0.0	0.0	300.0
Voted G.O. Bond Issue	0.0	0.0	0.0	0.0	300.0	3,827.5	4,127.5
Subtotal	46.0	60.0	1,000.0	2,825.4	660.0	8,490.0	13,081.4
Total Revenues	**2,598.5**	**131.0**	**1,206.0**	**5,642.8**	**3,502.0**	**11,635.0**	**24,715.3**
BALANCE	**(230.0)**	**0.0**	**0.0**	**230.0**	**0.0**	**0.0**	**0.0**

SANITARY SEWERS

BACKGROUND

There are a total of 14 wastewater collection systems in Kitsap County, which serve approximately 40 percent of the total County population. The majority of the population use on-site sewage disposal systems.

- Kitsap County manages five wastewater collection systems: Central Kitsap, Kingston, Manchester, Navy Yard City, and Suquamish.
- The City of Bremerton maintains a collection system and operates a treatment plant.
- The City of Poulsbo maintains a collection system and contracts with the County to dispose of City wastewater at the Central Kitsap Treatment Plant in Brownsville.
- The City of Bainbridge Island owns and operates their collection and treatment system, which serves the Winslow area. Sewer District No.7 owns and operates a collection and treatment system that serves the Fort Ward area in the City of Bainbridge Island.
- The City of Port Orchard and Kitsap County Sewer District No. 5 independently operate their respective collection systems and jointly manage the treatment facility at Annapolis. Sewer District No. 5 is responsible for daily operation of the treatment plant.
- The Port Gamble S'Klallam Tribe owns a small collection and treatment facility serving a community to the east of Port Gamble Bay.
- Pope Resources owns and operates a collection system and secondary treatment plant serving the Port Gamble Townsite and millsite.
- The Port of Bremerton owns and operates a collection and treatment system that serves the commercial development on Port property.

The U.S. Navy is a major contributor to several wastewater treatment plants in Kitsap County, with the Central Kitsap plant receiving the most. The U.S. Navy contracts with Kitsap County and the City of Bremerton to treat effluent from federal reservations and facilities.

Plans and cost estimates to expand the Kingston, Suquamish, Central Kitsap, and Manchester treatment plants have been prepared. Financing and construction of the elements in these plans will rehabilitate the existing facilities to provide for continuing service to existing customers and provide capacity for the projected new populations within the designated urban growth boundaries.

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SANITARY SEWER CFP SOURCE DOCUMENTS

The sources of information used to develop the Sewer CFP consist of Facilities and Engineering Plans for each service area and information supplied by private service providers. These plans are required by the Washington State department of Ecology and are required to proceed through the SEPA process.

Kitsap County's plans address the next 20 years of need and examine buildout to adequately size major sewers. The projects defined in the CFP are a direct transcription of projects that are in the Public Works Capital Improvement Plan adopted in 1995.

The projects mix is about 62 percent for rehabilitation of existing facilities, and about 28 percent for new capacity. Funding for these projects is calculated at the same proportion, with 62 percent being paid for by increases in rates and 28 percent by connection fees. The U.S. Navy is paying for rehabilitation of its portion of the facilities, and the City of Poulsbo is paying for its fair share of rehabilitation and construction of needed new capacity. Pope Resources is providing funding for any capital improvements required to serve the Port Gamble UGA.

The other sewer districts and cities that operate and maintain wastewater facilities are also guided by the same requirements and each has its own facility plans and 6-year Capital Improvement Plans. These are referenced in the bibliography found at the end of this volume and are available for review at each of the owners offices. These can also be viewed at the regional office of the Washington State Department of Ecology at Bellevue, WA.

There are obviously some needs for sewering in other parts of the unincorporated portions of the urban areas that are not specifically addressed in the 6-year CFP. Needs are evident for the Gorst area, which currently has been surveyed by the Health Department and found to be a severe health hazard area.

Currently the county does not have any planned sewage treatment works in the south area that could provide service to Gorst. The closest sewage treatment works are in Port Orchard, managed jointly by the City of Port Orchard and Sewer District #5; and in Bremerton, owned and operated by the City of Bremerton. The County will encourage and support LID formation to provide sewering to either of the available sewage treatment providers.

SANITARY SEWER SYSTEMS INVENTORY

An inventory of the existing wastewater facilities located in Kitsap County is presented in this section. This inventory is summarized in Table SS-1. The County's Comprehensive Plan "Part III Figure Book" graphically shows the location of existing County sanitary sewer facilities, as well as any proposed 1995-2000 County sanitary sewer capital facilities.

Municipal Collection Systems

City of Bremerton Sewer Facilities. The geographic area currently served by the City is primarily within the incorporated City limits. The city's sewer system currently serves 14 drainage basins within the sewer service area. Rocky Point currently is the only basin not being served. Five of the City's basins extend beyond the city limits into unincorporated Kitsap County. These include: Tracyton Beach, Trenton Avenue, Rocky Point, Sinclair Park, and Oyster Bay. The City's sewer system also serves the Puget Sound Naval Shipyard (PSNS), in addition to other naval installations. Kitsap County contracts with the City for wastewater treatment for Navy Yard City, the collections system is operated by Kitsap County. Historically, the Bremerton sewer collection system was also used to carry stormwater runoff. This has led to treatment of large quantities of storm water. The City is in the process of separating its combined sewers. A major portion of the City's capital expenditures are focused on separation of the storm and sewage conveyance systems. See the Bremerton Comprehensive Plan for further details.

Kitsap County Sewer District No. 5 Wastewater Facilities. Kitsap County Sewer District No. 5 serves the unincorporated area east and southeast of the City of Port Orchard in the southern portion of Kitsap County. The District currently serves those areas designated "Urban" and "Semi-Urban" as required by the 1977 Kitsap County Comprehensive Plan. The current area is approximately three square miles. In addition the district serves the beachfront area along beach drive and Watauga Beach in response to identified health and environmental concerns.

The City of Port Orchard and Sewer District No. 5 jointly own the treatment plant located east of Port Orchard along the south shore of Sinclair Inlet and provides sewer service to approximately 7,600 people. The collection system consists of eight pumping stations and about 42,000 linear feet of pipeline. The maximum capacity of this conveyance system is estimated to be 6.0 mgd. The current PDF is estimated to be approximately 3.15 mgd. Portions of the system were constructed in 1942 and have infiltration problems. However, most of the collection system is considered to be in good condition and adequate to convey flows through the year 2020.

The Joint WWTP treats wastewater from both service areas. Sewer District No. 5 operates the treatment plant. Information on the treatment plant was obtained from a copy of the 1986

NPDES permit, as a facility plan for the treatment plant has not been prepared to date. The plant is an activated sludge secondary plant, with an ADF capacity of 2.8 mgd. The Joint WWTP discharges to Sinclair Inlet. Sludge is treated anaerobically and disposal is to the Olympic View Landfill as composting cover.

The future sewer service area proposed in the Sewer District No. 5 Comprehensive Sewer Plan is quite large. The shoreline areas along Beach Drive recently formed a ULID to receive sewer service from Sewer District No. 5. Additional service area is proposed to the east and as far south as the southern end of Long Lake. Projected future service area population is estimated to be 23,000 in year 2020 and 51,000 at saturation. It is not expected that significant modifications to the existing conveyance and treatment facilities will be necessary in order to serve the populations projected for year 2020. Substantial modification of the major trunk sewers and the pump stations will be necessary to serve the projected saturation population. The Joint WWTP has space available on site to expand treatment facilities to treat 4.2 million gallons per day.

Currently the sewer district is operating within the area provided through their comprehensive plan prepared by Kennedy-Jenks in 1994.

City of Port Orchard. The existing service area is within the City of Port Orchard. Currently, the only exception is the elementary school on Sidney Avenue, which is outside the existing city limits. The area to the east of the City is developed and is being served by Kitsap County Sewer District No. 5. McCormick Woods is served by the treatment facility.

City of Poulsbo. The current sanitary sewer service area for the City of Poulsbo is primarily within the city limits. The City of Poulsbo currently serves the unincorporated area northeast of the City in the vicinity of Ridgewood Drive and Lincoln Road. The city contracts with Kitsap County for wastewater treatment at the Central Kitsap Treatment Plant. The City and County are currently planning and implementing improvements to both the City and County's existing systems to eliminate infiltration and inflow and to increase the capacity of the conveyance system.

City of Bainbridge Island. Unincorporated portions of Bainbridge Island and the former City of Winslow were recently incorporated into the City of Bainbridge Island. The new City of Bainbridge Island has jurisdiction over the entire island. Most of the island is not sewered. Several areas on the island are being developed to densities that would warrant sewering in lieu of current on-site treatment. The Bainbridge Island service area has the only treatment facility in operation on the island. It is located generally north of Eagle Harbor on the east side of the island. Bainbridge Island's current service area is approximately 750 acres and serves a population of about 3,050 people. Existing collection and treatment facilities are expected to be adequate to serve existing and future service area growth through the year 2010. Expansion of the treatment facilities may be necessary to treat flows for a saturation population of 12,000 people.

Collection facilities for the Bainbridge Island service area consist of approximately eleven pumping stations, 27,000 feet of gravity sewers, and 14,200 feet of wastewater force main.

Wastewater from the service area is treated at an activated sludge treatment plant near the ferry terminal. The plant is rated for an ADF of 1.0 mgd with a PDF of 2.87 mgd. Plant modifications have been completed to provide for plant rehabilitation and minor upgrades in capacity and to increase performance and maintain the maximum design capacity. Wastewater disposal is achieved through an outfall to Puget Sound. Current disposal of wastewater solids from the treatment process is to commercial forest land in Jefferson County.

Port of Bremerton Municipal Wastewater Treatment Facility. The Port of Bremerton operates a public wastewater facility located in the Olympic View Industrial Park on State Route 3 west of Gorst. The plant's service area includes the Port's 1,800 acres which are the home of the Bremerton National Airport and the Olympic View Industrial Park.

Constructed in the 1970's and expanded in the mid-1980's, the plant serves the vast majority of the approximately 50 businesses at the airport and industrial park. A few older business locations are operating on septic tank and drainfield systems. The Department of Ecology has designated the plant as a municipal plant and has rated the plant at a capacity of 72,500 gallons per day (average daily flow). The plant uses a combination gravity and pump station collection system with aeration lagoons and settling ponds for treatment and drainfields for disposal.

The plant is currently treating between 10,000 and 15,000 gallons per day depending on weather and business cycles. One limitation of the plant is its ability to treat only "domestic strength" sewage such as that produced by restrooms and kitchens. This type of sewage is characteristic of typical light industrial and office uses. The plant is currently serving approximately 400 persons. Typical levels of sewage generation for light industrial business activity is 25 to 35 gallons of wastewater per day per person. At these rates the remaining 57,500 to 62,500 gallons per day capacity could accommodate up to 2,500 *additional light industrial jobs. The Port has 1.6 miles of sewer installed in the 1970's in good condition.*

The plant serves two commercial/industrial areas (the airport and industrial park) which have been designated for business, industrial, and airport activity since the first county comprehensive plan was developed in the 1970's.

Kitsap County Sewer Facilities

Central Kitsap Wastewater Facilities. Kitsap County owns and operates the conveyance and treatment facilities in the Central Kitsap service area. This service area is the largest system in Kitsap County and includes the naval facilities at Bangor, Keyport, and the City of Poulsbo. The current service area for the Central Kitsap Treatment Plant includes those more intensively developed areas in and around Silverdale and extending northerly from Waaga Way along Silverdale Way to include the Ridgetop area. To the east, the service area includes much of the existing urban areas located south of Waaga Way and north of Bremerton. The plant also treats

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septic tank waste hauled to the plant. The conveyance system consists of approximately 856,347 linear feet of pipeline, 51 pumping stations, and 10 collection system related structures.

Flows from the City of Poulsbo enter the northern portion of the collection system via a gravity siphon crossing from Lemolo to Keyport, across the mouth of Liberty Bay.
Collection and transfer systems serving the Meadowdale areas, downtown Silverdale, and a majority of the northern portion of the Central Kitsap collection system, are undersized for existing wastewater flows. A phased expansion of the conveyance and treatment facilities is planned to repair and replace worn facilities, and to extend service to surrounding areas. Modifications to accommodate current flows are included in the design phase.

Treatment facilities at the Central Kitsap WWTP are currently rated for an ADF of 6.0 mgd. The plant utilizes an activated sludge/solids contact process for secondary treatment of wastewater, and an ultraviolet light disinfecting system. The county plans to expand the plant based on the extent of growth predicted within the existing sewer service area in the Central Kitsap area. The second phase of construction at the plant will increase the capacity to 10.6 mgd ADF. The existing 68-acre site is expected to accommodate layout of facilities for capacity in excess of 25 mgd ADF.

Treated wastewater from the Central Kitsap WWTP is discharged into the northern portion of Port Orchard Bay. The outfall pipe has a maximum hydraulic capacity of approximately 31 mgd. The diffuser has a maximum hydraulic capacity of 16 mgd. Future extension of the existing diffuser is expected to provide sufficient dilution for the increased flow.

The Central Kitsap WWTP is the regional sludge treatment center for all county-owned treatment plants and septage from on-site treatment systems. Approximately 30 to 40 percent of the solids treated at the Central Kitsap WWTP is derived from septage or sludge from other plants. Sludge treatment facilities at the Central Kitsap WWTP include gravity thickening, anaerobic digestion, and plate and frame press dewatering. Currently, dewatered sludge is hauled to Port Townsend and to hop farms in Yakima County for composting and agricultural soil amendment respectively.

Kingston Wastewater Facilities. Sewer service in the Kingston area is owned and maintained by Kitsap County. The facilities in the service area include approximately 30,000 linear feet of sewer, one pumping station, and one treatment plant. The existing Kingston WWTP has an ADF capacity of 0.15 mgd. These facilities serve an existing population of approximately 1,000 people.

Growth within the Kingston service area will soon exceed the capacity of the existing treatment plant. In order to accommodate growth in the service area, new facilities will have to be provided. The current facilities plan was based on the older land use plan and will be modified to reflect the adopted and approved land use plan. The Kingston service area and population will be evaluated at the First Annual Plan Update. This was required by the hearings examiner and is

consistent with the GMA requirements. Based on the projected population, capacity for an additional 97,100 g.p.d. will be required for the 20 year projected population. A treatment plant site has been acquired near West Kingston Road. The existing gravity outfall discharging to Appletree Cove will provide sufficient hydraulic capacity for about 3.0 mgd from the new site.

Waste sludge from the Kingston WWTP is currently trucked to the Central Kitsap WWTP for digestion and treatment. It is anticipated that this practice will continue. Additional sludge storage and thickening is planned for the new plant to enable greater sludge wasting and trucking schedule flexibility.

Suquamish Wastewater Facilities. Kitsap County owns and operates the Suquamish wastewater conveyance and treatment facilities that provide sewer service to approximately 1,600 residents in the Suquamish area. The existing service area Utilities Local Improvement District (ULID) covers about 214 acres; however, sewer service has been extended to three areas lying outside the ULID. The first of these areas covers about 44 gross acres and is located in the northwest corner of the growth study area. The second area is the Suquamish Shores residential development located on Port Madison. Suquamish Shores covers about 42 gross acres. The newest extension of the existing service area covers about 37 acres and lies west of Urban Avenue between Geneva Street and South Street.

The collection system consists of approximately 48,200 linear feet of pipeline. McKinstry Street pumping station is the only pumping station in the collection system, and serves as the central collection point in the system. All wastewater in the system flows by gravity to this station for transfer to the Suquamish WWTP. Existing sewers are sufficient to accommodate additional growth within the existing service area. New conveyance facilities are planned for extension of sewer service to the currently unsewered Suquamish areas.

The Suquamish WWTP is a prefabricated secondary plant with an ADF capacity of 0.2 mgd. The Suquamish WWTP currently has an NPDES permit issued by WDOE; although EPA is formally considered to be the regulatory authority for this plant, since it is located within the Port Madison Tribal Reservation boundary. Additional capacity is needed at this plant for the existing flows. The county is replacing the existing facilities with SBRs and expanding the plant to 0.4 mgd ADF capacity. Sludge from the plant will continue to require hauling and further treatment at the Central Kitsap WWTP. It is expected that the Suquamish WWTP's planned maximum capacity of 0.4 mgd ADF will be sufficient to serve the extent of future residential and commercial development in this area and the needs of the Port Madison Tribal Reservation.

Manchester Wastewater Facilities. Kitsap County owns and operates a small sewer collection and treatment system in Manchester. This system serves a population of approximately 1,000 people and treats an average flow of 0.19 mgd. The Manchester collection system consists of five pumping stations and approximately 60,000 linear feet of pipeline. Approximately 25 percent of the land within the rural village boundary is now served by public sewers, although the remaining area is subdivided into smaller parcels and much of it is built out.

The current service area includes the EPA laboratory at Clam Bay and the Manchester Naval Fuel Depot. Waste flows from the Manchester Naval Fuel Depot originate from ships discharging sewage at the facility. Kitsap County has an agreement with the Navy that requires the County to be notified when the Navy plans to discharge wastewater to the County's system. The Navy has storage facilities at the depot to allow holding of wastewater if the County does not permit immediate discharge. Based on 1986 water supply records, the EPA laboratory and the state park contribute a wastewater flow of about 7,000 gpd to the treatment facility.

The plant provides for an ADF capacity of 0.23 mgd. Secondary treatment capabilities using a sequencing batch reactor process were installed in 1992. Sludge from the Manchester WWTP is temporarily stored on the plant site and hauled to the Central Kitsap WWTP for treatment. The plant is currently being expanded to provide 0.46mgd of wastewater treatment capacity. The outfall provides good dilution and appears to have sufficient capacity for discharge of the projected future wastewater flows. Future sludge handling will continue as it is currently.

Navy Yard City Wastewater Facilities. Kitsap County owns and maintains a sewage collection system in the area of Bremerton, north and east of the wastewater treatment plant, that is commonly referred to as Navy Yard City. The County also owns, operates, and maintains two sewage pump stations. In addition to discharges from its two pump stations, the district also discharges by gravity to one location in the Utility's collection system. Kitsap County provides service to approximately 970 residential and commercial units. The collection system is very old and is currently being upgraded as funding allows. Priorities are set by structural condition first and elimination of inflow and infiltration second.

Private Sewer Facilities

Port Gamble S'Klallam Tribe Reservation. The Port Gamble S'Klallam reservation is located along the northeast shore of Port Gamble. Failing septic drainfields and concern for the environment of Port Gamble Bay have prompted the Port Gamble S'Klallam Tribe to construct wastewater collection and secondary treatment facilities. The collection system uses gravity sewers and septic tank effluent pumping (STEP) systems to convey wastewater to a recirculating sand filter for secondary treatment and subsurface disposal of the liquid effluent. Four lift stations and associated pipeline is constructed along Little Boston Road. Solids accumulating in the septic tanks continue to require removal and hauling to a regional plant that accepts such wastes (e.g., Central Kitsap WWTP). Treatment facilities are designed for an initial average design flow capacity of 0.05 mgd with ultimate expansion to 0.1 mgd to serve a projected population of 1,565 people.

Port Gamble. Pope Resources owns and operates the sewer collection and treatment system in Port Gamble. This system is a small prefabricated plant, serving approximately 40 homes for Port Gamble residents. The total wastewater plant capacity is approximately 25,000 gpd and current flows are approximately 13,000 gpd. The outfall is located in relatively shallow water in Hood Canal. Pope Resources also provides potable water and solid waste removal services for this area.

SEWER FACILITIES NEEDS FORECAST

The purpose of the Sewer Facilities Plan of the Capital Facility Element is to ensure there are adequate facilities for sewer service as the population increases in the county. This plan addresses existing and future facility needs, and provides a financial plan to indicate revenue sources for funding the increase in County services. Facilities and financial planning for sewer service purveyors other than Kitsap County Department of Public Works (e.g. cities, tribes, private districts) are described in each of the City's and District's Capital Improvement Plans.

Sewer system planning is based on the assumption that sewer service will only be provided in areas located within UGA boundaries or *Rural Village* Areas except where a significant threat to human and/or environmental health is identified. All projects planned in the 6-year CIP result in service only to areas within UGA or *Rural Village* boundaries. Most of these projects are physically located within UGA boundaries, or are associated with existing facilities located outside UGA boundaries (e.g., improvements to the Central Kitsap WWTP). Sewer projects planned for 2001 to 2012 focus on providing service to customers located within (1) existing sewer districts (i.e., in-fill), and (2) UGAs (i.e., extensions). Sewer extension is anticipated during the 20-year period to Gorst and Beach Drive, areas outside of UGA boundaries, to address known septic system failures resulting in human health risks and water quality problems.

There are obviously some needs for sewering in other parts of the unincorporated portions of the urban areas that are not specifically addressed in the 6-year CFP. These areas have not been specifically addressed because of limited funding available during the first 6 years. Needs are evident for the Gorst area, which currently is being surveyed by the Health Department and for the Port of Bremerton industrial area, which is unable to develop properly without adequate sewer service.

It is in the best interest of the County and the Cities to encourage and support the sewering of these areas. Currently, the County does not have any planned sewage treatment works in the south area that could provide service to the Port of Bremerton or to Gorst. The closest sewage treatment works is in Port Orchard, managed jointly by the City of Port Orchard and Sewer District #5; and in Bremerton, owned and operated by the City of Bremerton.

The County will encourage and support ULID formation to provide sewering for the Port of Bremerton to either of the available sewage treatment providers. The Port and major landowners have reached agreement with the Cities of Port Orchard and Bremerton to be included in those municipalities' comprehensive and capital facilities plans. Since neither of the plans involve capital facility asset funding by the County, the reader is referred to those plans for additional details.

LEVEL OF SERVICE

The adequacy of existing sewer facilities to meet present and future needs is based on the estimated gallons per day of wastewater for the current sewered population and for the projected future sewered population. It is also based on an assumed existing and planned Level of Service (LOS) for sewer service. There is an average of 2.5 people per household in Kitsap County. Current wastewater flow data indicates that an average of 100 gallons per capita per day (GPCD) is used. With an average of 2.5 people per dwelling unit, a residential connection will generate a demand for treatment of 250 gallons per day. These characteristics serve as a planning standard or LOS for sewer service during the next 20 year planning period. Based on this standard and sewered population allocations, it is possible to identify future deficiencies in various sewer systems and the capital projects necessary to correct those deficiencies.

SEWER SYSTEMS POPULATION ALLOCATION

Table SS-2 shows forecasted populations for the sewer service areas, which are defined on the land use and overall population allocation determined by the Kitsap County Regional Planning Council. The forecast provides sewer purveyors with a population to plan for during the 20-year planning period in order to determine future demand for sewer facilities and capital improvement costs. Note that not all residents located within sewer district boundaries will be sewered. This is consistent with the current practice and practices in other communities. In general, the unsewered population as a percentage of the total population decreases over time.

Table SS-1. Kitsap County Public Sewer System Inventory

NAME	COLLECTION SYSTEM		TREATMENT PLANT			SERVICE AREA			NOTES
	Miles of pipe	Existing conditions of collection system	Existing flow, mgd(1)	Design flow, mgd(1)	Surplus/ deficit, mgd	Existing population served	Existing connections, eru	Surplus/ deficit, eru(4)	
CITY SEWER SYSTEMS									
City of Bremerton	204	A portion of the collection system was constructed with combined sewers (stormwater and sewage). Significant additional separation is required to comply with State law.	7.8	10.1	2.3	45,210	13,858	9,200	Separation of stormwater ensure an increase of treatment plant hydraulic capacity. Current system is designed for 55,300 people or 22,757 dwelling units (2.43 per unit). City sewer service area includes Tracyton Beach, Trenton Ave, Rocky Pt, Sinclair Park, Oyster Bay with drainage basins that extend to unincorporated areas.
City of Port Orchard	98	Mains east of Blackjack Crk, Sidney Ave and Tremont St branches are anticipated to be 50% of capacity. One sewer main may approach capacity north of Lippert St.	1.0	*(4)*	*(4)*	5,860	2,344	*(4)*	Treatment plant is jointly owned by the City and Sewer District No. 5. Sewer District No. 5 is responsible for daily operation of the plant.
City of Poulsbo	25	The Lemolo gravity/ pressure line/inverted siphons and Pump Station No.16 in Key- port must be expanded to meet current peak conditions during peak flow. City contracts with Kitsap County to treat wastewater at the Central Kitsap plant. City is contracted for .95 mgd with existing flows .72 mgd of wastewater. City system heavily impacted by infiltration/inflow.	0.70	0.75 (see notes)	0 (see notes)	5,100	2,560	916	Rain water/inflow needs to be separated to extend the capacity of the system for 20 years of growth. Current peak one-hour flows exceed capacity of conveyance system from Poulsbo to Kitsap County. Current discharge contract with Kitsap County limits Poulsbo to 0.95 mgd ADF. City of Poulsbo currently removing infiltration and inflow. City and County designing pump stations /conveyance to treatment plant.

Central Kitsap Wastewater Facilities	115	Force mains along Old Military Road and Central are under capacity for estimated flows. Several pumping stations are undersized for existing flows. Sixty-three projects have been identified to improve collection system until 2012.	3.5	4.8	2.5	25,773	10,309	5,200	Central Kitsap treatment plant is contracted to receive sewage from US Navy at Bangor and Keyport and also from City of Poulsbo.
Kingston Sewer Facilities	6	Wastewater collection system has sufficient capacity for projected future flows.	0.080	0.15	0.07	1,050	420	280	Plant expansion on hold until UGA boundaries approved.
Suquamish Sewer System	9	No critical pipe flow capacity problems have been identified. Some pipe segments are under capacity, which can cause odor and maintenance problems.	0.21	0.20	(0.01)	1,655	700	(40)	Treatment plant is currently at or over capacity. Kitsap County is in the process of constructing plant expansion. Construction estimated to be complete by March 1998.
Manchester Sewer Facilities	60	Facility Plan does not address existing conditions of the collection system.	0.19	0.23	0.04	4,413	1,765	160	Kitsap County is in the process of constructing plant expansion from 0.23 mgd to 0.46 mgd. Construction is expected to be complete by June 1998.
Navy Yard City (Sewer Dist. #1)	7.4	Significant amount of I/I identified in the older sewers in this service area.	1.0	0.40 (see notes)	-0.60	3,228	1,291	-2,400	Current discharge contract with the City of Bremerton limits flows to 0.40 mgd ADF. Current flows exceed this amount.
Kitsap County (Sewer Dist. #5)	42	Older collection system has some I/I problems.	1.11	2.8 (2) (see notes)	0.7 (3)	9,410	7,924	2,760 (2) (see notes)	Treatment plant is owned by Port Orchard and the District. The District is responsible for operation of the plant. The District is drafting a new plan for the plant.
Port of Bremerton Industrial Area	*1.6*	*Generally in good condition with a few I&I concerns*	*10-15,000 gpd*	*72,5000 gpd*	*57,000 - 62,500 gpd*	*400*	*160*	*1000*	

Notes:

1. **Based on the average day flow during the peak flow month (ADF--basis of NPDES permits)**
2. **Calculations based on City of Port Orchard/District 5 combined totals.**
3. **Residential connections assume 100 gallons per capita per day and an average of 2.5 persons per residence (250 gpd/eru).**
4. **See Kitsap County Sewer District No. 5.**
5. **Discharge to drainfield limits type of services to residential, commercial, and light industrial.**

TABLE SS-2
SERVICE AREA POPULATIONS OUTSIDE CITY'S AND FORMAL SEWER DISTRICTS

SEWER FACILITIES	1992	2000	2012
Central Kitsap Service Area (1)			
Sewered	34,538	40,231	61,147
Unsewered (3)	19,758	19,758	9,879
Port Gamble S'kallam Tribal Service Area			
Sewered	0	NE	NE
Unsewered	600	0	0
Port Gamble Service Area			
Sewered	100	NE	NE
Unsewered	50	0	0
Kingston Service Area			
Sewered	940	1,286	2,615
Unsewered (3)	1,105	1,105	552
Suquamish Service Area			
Sewered	1,665	2,485 (2)	2,658
Unsewered (3)	216	150	0
Manchester Service Area			
Sewered	4,413	4,441	5,470
Unsewered (3)	183	183	915
Navy Yard City Service Area			
Sewered	2,518	2,635	3,454
Unsewered (3)	710	710	355

(1) Includes Bangor/Keyport/City of Poulsbo and Central Kitsap Area
Bangor/Keyport = 8,600 equivalent people Poulsbo = 6,414 people
Assumes new people are served by sewer.

(2) Includes 500 population equivalents for Suquamish Tribal Reservation.

(3) Estimate that as density increases and septic systems fail, one-half of existing septic systems in UGA's will connect to sewer by 2012.

SIX-YEAR CAPITAL IMPROVEMENT PLAN

The following 12 wastewater projects are planned during the 1995-2000 period. Each of these projects is described below.

Central Kitsap Wastewater Treatment Plant Renovation and Repair (Project 95-003, under construction)

The total project consists of constructing renovations to the existing Kitsap County Central Treatment Facility. The project includes, but is not limited to, site work, utilities, new below grade concrete structures, new custom metal building, mechanical and electrical systems associated with wastewater processes, and restoration within the existing property limits of the Facility. The Central Kitsap Wastewater Treatment Plant is located in Kitsap County, between the communities of Brownsville and Keyport, Washington.

The following is a description of the physical improvements performed under the Construction Contract 1 improvements. This contract was opened for bids September 11, 1995, and the apparent low bidder was IMCO Construction. IMCO was given Notice to Proceed for pre-construction planning phase activities on November 30, 1995.

Aeration Basins. Removal of the existing mechanical surface aerators in each of the existing four aeration basins; installation of fine bubble diffused aeration (FBDA) equipment and associated piping and instrumentation; installation of bulkheads above the existing basin weirs to raise the effective wall height of the basins and redirect flows; installation of over-under baffles in each of two basins.

Utilidor. Mechanical, electrical, and minor structural modifications in the existing structure, including: removal of the existing primary sludge pump and associated adjustable speed controller and installation of two new primary sludge pumps, with associated piping modifications; removal of two motors for the two existing waste activated sludge (WAS) pumps and installation of two new motors and adjustable speed controllers, with associated piping modifications; relocation of two adjustable speed controllers and replacement of two adjustable speed controllers for the existing five return activated sludge (RAS) pumps; and removal of the existing motor control center.

Secondary Clarifiers. Removal of the existing mechanical and electrical components in the two existing clarifiers; removal of interior wall and leveling the floor, installation of new sludge collectors, launders, and associated clarifier mechanical and electrical equipment; installation of handrail along the existing exterior walls; installation of associated yard piping; and installation of lighting.

Disinfection System. A new ultraviolet (UV) effluent disinfection system which includes reinforced concrete channels, equipment pad, handrail, roof, UV equipment, associated electrical and mechanical equipment, and yard piping.

Power/Blower Building. A new building to house new blowers, new MCCs, and new switchboard; relocation of some of the existing drives; installation of plumbing, lighting, acoustical insulation, and HVAC.

Standby Generator Building. A new building to house a new 600 kw generator.

Fuel Storage. A new above-ground 4,000 gallon diesel fuel storage tank and associated piping, including concrete containment, roof, and handrail.

Chlorine Building. Mechanical and electrical modifications in existing building, including: removal of existing chlorinators, injectors, and associated piping in existing building; installation of two new chlorinators and one new injector and associated piping and instrumentation.

Sludge Processing Building. Mechanical and electrical modifications in chemical storage area of existing building, including: relocation of existing grinder and associated piping; refurbishing the existing ferric chloride storage tank for alum storage; installation of two metering pumps, piping, valves and associated appurtenances and instrumentation; installation of an eyewash station and associated piping modifications.

Plant Power. Removal of portions of the existing 12.47 kv feeders; installation of new 12.47 kv feeders and ductbanks; installation of new 12.47 kv switchgear, 2,000 kva transformer, 480 v distribution switchboard, and motor control centers; installation of new concrete-encased ductbanks and handholes; installation of associated power, control, and signal cabling and raceway; installation of expanded PLC system.

Major Yard Piping. Removal of portions of the existing 36-inch diameter outfall pipe; installation of 48-inch diameter secondary effluent pipe to connect secondary clarifiers to the UV disinfection system; installation of a 72-inch diameter secondary effluent pipe to connect to the existing outfall; installation of additional buried piping, manholes, and utility vaults.

Fuel Station. Installation of a roof over the existing fuel refilling station located near the Sludge Processing Building.

Storm water Detention Ponds. Two new storm water ponds are constructed to provide storm water control for the entire site development.

Site Work. Paving, grading, storm water modifications including installation of valley gutters and one oil/water separator.

Suquamish Wastewater Treatment Plant Renovation
(Project 90-004, under construction)

The total project consists of constructing a new 0.4 mgd ADF and 1.0 mgd PDF treatment facility to replace the existing package plant together with a new pump station and force main. The treatment plant improvements include the removal of an existing steel building and sludge drying bed structure, and construction of concrete batch tanks with an adjacent process and control building to provide a new sequencing batch reactor treatment process.

The control building will house all the new process equipment inclusive of a rotating bar screen with conveyor and compactor, a grit tank, grit classifier and grit removal pumps, aeration blowers, recirculation pumps, polymer dilution tank and mixer, flocculation tank, gravity belt thickener, sludge pumping equipment for transfer and loading, odor control equipment, sodium hydroxide storage and pumping equipment, low pressure UV equipment, compressed air and reclaimed water systems. Space for the electrical M.C. equipment, a small office for the operator, and storage will be included in the new building. Space will be reserved in the site plan to double the SBR tank volume.

The building is sized to accommodate the addition of future process equipment. The existing treatment plant process tank will be renovated to provide for flow equalization and sludge storage. The existing service building will be renovated to incorporate the installation of a new standby generator. Space for the new generator will be provided by removing the existing generator and the sludge and aeration blower equipment. The roadways and parking areas will be repaved and the perimeter of the site landscaped for visual screening.

The influent lines to the treatment plant will be modified with the addition of a new pump station and force main. The pump station will be located adjacent to Division Street at the treatment plant access road. Flows from the upper Suquamish drainage basin will be diverted to the new pump station and transferred via a force main located within the existing treatment plant access road easement. The new force main will be manifolded with the existing influent force main and extended to the headworks within the new process building. No modifications are planned to the existing outfall.

The Suquamish Wastewater Treatment Plant is located in the town of Suquamish, just north of Bainbridge Island and southeast of Poulsbo. The site is located in a residential community. The scope of the treatment plant improvements are contained within the limits of the existing property. No additional property acquisition is anticipated to accommodate the scope of the treatment plant improvements. Property acquisition is necessary for the pump station. The location of the pump station site is adjacent to Division Street.

Kingston Wastewater Treatment Plant and Collection System
Phase I Improvements (Project 90-003)

The scope of work identified in the *Kingston Wastewater Facilities Plan Addendum* identifies projects to be implemented over a 20-year period, occurring in three phases. Each phase is assumed to be dependent on the demand for the service and the availability of funding. This five-year plan focuses on the Phase 1 Improvements. Phase 1 Improvements provide sewer service within the existing urban growth area. The major components of the Phase 1 system include:

Property Acquisition. The purchase of a 37 acre site for the new treatment facility. This site is located across from the Old Nike Installation Base approximately 1500 feet south of the West Kingston Road.

Treatment Plant Construction. Construction of a new secondary treatment facility on the property. The new facility will replace the existing plant and will be designed to meet the current user capacity requirements and long term capacity projections through advanced site planning.

For the purpose of establishing the scope of planned improvements, the following components are assumed to be included:

Capacity. Current population and future population for the proposed UGA is 2,408 people. The designed capacity would then be 240,850 g.p.d.

Headworks. The headworks consist of static screens for removal of gross solids. Separation of inorganic solids will be accomplished by a cyclonic grit separator.

Process Building. A process building will be constructed to enclose the influent screening and grit removal, aeration blowers, recirculation pumps, sludge transfer pumps, gravity belt thickener dewatering equipment, odor control equipment and UV disinfection equipment. The size of the process building will be sufficient to enclose the equipment needed for the year 2015 flow capacity and provide room for expansion.

Flow Equalization. Effluent flow equalization capacity is anticipated. It is assumed the equalization tanks will be separate adjacent structures from the SBR batch tanks and integrated with the effluent pump station if it is determined an effluent pump station will be necessary to accommodate peak discharge rates.

Sludge Handling. Sludge handling facilities will be limited to provisions for temporary sludge storage and thickening for truck haul to the Central Kitsap Treatment Plant. On-site storage volume has yet to be evaluated, but it is assumed minimum storage will be provided. Off-site sludge handling is a change from the recommendations presented in the Facilities plan. A facultative lagoon was previously proposed. This plan assumes the processing of sludge will occur at the Central Kitsap facility.

Power. Primary three-phase power will be extended to the site and a new power transformer and primary power distribution center will be constructed to meet the year 2012 plant size, with provisions for expansion to meet future requirements. Standby power facilities will be constructed and sized to provide emergency power to the occupied buildings, to run essential process equipment, and to provide a central standby power supply for the remote pump stations.

Operations Building. A separate operations building will be constructed to house the plant control equipment, instrumentation and alarms, electrical distribution inclusive of the main primary power switchgear, transfer switches, motor control center, step down transformers, and local distribution panels. The Operations building shall also contain the offices, showers, toilets, a locker room, a day room, a maintenance shop, a laboratory and storage space.

Site Work. Site development is assumed to be limited to clearing the area designated for the plant construction. Site improvements include provisions for on-site storm water treatment and detention storage, perimeter site fencing, site security lighting, low maintenance landscaping, and asphalt pavement access road and parking areas.

Utilities. On-site utilities will include potable water extended from the Kingston Water system for domestic and fire use, plant non-potable reclaimed water system for wash down purposes, site storm water collection for drainage of impervious areas, a site tank drainage system, and operations building sewer collection.

Kingston Collection System elements

Name and location
Kingston Pump Station located at the site of the existing treatment plant
5300 LF of 16-inch Force Main 800 LF of 15-inch gravity 800 LF of 24-inch gravity
South Kingston Pumping Station located along South Kingston Road.
1,100 LF of 14-inch force main 1700 LF of 18-inch gravity
Pump Station 41 retrofit
200 LF of 8-inch Force Main

The Kingston pump station is needed to re-route flows to the new treatment plant site. The South Kingston Pump Station will provide service to the extended service area along the south side of the bay. Pump Station 41 will be retrofitted to replace worn out components and the force main reconfigured to pump to the wet well of the new Kingston pump station.

Based on preferences expressed by Kitsap County, consideration has been given for below grade submersible duplex pump stations with limited above grade facilities. Site development should be limited to the minimum needed to provide access for inspection and maintenance. Pipelines are assumed to be constructed within existing right of way, existing easements or

easements associated with the new treatment plant purchase. Materials are assumed to be ductile iron piping for force mains and PVC for gravity lines.

Outfall Pipeline. Extension of the existing outfall to the new treatment plant location will require 6000 feet of new pipeline. It is assumed the pipeline will connect to the existing outfall at the base of the existing treatment plant access road at West Kingston Way. The pipe size is assumed to be 30-inch HDPE. The pipeline will be located within the existing West Kingston Way right-of-way.

Manchester Wastewater Treatment Plant Renovations (Project 93-010)
(Under Construction)

The project consists of upgrading the existing treatment facility to provide 0.46 mgd ADF and 1.25 PDF within the limits of the existing treatment plant property. This upgrade is expected to meet the projected population and sewer connection increase through the year 2014.

Property Acquisition. The scope of the treatment plant improvements are contained within the limits of the existing property. No additional property is anticipated.

Treatment Plant. The Manchester Wastewater Facilities Plan addenda recommends improvements to the treatment facility to increase capacity. The following new and modified facilities are recommended:

Site Work. General sitework associated with the expansion.

Influent Pumping Station. Construct a new influent pumping station. The new station will house a new influent pump together with two existing pumps, relocated from the old station.

Headworks. Headworks modifications include installing grinding equipment downstream from the influent pumps, influent flow measurement downstream from the influent pumps, and a new grit removal system.

Primary Clarification. The existing primary clarifier will be taken out of service and removed.

Secondary Treatment. The expansion and retrofit modifies the existing SBR unit to incorporate it in a new activated sludge process. Two new secondary clarifiers are provided and the existing SBR tanks are modified to serve as aeration tanks.

Disinfection. The existing chlorine disinfection system will be replaced with UV disinfection.

Power. Modify the maintenance garage to expand the square footage and install a new standby power generator.

Control Building. Construct a whole new operations center.

Sludge Disposal. Install a new gravity belt sludge thickener with polymer addition. This system will include odor control.

Outfall. It has recently been determined by Kitsap County that the outfall from the treatment plant is adequate for the new flow with nozzle modification at the outfall end.

South Central Collection System Improvements (Project 95-012)

Five segments of pipeline in the South Central collection system are currently under capacity and are critical to providing capacity for future flows. A description of each segment is presented below.

Segments 1, 2, and 3. The gravity sewer network of Silverdale Central was identified by Central Kitsap staff as the most troublesome area of the collection system, requiring frequent maintenance. The lines are also prone to surcharge during high flows. A high content of grease and solid waste was noted by Central Kitsap staff in these segments. Additional efforts to establish/enforce a pretreatment program may also be warranted to reduce the discharge of materials causing pipe constriction.

Segment 1 is an 8-inch gravity line conveying commercial flows from the north portion of Silverdale Central down Bayshore Drive into manhole L17-1038, located at Washington Avenue and Lowell Street. The flow limiting segment is approximately 350 feet and occurs between manholes L17-1055 and L17-1054.

Segment 2 is located at the downstream end of an 8-inch line from residential areas to the northwest; between manhole L17-1038 and approximately 280 feet to manhole L17-1003 which is located at the intersection of Washington Avenue and Commercial Avenue.

A third 8-inch gravity sewer conveys residential and commercial flows from the west into L17-1003. From L17-1003, all of the wastewater from Silverdale Central is conveyed approximately 190 feet through segment 3 by an 8-inch gravity line into Pumping Station 3.

Segment 4. Force mains from Pumping Stations 5 and 34 combine at manhole J16-1078 at the intersection of Central Valley Road and Fairgrounds Road. Due to frequent surcharging, this manhole has been sealed. The surcharging of the discharge manhole may be the result of constant-speed operating of Pumping Stations 5 and 34, poor force main discharge conditions with the manhole, or an undersized line downstream of the discharge manhole. Downstream of manhole H16-2048, surcharging is still expected for peak flows. The limiting stretch in this segment is between H16-2048 and Pumping Station 6, with a maximum capacity of approximately 1.3 mgd.

Segment 5. The gravity siphon under Clear Creek, upstream of Pumping Station 1, requires considerable maintenance by CK staff. The maximum theoretical flow capacity of the siphon barrels exceeds estimated existing flows. Low flow velocities and the commercial nature of the flow result in rapid accumulation of solids reduces the available capacity of the pipe, and creates a risk of surcharging the upstream manhole adjacent to Clear Creek.

The following table summarizes the segments of the collection system which are under capacity:

Segment	Upstream MH	Downstream MH	Pipe size	Existing capacity Q (mgd)	Calculated PDWF (mgd)	Pipe length
1	L17-1056	L17-1038	8-inch	.3	.28	350
2	L17-1038	L17-1003	8-inch	.2	.71	280
3	L17-1003	PS3	8-inch	.3	1.15	190
4	H16-2058	PS6	8-inch	1.3	1.77	
5	K18-3014	PS1	2, 6-inch (siphon)	.35	1.00	

These pipeline sections will be up sized to provide for current and future flows. For each segment the new proposed pipe size and the length of replacement pipe is listed below.

Segment	Upstream	Downstrea m	New Pipe Size	Replacement Pipe Length
1	L17-1056	L17-1038	15-inch	3,000
2	L17-1038	L17-1003	18-inch	280
3	L17-1003	PS3	18-inch	190
4	H16-2058	PS6	15-inch	200
5	K18-3014	PS1	8-inch	200

Infiltration/Inflow Repair (Projects 93-002 through 004 and 95-002)

Four projects have been identified which focus on reducing inflow and infiltration of surface and ground water into the sanitary sewer. Each of the four project scopes of work are described below:

Silverdale Infiltration/Inflow Study 93-002. In the old town Silverdale area, an inspection of the sewer mains and services is proposed. Root intrusion is suspected in sections of the pipeline causing infiltration, restricted flow, and pipe blockage. It is anticipated that some of the problems can be eliminated by sewer cleaning and others eliminated through pipe replacement efforts scheduled as part of Project 93-012 - South Collection System Improvements. No capital expenses beyond costs to fund the in-house study efforts are included in the five-year plan. Should the study identify the need for capital improvements, the plan will be adjusted in later years.

Suquamish Infiltration/Inflow Study 93-003. Portions of the Suquamish system are suspected of contributing a high level of infiltration. An infiltration study is currently underway. Preliminary analysis indicates the need to replace sections of mainline sewer and side sewer. A method of pipe bursting is being evaluated utilizing the existing pipeline and side sewers as a sleeve for installation of a new polyethylene sewer. A complete scope of work is presently being developed by an engineering consultant. The budget for this project includes the engineering design budget, together with an allowance for construction, which may change, based on the results of the engineering work.

Manchester Infiltration/Inflow Study 93-010. A survey of the Manchester collection system is planned to identify areas of excessive infiltration and/or roof intrusion. It is anticipated that some of the problems can be eliminated by sewer cleaning and others eliminated through pipe replacement efforts. No capital expenses beyond costs to fund the in-house study efforts are included in the five-year plan. Should the study identify the need for capital improvements, the plan will be adjusted in later years.

Navy Yard Sewer Infiltration/Inflow Study 95-002. The project consists of repair and replacement of approximately 6,800 LF of sewer main piping and 100 manholes. The piping system has numerous structural deficiencies and sections which allow infiltration of groundwater. Engineering design is scheduled to begin, with construction of prioritized improvements following. An allowance for engineering and construction has been established based on a preliminary estimate of the scope.

Collection System Chlorination Equipment Renovation (Project 95-005)

The *Central Kitsap Wastewater Treatment Facilities Plan* recommends conversion to hypochlorination from use of chlorine gas. The conversion to hypochlorination for the pumping stations will include demolition of existing chlorination process piping and equipment, electrical and structural modifications, and hypochlorite storage tank and chemical metering pump installation. The hypochlorination system at each pumping station will consist of one storage tank and two metering pumps. If the existing chlorination rooms do not have adequate space to house the storage tank and the metering pumps, additional slab-on-grade structures will be constructed.

The seven chlorination facilities recommended for conversion to hypochlorination are presented below. This study assumes only replacement of chlorine gas with NaOC1. Other odor control chemicals, such as ferrous chloride, are not included.

Project Description	Location
Pumping Station 3	Silverdale Central
Pumping Station 4	Dyes Inlet North
Pumping Station 12	Dyes Inlet West
Pumping Station 13	Dyes Inlet West
Pumping Station 17	Bangor
Johnson Road	

North Central Collection System Renovations and Improvements (Project 95-013)

Alternatives for accommodating existing and projected sewer service needs for the northern service area are presented in Chapter 7 of the *Central Kitsap Wastewater Treatment Facilities Plan.* Preliminary recommendations for collection system improvements are contained in Chapter 8 of this plan. The scope identified herein presents a portion of the recommended improvements with modifications based on further evaluation of alternatives. The identified improvements shall form the basis for scheduling design and construction activities and estimating costs.

The scope of proposed improvements focuses on improvements to the capacity of the existing facilities to provide for immediate needs. Increasing the capacity of the Lemolo/Liberty Bay crossings through conversion of the inverted siphon to a force main is the key component of this alternative. By pressurizing the crossing, a peak capacity of 6.0 mgd is expected. Further investigation of the systems capacity to withstand higher pressure heads may allow for a slight increase in the peak flow. Additional engineering analysis and policy discussions with Poulsbo, a plan for future growth have allowed the improvements to the Kitsap North End Collection System to be integrated with Poulsbo's system.

Under the proposed scope of work, Poulsbo flows will continue to be routed through the Lemolo crossing. Wastewater currently flows downstream of the flow measurement manhole (in Lemolo) through a 14-inch pipeline and through two 12-inch siphon lines crossing under Liberty Bay. One 12-inch siphon line is used at a time and has a capacity of 1.6 mgd. The discharge of the siphon flows to Pump Station #16 where it is pumped through a 16-inch force main down Washington Avenue and south along Highway 303. This force main discharges at Pump Station #15.

The proposed improvements seek to increase the capacity of the Lemolo crossing. Further increases in flow beyond the 6.0 peak flow will be achieved through elimination of infiltration and inflow. The table below outlines the proposed scope of improvements to be incorporated in the five-year Capital Improvement Plan.

Property Acquisition. Property is anticipated for two pump station sites. The new Pump Station #67 required a site in the Keyport community. A site for a pump station in Lemolo is also required. Pump Station #15 will be upgraded at its existing location, requiring no new property. All new or renovated pipelines are assumed to be installed within public right of way or existing easements.

Scope Component	Description
Pump Station 15	Replace the existing pumps with new centrifugal pumps sized for year 2020 flows. Upgrade pump station to meet current code requirements.
Pump Station 16	Replace with pump station 67 in the Keyport Community serving only the Keyport Naval Base and community flows
Lemolo Pump Station	Construct a custom pump station in Lemolo and modify the existing 14-inch gravity line for force main operation. Pressurize the existing two 12-inch inverted siphons crossing under Liberty Bay all the way to Pump Station 15.

Pump Station Design. New pump stations will be custom built stations designed to conform to the constraints of the site, provide for ease of operation and maintenance, provide operational reliability, and meet the required flow capacity.

Pipeline Construction and Renovation Design. The scope of the pipeline work includes converting the 14-inch gravity line on the Lemolo side to force main operation through removal of manholes and replacement with piping and installing new piping in the Keyport area.

Central Kitsap Wastewater Treatment Plant Expansion (Project 95-003)

This project will increase the capacity of the existing treatment plant from 6.0 mgd ADF to 10.6 mgd ADF. Significant facility additions and modifications are included in this project, as described in the Central Kitsap Wastewater Facilities Plan. Recommendations focus on maintaining the existing treatment plant core facilities and augmenting the capacity and treatment plant function by pursuing the following improvements:

Property Acquisition. No property acquisition is required for this project.

Treatment Plant.

Headworks. Replace the existing headworks with a new headworks sized for the new 10.6 mgd ADF which will include barscreens and odor control.

Primary Sedimentation. New primary clarifiers.

Secondary Treatment. Increase the capacity of the secondary process through the modification of four new aeration basins, two secondary clarifiers, and new aeration equipment and piping.

Ultraviolet Disinfection. Additional UV equipment will be added to the existing equipment to accommodate the increase in flow.

Solids Handling. The solids stream improvements include installing two new 30-foot diameter dissolved air flotation thickeners, new grit removal facilities, and one new digester.

Septage Handling. A new septage handling facility is proposed to replace the existing facilities.

Sludge Disposal. New or renovated facilities are needed, including two new dewatering centrifuges.

Site Work. A new hypochlorite facility is proposed, additional power and standby power, expanded process water, expanded administration building and maintenance facilities, and improvements to the site plan are recommended.

Outfall Modifications. Capacity restrictions and dilution discharge requirements for future flows may require modifications to the existing outfall and marine diffuser. Construction is anticipated to occur in the year 2000-2005 period. An allowance for construction of the on-site facilities to include an outfall junction structure and 550 feet of 60-inch reinforced concrete pipe is included in this project. For the purposes of this plan, no costs are included for offsite outfall pipe improvements or diffuser modifications because it is assumed the 23 mgd capacity will be sufficient for the near term operation of the plant. It is anticipated that engineering analysis will be incorporated with the treatment plant expansion project predesign.

THE CITY OF BREMERTON - PORT BLAKELY PROPERTIES

The City of Bremerton has committed to provide sewer service to Port Blakely. This includes 500 acres of light industrial land west of Kitsap Lake. The City plans on spending $230,000 in 1998, $780,000 in 1999, with a total expenditure to complete the sewering of $3.4 million dollars. This development is supported by a plan completed by Parametrix, Inc. in 1997.

CAPITAL FACILITIES PLAN FUNDING

Sanitary sewer facilities include nine capacity-related capital facilities at various locations throughout the county at a cost of $67,851. The proposed financing plan is shown on Table SS-3. The map in the map volume shows the locations of these projects and the existing sewers in the various service areas.

TABLE SS-3
CFP PROJECTS AND FINANCING PLAN
(All Amounts Are Times $1,000)
SANITARY SEWER

(1) COST REVENUES	(2) 1995	(3) 1996	(4) 1997	(5) 1998	(6) 1999	(7) 2000	(8) TOTAL
1. Central Kitsap WWTP Phase I							
Cost	1,614.0	8,001.0	238.0				9,853.0
Revenue - Cash	1,614.0	2,817.0	238.0				4,669.0
Revenue - Bonds		5,184.0					5,184.0
2. Suquamish WWTP							
Cost		491.0	3,106.0	1,240.0			4,837.0
Revenue - Cash		491.0					491.0
Revenue - Bonds			3,106.0	1,240.0			4,346.0
3. Manchester WWTP							
Cost		501.0	3,820.0	1,413.0			5,734.0
Revenue - Cash		501.0					501.0
Revenue - Bonds			3,820.0	1,413.0			5,233.0
4. Collection System Chlorine Renovation							
Cost			883.0				883.0
Revenue - Cash			176.0				176.0
Revenue - Bonds			707.0				707.0
5. North Central P.S. No. 67 (Keyport)							
Cost			1,550.0	139.0			1,689.0
Revenue - Cash			1,007.0	91.0			1,098.0
Revenue - Bonds			543.0	48.0			591.0
6. Navy Yard City Collection System							
Cost			162.0				162.0
Revenue - Cash			162.0				162.0
Revenue - Bonds			0				0
7. Infiltration/Inflow Collection Systems							
Cost		349.0	165.0	300.0	300.0	300.0	1,414.0
Revenue - Cash		349.0	165.0	300.0	300.0	300.0	1,414.0
Revenue - Bonds		0	0	0	0	0	0
Sub-Total	**1,614.0**	**9,342.0**	**9,924.0**	**3,092.0**	**300.0**	**300.0**	**24,572.0**

TABLE SS-3
CFP PROJECTS AND FINANCING PLAN
(All Amounts Are Times $1,000)

SANITARY SEWER

(1) COST REVENUES	(2) 1995	(3) 1996	(4) 1997	(5) 1998	(6) 1999	(7) 2000	(8) TOTAL
8. North Central Collection - Lemolo/P.S. No. 15							
Cost				850.0	3,925.0	500.0	5,275.0
Revenue - Cash				98.0	1,702.0	0	1,800.0
Revenue - Bonds				752.0	2,223.0	500.0	3,475.0
9. Kingston System							
Cost							
Revenue - Cash			550	249	1,545	4,500	6,844
Revenue - Bonds			550	249	587	1,710	3,096
					958	2,790	3,748
10. Central Kitsap WWTP Phase IIA							
Cost				1,200.0	14,590.0	15,370.0	31,160.0
Revenue - Cash				430.0	5,360.0	5,370.0	11,160.0
Revenue - Bonds				770.0	9,230.0	10,000.0	20,000.0
Sub-Total	**0.0**	**0.0**	**550.0**	**2,299.0**	**20,060.0**	**20, 370.0**	**43,279.0**
SUMMARY: COST/REVENUES							
Costs	1,614.0	9,342.0	10,474.0	5,391.0	20,360.0	20,670.0	67,851.0
Existing Revenues:							
Cash	1,614.0	4,158.0	2,298.0	1,168.0	7,949.0	7,380.0	24,567.0
Revenues:							
Bonds	0.0	5,184.0	8,176.0	4,223.0	12,411.0	13,290.0	43,284.0
Total Revenues	1,614.0	9,342.0	10,474.0	5,391.0	20,360.0	20,670.0	67,851.0
BALANCE	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**

TWENTY-YEAR CAPITAL FACILITY NEEDS NOT DEVELOPED IN THIS SIX YEAR PLAN
SEWERS

This plan is specifically focused on the capital facilities proposed to be funded and constructed during the years 1995 through 2000. Some of the capital facility plans identify facility needs beyond the year 2000, and identify some facilities that will be provided by agencies other than the County. This table of sewer capital facilities is provided to put this plan into a longer term perspective.

Sewer

The following tables list the sewer projects found in the County's Facility Plans that will be required between the years 2001 and 2010. Most of these projects are related primarily to sewer capacity issues and will be scheduled in the County's capital improvement plans as they are developed each year.

Kitsap County Sewer Projects - Year 2000 to 2010

Project No:	Project Description:	Most probable total project cost, Jan-93 dollars	Project No:	Project Description:	Most probable total project cost, Jan-93 dollars
1	Waaga Way Pumping Station Station design & construction	$3,676,000	14	Central Valley Road Projects New 18-inch gravity sewer	$516,000
2	Waaga Way Pumping Station Pumping station influent sewer	$476,000	15	Central Valley Road Projects New 15-inch sewer to Waaga Way	$718,000
3	Waaga Way Pumping Station Pumping station force main	$2,694,000	16	Tracyton Area Projects Tracyton Pumping Station A	$2,330,000
4	Wheaton Way Projects Interceptor sewer	$12,033,000	17	Tracyton Area Projects Tracyton Pumping Station B	$1,613,000
5	Waaga Way Projects Interceptor sewer	$6,465,000	18	Tracyton Area Projects Pumping Station A force main	$358,000
6	Low pressure system pumping stations PS#9, 19, 20, 23, & 25	$1,290,000	19	Tracyton Area Projects Pumping Station B force main	$1,072,000
7	Install Waaga Way & Old Military Road manholes	$157,000	20	Tracyton Area Projects Gravity sewer	$282,000
8	Central Valley Road Projects New Pumping Station 10	$389,000	21	Tracyton Area Projects Force main discharge structure	$33,000
9	Central Valley Road Projects Pumping Station 10 force main	$497,000	22	Pumping Station 6 Construct new pumping station	$3,491,000
10	Central Valley Road Projects New 15-inch sewer to PS #34	$396,000	23	Pumping Station 6 Construct new 14-inch force main	$787,000
11	Central Valley Road Projects Decommission Pump Station No.5	$19,000	24	Pumping Station 7 Replace existing pumping station	$229,000
12	Central Valley Road Projects Replace Pumping Station 34	$2,744,000	25	Pumping Station 7 Construct new force main	$188,000
13	Central Valley Road Projects New PS 34 force main	$1,934,000	26	Southern-section PS modifications Pumping Station 4	$677,000

Project No:	Project Description:	Most probable total project cost, Jan-93 dollars	Project No:	Project Description:	Most probable total project cost, Jan-93 dollars
27	Southern-section PS modifications Pumping Station 8	$344,000	49	Sewer replacement project G16-4057 to G16-4005	$544,000
28	Southern-section PS modifications Pumping Station 8 force main	$345,000	48	Sewer replacement project G16-3018 to G16-3014	$247,000
29	Southern-section PS modifications Pumping Station 12	$282,000	47	Sewer replacement project H16-3042 - PS 5	$69,000
30	Southern-section PS modifications Pumping Station 32	$294,000	50	Sewer replacement project PS 18 to G16-1011	$142,000
31	Southern-section PS modifications Pumping Station 3	$2,931,000	51	Sewer replacement project L17-3008 to PS 12	$774,000
32	Southern-section PS modifications Pumping Station 3 force main	$2,395,000	52	Sewer replacement project G16-2008 to H16-1023	$232,000
33	Southern-section PS modifications Pumping Station 13	$719,000	53	Sewer replacement project H17-3052 to H16-2010	$705,000
34	Southern-section PS modifications Pumping Station 14	$538,000	54	Sewer replacement project J19-2007 to J19-2003	$297,000
35	Southern-section PS modifications Pumping Station 36	$598,000	55	Sewer replacement project H16-2010 to PS 6	$76,000
36	Southern-section PS modifications Pumping Station 36 force main	$124,000	56	Sewer replacement project L15-2009 to PS 13	$317,000
37	Southern-section PS modifications Pumping Station 31	$250,000	57	Sewer replacement project G16-3044 to G16-3018	$104,000
38	Sewer replacement project Clear Creek Siphon	$105,000	58	Sewer replacement project G16-1008 to G16-2017	$240,000
39	Sewer replacement project L17-1066 to L17-1004	$423,000	59	Sewer replacement project G16-2015 to G16-2006	$296,000
40	Sewer replacement project G15-3010 to G15-2017	$261,000	60	Sewer replacement project J17-4006 to PS 20	$550,000
41	Sewer replacement project L17-1058 to L17-1038	$91,000	61	Sewer replacement project G16-4005 to PS 8	$24,000
42	Sewer replacement project L17-1038 to L17-1003	$729,000	62	Sewer replacement project G16-1011 to G16-1008	$174,000
43	Sewer replacement project L17-1014 to L17-1003	$532,000	63	Sewer replacement project L15-2020 to Holly Park Dr	$1,907,000
44	Sewer replacement project L17-1003 to PS 3	$71,000	64	Sewer replacement project J19-3001 to J18-2001	$357,000
45	Sewer replacement project J16-4020 to J16-4023	$212,000	65	Sewer replacement project Holly Park Dr to PS 12	$359,000
46	Sewer replacement project J16-4023 to H16-3042	$283,000			

Other sewer Projects

* Gorst Health Hazard area sewering to Bremerton: Funding by LID, Constructed in 2000
* Port of Bremerton Employment Area sewered to Port Orchard or Bremerton or both. Funding by LID. Constructed in sometime in the late 1990's or early 2000's. Costs being negotiated between City of Port Orchard and Port of Bremerton.
* Port Blakely Properties sewered to Bremerton. City of Bremerton, Construct 1999-2000, Cost $1,030. Ultimate build out estimated at $3.4 million(1997 dollars)
* There will be other sewer projects that respond to specific health or environmental hazards. These will each be dealt with on a case by case basis and funded by local improvement districts.
* In addition, local extensions of sewers within UGA boundaries will be funded by specific assessments of the properties benefited.

SCHOOLS

The purpose of the schools section of the Capital Facilities Element is to ensure that adequate educational facilities will be available to serve the increasing population in Kitsap County. This section evaluates the four school districts that serve unincorporated Kitsap County: North Kitsap, Central Kitsap, South Kitsap, and Bremerton. Two districts were excluded: Bainbridge Island Schools because the entire district is located in the City of Bainbridge Island, and the North Mason School District because it does not have schools or facilities located in Kitsap County and serves only a very small area in the southwestern corner of the county. Figure SC-1 shows the boundaries of each district and the location of existing school facilities.

The schools section of the Capital Facilities Element is divided into four parts, one for each district (North, Central, South, and Bremerton). The part devoted to each school district includes an inventory of existing facilities, an analysis of the requirements for school capacity needed to serve projected enrollment through the 2001-02 school year, and a capital improvements schedule and financing plan to provide school capacity and other needed school capital improvements through the 2001-02 school year.

The County's Comprehensive Plan "Part III Figure Book" graphically shows the location of existing County school districts' facilities, as well as any proposed 1995-2000 County school districts' capital facilities.

Enrollment and Capacity Data

The enrollment and school capacity data deserves some explanation. First, the data are measured by full time equivalent (FTE) students, rather than "head count" (the total number of students enrolled). Students who attend only half- or part-time in the preschool programs, alternative schools, or in kindergarten are counted in relationship to a full school day. FTE numbers are lower than head counts, and better represent the actual impact on facilities.

Second, the inventories and analysis of capacity requirements are presented two ways: with interim (i.e., portable) facilities and without interim facilities. The districts' capital improvement projects are based on the capacity without portables because they have significant limitations ins such areas as heating, ventilation, noise, security, restrooms, storage cupboards, and intercom communications. For these reasons, portables are not considered permanent capacity by the State nor by the districts. The capacity of portable rooms is presented in order to show the interim facilities that the districts use (1) to meet short-term enrollment fluctuations, or (2) to serve as temporary facilities until permanent facilities are built.

Finally, capacity figures are generally based on teacher-to-student ratios (expressed as students per classroom) which the school district determines to be most appropriate to accomplish its educational program. These ratios are often contained in employment agreements between districts and their teachers. The State of Washington uses a different basis to distribute capital facilities money to school districts. The State uses square feet of space per student (see the space allocations criteria established in WAC 180-30-110). The schools section of Kitsap County's comprehensive plan uses teacher-student ratios because they are more easily understood, and because they can be translated into square footage requirements to estimate the cost of new facilities.

Level of Service

Table SC-1 shows the students per classroom ratios used by each of the school districts analyzed in this section of the Capital Facilities Element. The data for middle/junior high and senior high schools overstate the actual capacity of those schools because they are not adjusted for the "utilization" or "efficiency" factor that represents classrooms not in use during some periods of instruction. These factors typically reduce the theoretical capacities listed below by 10 to 15 percent.

Table SC-1. Students per Classroom Level of Service Standards

	Elementary	Middle/Junior	Senior
North Kitsap	25	25	25
Central Kitsap	25	28	28
South Kitsap	26	29	29
Bremerton	24	32	32

Source: School Districts

Financing Plan

RCW 36.70A.070(3)(e) requires that all capital facilities plan to include "a six-year plan that will finance such capital facilities within projected funding capacities and clearly identifies sources of public money for such purposes." RCW 36.70A.070(3)(e) requires that all capital facilities have "probable funding" to pay for capital facility needs, or else the County must "reassess the land use element."

"Probable funding for new school facilities comes from three sources: (1) local bonds (that require approval by 60% of voters), (2) state funds (that are allocated on the basis of complex formulas and criteria that can make some districts ineligible), and (3) impact fees (that can pay a portion of the facilities needed by new development, but cannot be used to eliminate existing deficiencies, nor can they be used for modernization or other non-capacity capital improvements).

NORTH KITSAP SCHOOL DISTRICT

Inventory

The North Kitsap School District is located at the north end of the Kitsap Peninsula and is almost completely surrounded by water. To the west, the district is bordered by Hood Canal and includes the Port Gamble Inlet. To the north and east, the district is bordered by Puget Sound. Port Madison and Liberty Bay surround the district on its southern most borders. North Kitsap schools are generally clustered around the City of Poulsbo and the unincorporated community of Kingston. The District uses the following grade level configurations: K-6 housed in elementary schools, 7-9 housed in junior high schools, and 10-12 housed in senior high schools. Table SC-2 lists North Kitsap schools and their enrollment capacity.

Table SC-2. North Kitsap School District Existing Capacity

School	Existing Capacity
Elementary Schools (K-6)	
Breidablik	400
Gordon	150
Pearson	350
Poulsbo	425
Suquamish	375
Vinland	600
Wolfle	400
Total Elementary Permanent Facilities	**3,000**
Total Elementary Interim (Portables) Facilities	**775**
Total Elementary Permanent and Interim Facilities	**3,775**
Jr. High Schools (7-9)	
Kingston Jr. High	923
Poulsbo Jr. High	720
Total Jr. High Permanent Facilities	**1,643**
Total Jr. High Interim (Portables) Facilities	**90**
Total Jr. High Permanent and Interim Facilities	**1,733**
Senior High Schools (10-12)	
North Kitsap High School	1,211
Spectrum	64
Total Senior High School Permanent Facilities	**1,275**
Total Senior High Interim (Portables) Facilities	**85**
Total Senior High Permanent and Interim Facilities	**1,360**

Source: North Kitsap School District

Capital Facility Capacity Requirements

Table SC-3 compares current and future enrollment to the enrollment capacity of the North Kitsap School District. The enrollment data in column 2 was provided by the Washington Superintendent of Public Instruction using the cohort survival method. The existing capacity (column 3) is taken from Table SC-2, and includes existing permanent and portable facilities. The net reserve or deficiency is the difference between enrollment and capacity. The net reserve or deficiency in permanent facilities (column 5) is calculated by subtracting enrollment from permanent capacity: column 3 minus column 2. The net reserve or deficiency in all facilities (column 6) is calculated by subtracting enrollment from both permanent and interim capacity: add columns 3 and 4, then subtract column 2. If capacity is greater than enrollment, the district has "reserve" that can accommodate future enrollment. If capacity is less than enrollment, the district has a "deficiency" which can be addressed by adding capacity (see Capital Projects and Financing Plan, Table SC-3) or by changing the standard for level of service as part of the annual amendment to the Comprehensive Plan.

Immediately below the calculation of net reserve or deficiency is a list of each capital improvement project from the District's CFP that provides capacity to offset any deficiency (see Table SC-4 for CFP project list). The new capacity is listed in column 3, and the revised net reserve or deficiency is listed in columns 5 and 6.

Elementary School Capacity Requirements. By the year 2000, the North Kitsap School District will need permanent space for 2,232 elementary students. The District's Capital Facilities Plan includes an addition to Suquamish Elementary (150 student stations) and construction of a new elementary (#8, housing 600 students). Upon the opening of elementary #8 the District will close Pearson Elementary (350 student stations). After these projects are completed, the District will still need permanent space for 832 elementary students.

Junior High School Capacity Requirements. By the year 2000, the North Kitsap School District will need permanent space for 327 junior high school students. Since this capacity deficiency does not equal or exceed the capacity of an additional junior high school, the District does not include a new junior high school in its capital facilities plan through the 2001-02 school year, but such a facility is contemplated in the District's longer-range plans.

Senior High School Capacity Requirements. By the year 2000, the North Kitsap School District will need permanent space for 529 senior high school students. Since this capacity deficiency does not equal or exceed the capacity of an additional senior high school, the District does not include a new senior high school in its capital facilities plan through the 2001-02 school year, but such a facility is contemplated in the District's longer-range plans.

Table SC-3. North Kitsap School District Facility Capacity Requirements and Proposed Capacity Projects Through 2001-02 School Year

(1) Time period	(2) Enrollment	(3) Existing capacity	(4) Interim capacity*	(5) Net reserve or deficiency: permanent facilities	(6) Net reserve or deficiency: all facilities
Elementary Schools (K-6)					
1994 Actual	3,403	3,000	775	-403	372
1995-2000: Growth	829			-829	-829
Total as of 2000	4,232	3,000	775	-1,232	-457
Capacity Projects:					
1. Addition to Suquamish (CFP #1)		150		-1,082	-307
2. New Elementary #8 (CFP #2)		600			
(Less closure of Pearson)		-350		-832	-57
Jr. High Schools (7-9)					
1994 Actual	1,493	1,643	90	150	240
1995-2000: Growth	477				-477
Total as of 2000	1,970	1,643	90	-327	-237
Capacity Projects (None Scheduled)				-327	-237
Senior High Schools (10-12)					
1994 Actual	1,335	1,275	85	-60	25
1995-2000: Growth	469			-469	-469
Total as of 2000	1,804	1,275	85	-529	-444
Capacity Projects (None Scheduled)				-529	-444

- District's interim capacity may be reduced when the District's permanent capacity is increased and portables are removed.

- The capacity deficiency does not equal or exceed the capacity of an additional school. No new school for this grade level is included in the District's 6-year Capital Facilities Plan, but such a facility is contemplated in the District's longer-range plans.

Sources: Enrollment Data from State of Washington, Superintendent of Public Instruction Capacity Data from Table SC-2

Capital Projects and Financing Plan

Table SC-4 presents North Kitsap School's six-year plan for capital improvements projects, including sources of public money within projected funding capacities that constitute the probable funding of the District's capital improvement projects.

Table SC-4. North Kitsap School District Capital Projects and Financing Plan ($000)

COST/REVENUE	1996	1997	1998	1999	2000	2001	Total
Capacity Projects							
1. Addition to Suquamish (150 elem. Students)		1,968.0	1,103.0				3,071.0
2. New Elementary #8 (600 Students)			1,257.0	11,025.0			12,282.0
Non-Capacity Projects							
3. High School Remodel		2,977.0	22,000.0				24,977.0
4. District-wide Code Compliance		882.0	441.0	502.0			1,825.0
5. Non-recurring		882.0	992.0	992.0	904.0		3,770.0
6.Technology		551.0	4,961.0				5,512.0
7.New sites				386.0	419.0		805.0
8.Poulsbo Jr. High Remodel				3,308.0	6,615.0		9,923.0
9. Plan New High School					3,219.0	2,205.0	5,496.0
10.Plan New Jr. High School					1,119.0	2,205.0	3,324.0
11. Replace Poulsbo Elem.						683.0	683.0
Total Cost		7,260.0	30,754.0	16,213.0	12,348.0	5,093.0	71,668.0
Local Bond Funds		4,663.0	29,914.0	13,207.0	12,098.0	4,843.0	64,725.0
State Match	805.0	492.0	590.0	2,756.0			4,643.0
Impact Fees	1,000.0	300.0	250.0	250.0	250.0	250.0	2,300.0
Total Revenues	**1,805.0**	**5,455.0**	**30,754.0**	**16,213.0**	**12,348.0**	**5,093.0**	**71,668.0**
Balance	+1,805.0	-1,805.0					

Source: North Kitsap School District

The voters of the North Kitsap School District passed a $28 million bond issue in 1991. The District does not anticipate another bond measure to be placed before the voters until 1997. The District will be forming a citizens review committee to review the capital projects presented below, and to identify any additional projects for recommendation to the District's Board of Directors. The committee is anticipated to meet from the winter of 1996 to the spring of 1997. The District anticipates that it will continue to qualify for state match for future projects. Impact fee revenue forecasts are consistent with past income from new residential development (the District has $680,000 in its impact fee account at the beginning of 1996).

CENTRAL KITSAP SCHOOL DISTRICT

Inventory

Central Kitsap School District is located on the Kitsap Peninsula, surrounding Dyes Inlet and extending west to the Hood Canal. Currently, there are 13 elementary schools, 3 junior high schools, and 2 senior high schools in the District. The district also provides alternative junior high and high school programs. The grade configuration is based on grades K-6, elementary; grades 7-9, junior high; and 10-12, senior high school. Table SC-5 presents the schools of Central Kitsap and their enrollment capacity.

Table SC-5. Central Kitsap School District Existing Capacity

School	Existing Capacity
Elementary Schools (K-6)	
Brownsville	512
Clear Creek	524
Cottonwood	487
Cougar Valley	524
Emerald Heights	574
Esquire Hills	524
Green Mountain	524
Jackson Park	499
Seabeck	374
Silverdale	524
Silver Ridge	574
Tracyton	524
Woodlands	536
Total Elementary Permanent Facilities	**6,700**
Total Elementary Interim (Portables) Facilities	**1,350**
Total Elementary Permanent and Interim Facilities	**8,050**

Jr. High Schools (7-9)	
Central Kitsap Jr. High	791
Fairview Jr. High	840
Ridgetop Jr. High	878
Alternative Jr. High	0*
Secondary #6 (to be completed 9/97)	404
Total Jr. High Permanent Facilities	**2,913**
Total Jr. High Interim (Portables) Facilities	**448**
Total Jr. High Permanent and Interim Facilities	**3,361**

Senior High Schools (10-12)	
Central Kitsap High School	1,047
Olympic High School	1,156
Alternative High School	147
Secondary #6 (to be completed 9/97)	405
Total Senior High School Permanent Facilities	**2,754**
Total Senior High School Interim (Portables)Facilities	**728**
Total Senior High School Permanent and Interim Facilities	**3,482**

Source: Central Kitsap School District

Capital Facility Capacity Requirements

Table SC-6 compares current and future enrollment to enrollment capacity of the Central Kitsap School District. The enrollment data in column 2 was provided by the Washington Superintendent of Public Instruction, using the cohort survival method.

The existing capacity (column 3 and 4) is taken from Table SC-5, and includes existing permanent and portable facilities.

The net reserve or deficiency is the difference between enrollment and capacity. The net reserve or deficiency in permanent facilities (column 5) is calculated by subtracting enrollment from permanent capacity: column 3 minus column 2. The net reserve or deficiency in all facilities (column 6) is calculated by subtracting enrollment from both permanent and interim capacity: add columns 3 and 4, then subtract column 2. If capacity is greater than enrollment, the district has "reserve" that can accommodate future enrollment. If capacity is less than enrollment, the district has a "deficiency" which can be addressed by adding capacity (see Capital Projects and Financing Plan, Table SC-7) or by changing the standard for level of service as part of the annual amendment to the Comprehensive Plan.

Immediately below the calculation of net reserve or deficiency is a list of each capital improvement project from the District's CFP that provides capacity to offset any deficiency (see Table SC-7 for CFP project list). The new capacity is listed in column 3, and the revised net reserve or deficiency is listed in columns 5 and 6.

Elementary School Capacity Requirements. By the year 2000, the Central Kitsap School District will need permanent space for 450 elementary students. The District's Capital Facilities Plan includes a new elementary school (600 student station) currently under construction.

Junior High School Capacity Requirements. By the year 2000, the Central Kitsap School District will need permanent space for 668 junior high students. The District's Capital Facilities Plan includes an addition to Secondary School #6 (188 student stations at the junior high level). After this project is completed, the District will still need permanent space for 480 junior high students. Since this capacity deficiency does not equal or exceed the capacity of an additional junior high school, the District does not include a new junior high school in its capital facilities plan through the 2001-02 school year, but such a facility is contemplated in the District's longer-range plans.

Table SC-6. Central Kitsap School District Facility Capacity Requirements and Proposed Capacity Projects Through 2001-02 School Year

(1) Time period	(2) Enrollment	(3) Permanent capacity	(4) Interim capacity	(5) Net reserve/ deficiency: permanent facilities	(6) Net reserve/ deficiency: all facilities
Elementary Schools (K-6)					
1994 Actual	6,932	6,700	1,350	-232	1118
1995-2000: Growth	218		225	-218	-218
Total as of 2000	7,150	6,700	1,575	-450	900
Capacity Projects					
1. Pinecrest Elem School (CFP Project #1)		600	1350	150	1,500
Jr. High Schools;					
1994 Actual	3,112	2,913	448	-199	249
1995-2000: Growth	319		68	-319	-319
Total as of 2000	3,431	2,913	516	-518	-70
Capacity Projects					
1. Klahowya, Phase II (Portion of CFP Project #2)		188		-330	118
Senior High Schools (10-12)					
1994 Actual	2,872	2,754	728	-118	610
1995-2000: Growth	495		336	-495	-495
Total as of 2000	3,367	2,754	1064	-613	115
Capacity Projects					
1. Klahowya, Phase II (Portion of CFP Project #2)		187		-426	-302

- District's interim capacity may be reduced when the District's permanent capacity is increased and portables are removed.

- The capacity deficiency does not equal or exceed the capacity of an additional school. No new school for this grade level is included in the District's 6-year Capital Facilities Plan, but such a facility is contemplated in the District's longer-range plans.

  Sources: Enrollment Data from State of Washington

Senior High School Capacity Requirements. By the year 2000, the Central Kitsap School District will need permanent space for 613 senior high school students. The District's Capital Facilities Plan includes an addition to Secondary School #6 (187 student stations at the senior high level). After this project is completed, the District will still need permanent space for 426 senior high students. Since this capacity deficiency does not equal or exceed the capacity of an additional senior high school, the District does not include a new junior high school in its capital facilities plan through the 2001-02 school year, but such a facility is contemplated in the District's longer-range plans.

Non-Capacity Requirements. The analysis of capacity does not address the need to modernize or replace existing facilities, but the District has determined the need for such capital projects, and they are included in the capital improvements projects and financing plan listed below.

Capital Projects and Financing Plan

Table SC-7 presents Central Kitsap School's six-year plan for capital improvement projects, including sources of public money within projected funding capacities that constitute the probable funding of the District's capital improvement projects.

In 1992, the voters of the Central Kitsap School District approved a $63 million bond issue. The district anticipates submitting another request to its voters in 1999. The District uses a citizens review committee and consultants to identify capital projects for recommendation tot he District's Board of Directors.

Impact fee revenue forecasts are consistent with past income from new residential development.

Table SC-7. Central Kitsap School District Capital Projects and Financing Plan ($000)

Cost Revenue	1996	1997	1998	1999	2000	2001	Total
Capacity Projects							
1. New Elem School (600 students)		1,000.0	8,500.0				9,500.0
2. Addition to Secondary School No. 6 (375 students)						5,000.0	5,000.0
Non-Capacity							
3. Secondary #6	9,500.0	12,000.0					21,500.0
4.Modernization, Renovation Projects		3,000.0					3,000.0
5.Modernization, Renovation Projects				4,000.0	6,000.0		10,000.0
6. Elementary Portables	150.0						150.0
7. Relocate Portables		100.0	250.0				350.0
Total Cost:	9,650.0	16,100.0	8,750.0	4,000.0	6,000.0	5,000.0	49,500.0
Local Bond Funds	9,500.0	15,600.0	8,650.0	3,750.0	5,750.0	4,750.0	48,000.0
State Match	12,300.0	2,463.0					14,763.0
Impact Fees	186.0	183.0	300.0	300.0	300.0	300.0	1,569.0
Total Revenues	21,986.0	18,246.0	8,950.0	4,050.0	5,950.0	5,050.0	64,232.0
Balance	12,336.0	2,146.0	200.0	50.0	50.0	50.0	14,832.0

Source: CK School District

SOUTH KITSAP SCHOOL DISTRICT

The South Kitsap School District is located in the southern portion of Kitsap County. The district is bordered on the west by Mason County and on the south by Pierce County. To the north and east, the district is bordered by Sinclair Inlet, Rich Passage, Colvos Passage, and Puget Sound. The District includes 10 elementary schools, 3 junior high schools and 1 high school. The majority of the schools are located throughout the southern portion of Kitsap County, while South Kitsap high school and Cedar Heights junior high school are located within the Port Orchard City limits. The grade configuration is based on grades K-6, elementary; grades 7-9, junior high; and 10-12, senior high school. Table SC-10 lists the schools of the South Kitsap School District and their enrollment capacity School District.

Table SC-8. South Kitsap School District Existing Capacity

School	Existing Capacity
Elementary Schools (K-6)	
Burley-Glenwood	598
East Port Orchard	546
Hidden Creek	520
Madrona Heights	130
Manchester	546
Mullenix Ridge	520
Olalla	520
Orchard Heights	962
Sidney Glen	520
South Colby	338
Sunnyslope	546
Total Elementary Permanent Facilities	**5,746**
Total Elementary Interim (Portables) Facilities	**518**
Total Elementary Permanent and Interim Facilities	**6,214**
Jr. High Schools (7-9)	
Cedar Heights	667
Sedgwick	870
Marcus Whitman	870
Total Jr. High Permanent Facilities	**2,407**
Total Jr. High Interim (Portables) Facilities	**442**
Total Jr. High Permanent and Interim Facilities	**2,799**
Senior High Schools (10-12)	
South Kitsap High School	2,123
Alternative High School	*
Total Senior High School Permanent Facilities	**2,123**
Total Senior High Interim (Portables) Facilities	**148**
Total Senior High School Permanent and Interim Facilities	**2,271**

Source: South Kitsap School District

Capital Facility Capacity Requirements

Table SC-9 compares current and future enrollment to the enrollment capacity of the South Kitsap School District. The enrollment data in column 2 was provided by the Washington Superintendent of Public Instruction using the cohort survival method.

Table SC-9. South Kitsap School District Facility Capacity Requirements and Proposed Capacity Projects Through 2001-02 School Year

(1) Time period	2) Enrollment	(3) Permanent capacity	(4) Interim capacity	(5) Net reserve/deficiency: permanent facilities	(6) Net reserve/ deficiency: all facilities
Elementary Schools (K-6)					
1994 Actual	5,707	5,746	518	39	507
1995-2001: Growth	385			-385	-385
Total as of 2001	6,100	5,746	518	-346	122
Capacity Projects					
1.South Colby Elementary Replacement (CFP Proj.#3)		**182		-97	371
Jr. High Schools (7-9)					
1994 Actual	2,733	2,407	442	-326	66
1995-2001: Growth	-68			-68	-68
Total as of 2001	2,665	2,407	442	-394	-2
Capacity Projects					
1.Cedar Heights Jr. High Replacement (CFP Proj. #2) (Replace Cedar Heights)		203		***154	***238
Senior High Schools (10-12)					
1994 Actual	2,308	2,123	148	-185	-37
1995-2001: Growth	275			-275	-275
Total as of 2001	2,648	2,123	148	-460	-312
Capacity Projects					
1. New High School (CFP #1)		1,600		**1075	

* The District's interim capacity may be reduced when the District's permanent capacity is increased and portables are removed

** Net increase in capacity of replacement project

*** The District intends to reconfigure grade levels upon completion of the new high school. The District anticipates shifting 942 9th graders from junior high schools to senior high schools. The net effect will be that 942 of the 962 "reserve" permanent spaces at the high school will be used to accommodate the reconfiguration.

Sources: Enrollment Data from State of Washington, Superintendent of Public Instruction
Capacity Data from Table SC-8

The existing capacity (columns 3 and 4) is taken from Table SC-8, and includes existing permanent and portable facilities.

The net reserve or deficiency is the difference between the enrollment and capacity. The net reserve or deficiency in permanent facilities (column 5) is calculated by subtracting enrollment from permanent capacity: column 3 minus column 2. The net reserve or deficiency in all facilities (column 6) is calculated by subtracting enrollment from both permanent and interim capacity: add columns 3 and 4, then subtract column 2. If capacity is greater than enrollment, the district has "reserve" that can accommodate future enrollment. If capacity is less than enrollment, the district has a "deficiency" which can be addressed by adding capacity (see Capital Projects and Financing Plan, Table SC-10) or by changing the standard for level of service as part of the annual amendment to the Comprehensive Plan.

Immediately below the calculation of net reserve or deficiency is a list of each capital improvement project from the District's CFP that provides capacity to offset any deficiency (see Table SC-10 for CFP project list). The new capacity is listed in column 3, and the revised net reserve or deficiency is listed in columns 5 and 6.

Elementary School Capacity Requirements. By the year 2000, the South Kitsap School District will need permanent space for 279 elementary students. The District's Capital Facilities Plan includes the replacement of South Colby Elementary School (CFP Project #3, housing 520 students, less 338 students at the old school, for a net gain of 182 students). After these projects are completed, the District will still need permanent space for 97 elementary students.

Junior High School Capacity Requirements. By the year 2000, the South Kitsap School District will need permanent space for 357 junior high students. The District's Capital Facilities Plan includes a new mid-level school to replace the existing Cedar Heights Junior High (CFP project #2). Upon completion of the replacement, the District will have a net gain of 203 student stations, leaving a remaining deficiency of 154 permanent student stations. The District intends to address this deficiency by assigning 942 ninth graders to the high school campuses upon the completion of the new high school (described below).

Senior High School Capacity Requirements. By the year 2000, the South Kitsap School District will need permanent space for 638 senior high school students. The District's Capital Facilities Plan includes a new high school with capacity for 1,600 students (CFP project #1). Upon completion of the new high school, the District intends to assign 942 ninth graders to the high school.

Non-Capacity Requirements. This analysis of capacity does not address the need to modernize or replace existing facilities, but the District has determined the need for such capital projects, and they are included in the capital improvements projects and financing plan listed below.

Capital Projects and Financing Plan

Table SC-10 presents South Kitsap School's six-year plan for capital improvements projects, including sources of public money within projected funding capacities that constitute the probable funding of the District's capital improvement projects.

The District uses a citizens review committee to identify future capital projects for recommendation to the District's Board of Directors. In 1993, a complicated bond issue to fund land acquisition, new construction, remodeling, improvements to support facilities, miscellaneous improvements and technology was defeated.

The Board is currently in the process of reviewing the recommendations of the citizens review committee, and the proposed financing plan. The Board is considering placing a measure on the ballot in may 1996.

The recommended 1996 measure differs significantly from the 1993 issue. It is a simple request which includes construction of a new high school, replacement of a junior high school and an elementary school, and school site acquisition.

The amount of the local match may increase in order to from fund state match. The District anticipates continued eligibility for State matching funds. Impact fee revenue forecasts are consistent with past income from new residential development (the District has $800,000 in its impact fee account at the beginning of 1996.)

Table SC-10. South Kitsap School District Capital Projects and Financing Plan

Cost Revenue	1996	1997	1998	1999	2000	2001	Total
Capacity Projects							
1. High School #2 (1600 students)	4,700.0	4,700.0	4,689.0	21,260.0	25,651.0		61,000.0
2.Cedar Heights Jr. High Replacement (net increase of 203 students)	2,400.0	2,400.0	19,200.0				24,000.0
3.South Colby Elementary Replacement (net increase of 182 students)					2,150.0	7,000.0	9,150.0
4.Purchase Sites						2,780.0	2,780.0
Total Cost	7,100.0	7,100.0	23,889.0	21,260.0	27,801.0	9,780.0	96,930.0
Local Bond	6,300.0	6,700.0	123,489.0	20,860.0	25,251.0		82,600.0
State Match					8,780.0	7,510.0	16,290.0
Impact Fees	800.0	400.0	400.0	400.0	400.0	400.0	2,800.0
Total Revenues	7,100.0	7,100.0	23,889.0	21,260.0	34,431.0	7,910.0	101,690.0
Balance	0	0	0	0	6,630.0	1,870.0	4,760.0

Source: South Kitsap School District

BREMERTON SCHOOL DISTRICT

The Bremerton School District is located on the Kitsap Peninsula between Port Orchard Bay, Dyes Inlet, and Sinclair Inlet. The district is adjacent to the Puget Sound Naval Shipyard, and its enrollment is directly related to the military base. The school district serves the City of Bremerton and unincorporated areas adjacent to the city.

The Bremerton School District has 7 elementary schools, 1 middle school, 1 junior high school, and 1 high school plus an alternative high school. The district also administers a vocational skills center that serves other school districts. The current grade configuration in the district is based on grades K-5, elementary; grades 6-7, middle school; grades 8-9, junior high; and grades 10-12, high school. Table SC-11 lists the Bremerton School District's schools and their enrollment capacity.

Table SC-11. Bremerton School District Existing Capacity

School	Existing Capacity
Elementary Schools (K-5)	
Armin Jahr	481
Crown Hill	528
Kitsap Lake	550
Naval	484
Olympic View	486
View Ridge	528
West Hills	528
Total Elementary Permanent Facilities	**3,585**
Total Elementary Interim (Portables)Facilities	**250**
Total Elementary Permanent and Interim Facilities	**3,835**
Middle/Jr. High Schools (6-9)	
Mt. View Middle School	810
Bremerton Jr. High	1,115
Total Middle/Jr. High Permanent Facilities	**1,925**
Total Middle/Jr. High Interim (Portables) Facilities	**115**
Total Middle/Jr. High Permanent and Interim Facilities	**2,040**
Senior High Schools (10-12)	
Bremerton High School	1,275
Total Senior High School Permanent Facilities	**1,275**
Total Senior High Schools Interim (Portables) Facilities	**115**
Total Senior High School Permanent and Interim Facilities	**1,390**

Source: Bremerton School District

Capital Facility Capacity Requirements

Table SC-12 compares current and future enrollment to the enrollment capacity of the Bremerton School District. The enrollment data in column 2 was provided by the Washington Superintendent of Public Instruction using the cohort survival method.

The existing capacity (column 3 and 4) is taken from Table SC-11, and includes existing permanent and portable facilities.

The net reserve or deficiency is the difference between the enrollment and capacity. The net reserve or deficiency in permanent facilities (column 5) is calculated by subtracting enrollment from permanent capacity: column 3 minus column 2. The net reserve or deficiency in all facilities (column 6) is calculated by subtracting enrollment from both permanent and interim capacity: add columns 3 and 4, then subtract column 2. If capacity is greater than enrollment, the district has "reserve" that can accommodate future enrollment. If capacity is less than enrollment, the district has a "deficiency" which can be addressed by adding capacity (see Capital Projects and Financing Plan, Table SC-13) or by changing the standard for level of service as part of the annual amendment to the Comprehensive Plan.

Immediately below the calculation of net reserve or deficiency is a list of each capital improvement project from the District's CFP that provides capacity to offset any deficiency (see Table SC-13 for CFP project list). The new capacity is listed in column 3, and the revised net reserve or deficiency is listed in columns 5 and 6.

Elementary School Capacity Requirements. Through the year 2000, the Bremerton School District will need not need and additional permanent space for elementary students.

Junior High School Capacity Requirements. Through the year 2000, the Bremerton School District will need permanent space for 176 middle school/junior high students. Since this capacity deficiency does not equal or exceed the capacity of an additional middle school or junior high school, the District does not include a new middle school or junior high school in its capital facilities plan through the 2001-02 school.

Senior High School Capacity Requirements. By the year 2000, the Bremerton School District will need permanent space for 357 senior high school students. Since this capacity deficiency does not equal or exceed the capacity of an additional senior high school, the District does not include a new senior high school in its capital facilities plan through the 2001-02 school.

Non-Capacity Requirements. This analysis of capacity does not address the need to modernize or replace existing facilities, but the District has determined the need for such capital projects, and they are included in the capital improvements projects and financing plan listed below.

Table SC-12. Bremerton School District Facility Capacity Requirements

(1) Time period	(2) Enrollment	(3) Permanent capacity	(4) Interim capacity	(5) Net Reserve or deficiency: Permanent facilities	(6) Net reserve or deficiency: all facilities
Elementary Schools (K-5)					
1994 Actual	2,777	3,585	250	808	1,058
1995-2000: Growth	722			-722	-722
Total as of 2000	3,499	3,585	250	86	366
Capacity Projects					
None					
Middle/Jr. High School (6-9)					
1994 Actual	1,881	1,925	115	44	159
1995-2000: Growth	220			-220	-220
Total as of 2000	2,101	1,925	115	-176	-61
Capacity Projects					
None					
Senior High Schools (10-12)					
1994 Actual	1,602	1,275	115	-327	-212
1995-2000: Growth	30			-30	-30
Total as of 2000	1,632	1,275	115	-357	-242
Capacity Projects					
None					

* The District's interim capacity may be reduced when the District's permanent capacity is increased and portables are removed.

** The capacity deficiency does not equal or exceed the capacity of an additional school. No new school for this grade level is included in the District's 6-year Capital Facilities Plan.

Sources: Enrollment Data derived from population forecasts from Kitsap County, based on Office of Financial Management, State of Washington.

Capital Projects and Financing Plan

Table SC-13 presents Bremerton School's six-year plan for capital improvement projects, including sources of public money within projected funding capacities that constitute the probable funding of the District's capital improvement projects.

In 1991, the voters of the Bremerton School District authorized a $17 million bond issue. The District does not anticipate requesting additional voter authorization before 1998. The District uses a citizens review committee to identify future capital projects for recommendation to the District's Board of Directors.

Table SC-13. Bremerton School District Capital Projects and Financing Plan

Cost/Revenue	1996	1997	1998	1999	2000	2001	Total
Non-Capacity Projects							
1.Crown Hill Elementary (replacement)	7,800.0						7,800.0
2.Administration Building		1,500.0					1,500.0
3.Maintenance & Transportation Building (replacement)				1,200.0			1,200.0
4.Bremerton Junior High (replacement)				15,000.0			15,000.0
5.Olympic View Elementary (replacement)				8,000.0			8,000.0
6.Portable Relocation	120.0						120.0
Total Cost	**7,920.0**	**1,500.0**		**24,200.0**			**33,620.0**
Local Funds*	5,605.0	1,480.0					7,085.0
Local Bond Funds				24,200 0			24,200.0
State Match	2,300.0						2,300.0
Impact Fees	15.0	20.0	20.0	20.0	20.0	20.0	115.0
Total Revenues	**7,290.0**	**1,500.0**	**20.0**	**24,200.0**	**20.0**	**20.0**	**33,700.0**
Balance	0.0	0.0	20.0	20.0	20.0	20.0	80.0

*Local Funds include remaining proceeds from 1991 Bond Issue; insurance proceeds for Crown Hill Elementary, and proceeds of a planned property sale.
Source: Bremerton School District

The District anticipates continued eligibility for State matching funds. Impact fee revenue forecasts are consistent with past income from new residential development (the District has $5,000 in its impact fee account at the beginning of 1996).

SOLID WASTE MANAGEMENT SYSTEM

BACKGROUND

State law (RCW 70.95.010) requires counties to plan an integrated solid waste management system that emphasizes waste reduction and recycling. Management of solid waste which cannot be recycled or managed alternatively can be incinerated, landfilled, or a combination of the two.

Kitsap County Public Works/Solid Waste Division is the lead planning agency for solid waste management in Kitsap County. The county, cities, tribes, and federal facilities have participated in development of the Comprehensive Solid Waste Management Plan (CSWMP) and the Moderate Risk Waste Management Plan, which specifies the management actions that will be taken over a six-year (detailed) and 20-year (general) period. The current CSWMP, which covers the years 1990 through 2010, will be revised beginning in 1996.

Through this planning process, counties are encouraged to allow private industry to provide services as much as possible (RCW 70.95.020). The Kitsap County solid waste system is a combination of private companies and public agencies. Components of an integrated solid waste management are:

- system planning, administration, and enforcement
- collection, transfer, and disposal of solid waste
- collection and processing of recyclables
- moderate risk waste transfer and collection programs

Service boundaries differ among components of the solid waste system. Capital facilities are an integral part of several solid waste system components, and are owned and operated by a variety of entities. Table SW-1 lists system components and owner/operator status, and Figure SW-1 shows the location of existing system components. The County's Comprehensive Plan "Part III Figure Book" graphically shows the location of existing County solid waste management facilities, as well as any proposed 1995-2000 County solid waste management capital facilities.

Table SW-1. Inventory of Solid Waste Facilities

Name	Owner	Operator	Location
Disposal			
Olympic View Sanitary Landfill (OVSL)	OVSL	OVSL	SK
Solid Waste Collection			
OVSL Drop Box	OVSL	OVSL	SK
Olalla Drop-Box	KC	OVSL	SK
Hansville Drop-Box	KC	KC	NK
Silverdale Drop-Box	KC	OVSL	CK
Bainbridge Island Drop-Box	KC	Bainbridge Disposal (BD)	BI
Residential Recyclables Collection			
OVSL Drop Box	OVSL	OVSL	SK
Olalla Drop-Box	KC	OVSL	SK
Hansville Drop-Box	KC	KC	NK
Silverdale Drop-Box	KC	OVSL	CK
Bainbridge Island Drop-Box	KC	BD	BI
Poulsbo Recycle Center	Poulsbo	BD	NK
Peninsula Recycling MRF	Peninsula	Peninsula	SK
Bangor Recycling Station	Navy	Navy	NK

Source: Kitsap County Solid Waste Division.

LEVELS OF SERVICE

Solid Waste Administration and Enforcement

Solid waste planning requirements are met by Kitsap County Public Works/Solid Waste Division with input from all affected jurisdictions. The Bremerton-Kitsap County Health District has responsibility for enforcement of solid waste regulations.

Solid Waste Collection and Disposal

The Washington Utilities and Transportation Commission (WUTC) regulates solid waste collection in the unincorporated county through issuance of G certificates to qualified companies. As a result, residential solid waste collection is available to every dwelling in the county via private haulers. In addition, the County owns four solid waste drop box facilities in the county, which accept solid waste from self-haul customers. The solid waste is then hauled for disposal to the landfill. The County operates one of these facilities and has service agreements with private companies to operate the others.

Cities have the right to contract for solid waste collection, operate a collection service, or allow the WUTC to set rates. Bremerton and Port Orchard contract for service. The City of Poulsbo operates collection service for its citizens. The City of Bainbridge Island allows the WUTC to regulate collection. Federal facilities contract for service.

All solid waste collected through residential, commercial, and drop-off programs is disposed at Olympic View Sanitary Landfill (a privately-owned and operated facility); however, Kitsap County is tasked by Ecology to ensure disposal capacity in some form is available for 20 years--regardless of who owns the disposal facilities (RCW 70.95.090). Table SW-2 shows the current solid waste generation rate is 6.49 pounds per capita per day.

Collection and Processing of Recyclables

Residential Recyclables Collection. The Waste Not Washington Act of 1989 mandated that each local jurisdiction develop recycling services. RCW 70.95.092 states that:

Levels of service shall be defined in the waste reduction and recycling element of each local comprehensive solid waste management plan and shall include the services set forth in RCW 70.95.090. In determining which service level is provided to residential and nonresidential waste generators in each community, counties and cities shall develop clear criteria for designating areas as urban and rural. In designating urban areas, local governments shall consider the planning guidelines adopted by the department, total population density, and any applicable land use or utility service plans.

The Solid Waste Division used Ecology's *Guidelines for the Development of Local Solid Waste Management Plans* (March 15, 1990) to determine recycling service level areas.

The initial designation of the Level 1 (urban and suburban) and Level 2 (rural) areas was based on the County's land use maps. Ecology's "common sense" guideline and a visual inspection of the designated service level areas were also used to determine if the boundaries made sense in terms of physical surroundings and collection routes. The resulting Level 1 and Level 2 service areas were presented to the public and revised according to their feedback. They were included in Kitsap County's final amendment to the 1990 Final Comprehensive Solid Waste Management Plan that was approved by the Washington Department of Ecology in 1993, and are shown on Figure SW-2.

All incorporated areas of the county are considered Level 1 service areas and receive curbside collection of residential recyclables.

Kitsap County Ordinance No. 157-1993 establishes service levels for residential recyclables collection in unincorporated Kitsap County as follows:

- Level 1 service areas: curbside collection for all single-family dwellings and multi-family complexes in unincorporated Kitsap County.

- Level 2 service areas: drop-off collection available for every 5,000 to 10,000 people in Level 2 areas.

Collection of recyclables is provided by a service agreement between the County and private haulers.

Nonresidential Recyclables Collection. Private service providers collect recyclables from businesses in incorporated and unincorporated Kitsap County. Cities can enact ordinances requiring businesses within their jurisdiction to recycle. The City of Poulsbo has enacted such an ordinance. Many businesses self-haul recyclables to the drop box stations throughout the County.

Table SW-2 shows a current recycling LOS of 2.13 pounds per capita per day.

Recyclables Processing. Recyclable materials collected from county curbside and drop box programs are processed at privately operated regional facilities.

Moderate Risk Waste

Moderate risk waste collection has been provided by annual collection events. Kitsap County Public Works/Solid Waste Division is responsible for maintaining and implementing the Moderate Risk Waste Management Plan. The current Moderate Risk Waste Management Plan was last modified in 1994.

A key task identified in this plan is for construction and operation of a fixed facility to collect household hazardous waste from residents in Kitsap County and the cities. The facility will be operating as of April 1996 and will be operated by KCPW. Hazardous waste from small businesses will be accepted at the fixed facility through the small quantity generator program. The location of the MRW Facility is shown on Figure SW-1.

The Solid Waste Division operates a used oil recycling program and a white goods (appliances) recycling program at area drop boxes.

Availability of consistent service throughout the County is the chief aim of the Moderate Risk Waste Facility. An increase in the percent of the population served is expected when the facility is open, as this will increase the availability of service from 8 to 150 days per year. Table SW-3 shows predicted MRW collection figures for the planning period.

LOS Needs Assessment

As described in the previous section, solid waste and recyclables collection is provided by private companies. There are no anticipated deficiencies in the ability of the private sector to continue the levels of service shown in Table SW-2. Table SW-2 also indicates there are no anticipated disposal capacity deficiencies in the planning period.

Table SW-2. Solid Waste Management Levels of Service

Year	Population	SW Generation Rate (lbs/cap/day)	SW Tons	SW Recycling (lbs/cap/day)	Recycled Tons	Cumulative In-Landfill Volume	Remaining Landfill Capacity (Cu Yds)
1994	213,200	6.51	253,140	2.14	83,088	1,379,984	2,920,016
1995	218,599	6.02	240,290	2.09	83,286	1,580,777	2,719,223
1996	223,999	5.84	238,665	2.05	83,851	1,770,911	2,529,089
1997	229,399	5.91	247,228	2.12	88,934	1,965,316	2,334,684
1998	235,728	5.95	255,966	2.36	101,552	2,154,867	2,145,133
1999	242,057	5.99	264,411	2.42	107,102	2,347,957	1,952,043
2000	248,290	5.92	268,374	2.84	128,591	2,519,294	1,780,706

CAPITAL FACILITIES PROJECTS AND FINANCING

The MRW Facility is the only capital project identified as required to maintain the level of service. The proposed financing plan for this project is shown in Table SW-4.

TABLE SW-4
CFP PROJECTS AND FINANCING PLAN
(All Amounts Are Times $1,000)

SOLID WASTE

(1) COST/REVENUES	(2) 1995	(3) 1996	(4) 1997	(5) 1998	(6) 1999	(7) 2000	(8) TOTAL
Capacity Projects:							
1. MRW Facility Construction							
Cost	434.7	345.0					779.7
Rev - Tipping Fee	223.7	148.2					371.9
Rev - DOE Grant	185.5	222.3					407.8
SUMMARY: COSTS/REVENUES							
Costs	434.7	345	0.0	0.0	0.0	0.0	779.7
Existing Revenues:							0.0
Tipping Fee	223.7	148.2	0.0	0.0	0.0	0.0	371.9
DOE Grant	185.5	222.3	0.0	0.0	0.0	0.0	407.8
Total Revenues	409.2	370.5	0.0	0.0	0.0	0.0	779.7
BALANCE	(25.5)	25.5	0.0	0.0	0.0	0.0	0.0

STORMWATER FACILITIES

BACKGROUND

Storm drainage facilities within unincorporated Kitsap County includes a diverse combination of natural systems and constructed conveyance and control facilities. Ownership, maintenance responsibility, and stewardship of drainage facilities takes place by a variety of means. This section of the CFP identifies the type and condition of stormwater facilities within Kitsap County, and describes the County's plan for capital improvements to the drainage system infrastructure.

The National Pollutant Discharge Elimination System (NPDES) program administered by the U.S. Environmental Protection Agency requires that point source discharges meet federal and state water quality standards, and that routine monitoring be conducted to insure compliance. The program was authorized by the Clean Water Act of 1972, and is administered by the Washington State Department of Ecology (WSDOE). Discharges from Kitsap County's stormwater infrastructure are not currently regulated under the NPDES municipal discharge requirements. It is anticipated that Kitsap County will be required to meet permit requirements by the year 2000.

The Puget Sound Water Quality Management Plan, first adopted in 1989, identified the need for a watershed management process to systematically address nonpoint sources of pollution throughout the Puget Sound Basin. The plan also directed each county within the Puget Sound Basin to rank its watersheds in order of priority for developing action plans to control nonpoint source pollution. Ranking of the County's nine primary watersheds prioritizes watersheds most in need of corrective actions to manage nonpoint source pollution. Many of the watersheds are also located within areas of rapid urbanization where potential impacts on fisheries and shellfish resources are a consideration.

The Dyes Inlet/Clear Creek Watershed Action Plan was approved by WSDOE and adopted by the Kitsap County Board of Commissioners in December 1992. In February 1995, the Sinclair Inlet Watershed Action Plan was approved by WSDOE and adopted by the County. The Upper Hood Canal Watershed Action Plan has been completed and is scheduled for adoption by the Board of Commissioners March 1998. The Liberty Bay/Miller Bay Watershed Action Plans is scheduled for adoption spring 1998.

The Puget Sound Water Quality Management Plan also directed WSDOE to develop a technical manual addressing erosion and sediment control, runoff control, and pollution from urban land uses. WSDOE was also charged with providing program implementation guidance to local jurisdictions within the Puget Sound Basin. The final WSDOE Stormwater Management Manual for the Puget Sound Basin was developed in February 1992. All cities and counties within the basin are required to adopt ordinances and technical manuals that are "substantially equivalent" to that of WSDOE. In response to this requirement, Kitsap County began development of the Kitsap County Stormwater Management Ordinance in 1991. In March

1995, the ordinance and its accompanying Stormwater Design Manual were found by WSDOE to be technically equivalent. The Kitsap County Stormwater Management Ordinance and Design Manual was adopted by the Kitsap County Board of Commissioners in December 1996 and implemented in April 1997.

The 1992 revisions to the Puget Sound Water Quality Management Plan require that all local jurisdictions implement stormwater management programs addressing State goals and objectives. Kitsap County's Surface and Stormwater Management Program (SSWM) was adopted by the County Commissioners in October 1994 with the following goals and objectives:

- Protect life and property from storm, waste, flood, or surplus surface water.
- Protect water quality by preventing siltation, contamination, and erosion of County waterways.
- Protect aquifers.
- Protect County shellfish resources.
- Assure compliance with federal and state surface water management and water quality regulations and legislation.
- Increase public awareness and citizen involvement.
- Encourage preservation of natural drainage systems.

INVENTORY OF EXISTING FACILITIES

Drainage facilities within Kitsap County are composed of three basic types: conveyance systems, rate control facilities, and natural and man-made enhancement facilities. The nature and function of the County's drainage infrastructure is governed by topography, and flows without consideration to property ownership, land use, or political boundaries.

Conveyance systems include natural and man-made open channels as well as pipe systems and culverts. These systems may be located on private property, or within County right-of-way. The division of ownership, function, and location determines the entity responsible for facilities maintenance.

Development activities taking place within Kitsap County are conditioned during the application process to comply with minimum requirements of the Kitsap County Stormwater Management Ordinance, the technical equivalent of the WSDOE Stormwater Management Manual for the Puget Sound Basin. Drainage control and water quality enhancement facilities constructed for residential projects are dedicated to the County for maintenance. Facilities constructed for commercial and multifamily developments are maintained privately.

Table SD-1
Inventory of Stormwater Facilities (Operated and Maintained)
Kitsap County

Number	Facility (SEC-TWP-RNG)	Type of system	Volume (cu ft)
1	AGATE CREST 29-26N-2E	DETENTION POND	2,135
2	APEX AIRPARK 2 18-25N-1E	DETENTION TANK	2,313
3		DETENTION TANK	1,673
4		INFILTRATION POND	14,625
5	ARLINGTON 13-23N-1E	DETENTION POND	11,000
6	AUTUMN RIDGE 13-25N-1E	DETENTION POND	7,226
7	AVELLANA 08-25N-1E	DETENTION POND	23,046
8	BALSAM 7-11 06-23N-2E	INFILTRATION POND	7,200
9	BANGOR WOODS 33-26N-1E	BIOFILTRATION SWALE	
10	BANNER HILL 10-23N-1E	DETENTION POND	2,716
11	BARKER RIDGE 22-25N-1E	DETENTION POND	2,969
		BIOFILTRATION SWALE	5,241
12	BEAVER CREEK 28-24N-2E	DETENTION POND	9,607
13	BERGER LANE 01-23N-1E	INFILTRATION POND	29,000
14	BOOTLEG HILL 06-24N-2E	DETENTION POND	4,482
15	BRADY ESTATES 01-23N-1E	INFILTRATION POND	10,443
16	BRIANWOOD 08-25N-1E	DETENTION POND	2,130
17	BROOKE ESTATES 35-27N-2E	DETENTION TANK	1,492
18	BURLEY ESTATES 29-24N-2E	DETENTION POND	1,900
19	CAMBRIDGE I & II 30-25N-2E	DETENTION POND	12,000
20	CAMBRIDGE HEIGHTS 23-25N-1E	DETENTION POND	15,779
21	CEDAR CREEK 23-25N-1E	DETENTION POND	44,483
22	CENTER STREET 20-26N-2E	DETENTION TANK (EAST)	784
23		DETENTION TANK (WEST)	1,090
24	CHASEWOOD 01-23N-1E	INFILTRATION POND	19,647
25	CIMERON 23-25N-1E	RETENTION POND	2,750

26	CLEAR CREEK SWALE 16-25N-1E	BIOFILTRATION SWALE	
27	COLLINS ROAD EXTENSION 28-24N-2E	DETENTION TANK	1,200
28	COLONY BROOK 26-25N-1E	DETENTION POND	20,821
29	CONCEPT PARK 21-23N-2E	DETENTION POND	1,300
30	CONIFER PARK 31-24N-2E	DETENTION POND	50,000
31	COTTONWOOD I & II 23-25N-1E	DETENTION POND	18,910
32	COTTONWOOD CANYON 23-25N-1E	DETENTION POND	1,548
33 34	COUNTRY COMMONS 33-26N-1E	DETENTION POND (WEST) DETENTION POND (EAST)	13,068 69,260
35	COUNTRY MANOR 22-25N-1E	DETENTION POND	5,382
36 37 38	COUNTRY MEADOWS 33-26N-1E	RETENTION POND RETENTION POND RETENTION POND	14,576 30,276 10,816
39	CREST AT QUAIL RIDGE 15-25N-1E	DETENTION POND	22,800
40 41	CROWN FIRS 19-23N-2E	DETENTION POND (W) DETENTION POND (E)	5,436 2,936
42	CROWNWOOD 06-23N-2E	INFILTRATION POND	37,535
43	CRYSTAL CREEK 08-25N-1E	DETENTION POND	12,400
44 45	EAGLE CREST 29-25N-1E	DETENTION POND (N) DETENTION POND (E)	2,400
46	EAST VIEW ESTATES 21-24N-2E	DETENTION POND	6,398
47 48	EASTWIND 17-25N-1E	DETENTION POND (E) DETENTION POND (W)	15,700 8,000
49 50 51 52	ELDORADO HILLS III 31-25N-1E	DETENTION POND (S) DETENTION TANK (S) DETENTION POND (N) DETENTION TANK (N)	8,980 550 9,088 1,622
53	EMERY RIDGE 29-25N-1E	DETENTION POND	40,475
54 55	ENGLISH HILLS 30-25N-1E	DETENTION POND (E) DETENTION POND (W)	13,808 19,210
56	ESTONIA 12-23N-1E	DETENTION POND	7,610
57	FAIRGROUNDS 27-25N-1E	DETENTION POND	26,140

58	FAIRVIEW 27-25N-1E	DETENTION POND	6,720
59 60 61	FAIRWOOD RANCH 22-25N-1E	DETENTION POND (EAST) DETENTION POND (WEST) RETENTION POND (SOUTH)	16,700 52,900 10,816
62	FERN MEADOWS 29-24N-2E	DETENTION POND	5,698
63 64 65	FERN VISTA 15-23N-1E	DETENTION POND (NORTH) DETENTION POND (SOUTH) DETENTION POND (EAST)	8,236 8,734 2,236
66	FISCHER PARK 06-24N-1E	DETENTION POND	5,100
67 68	FOOTHILL ESTATES 02-24N-1E	DETENTION POND (N) DETENTION POND	2,875 2,479
69	FOREST GROVE 21-25N-1E	DETENTION TANK	1,600
70 71	FOSTER MEADOWS 23-25N-1E	DETENTION POND DETENTION TANK	5,460 3,696
72	GLEN AT QUAIL RIDGE 15-25N-1E	DETENTION POND	50,000
73	GLENWOOD STATION I 15-23N-1E	DETENTION POND	12,191
74	GLENWOOD STATION 2 15-23N-1E	RETENTION POND	28,000
75	GLENWOOD STATION 3 15-23N-1E	DETENTION POND	8,422
76	HIDDEN ESTATES 12-23N-1E	DETENTION POND	9,390
77 78	HORIZON HILLS 25-23N-1E	DETENTION POND INFILTRATION TRENCH	8,199
79	HUNNINGTON, THE 01-23N-1E	DETENTION TANK	5,080
80	IRONWOOD 23-25-1E	CONVEYANCE	
81	ISLAND LAKE 03-25N-1E	DETENTION POND	25,814
82	IVES ESTATES 12-23N-1E	INFILTRATION POND	2,389
83	JACKSON - LUND 36-24N-1E	DETENTION TANK	
84	KEYPORT TRACE 35-26N-1E	DETENTION POND	19,157
85 86	KINGSTON HILL 26-27N-2E	DETENTION POND (SOUTH) DETENTION POIND (NORTH)	43,350 22,650
87	KLAHANIE WEST 08-24N-1W	DETENTION POND	4,351
88	KMHS 36-25N-1E	DETENTION POND	15,431

89	KNIGHTSBRIDGE 26-25N-1E	DETENTION POND	8,000
90 91	KRISTA FIRS 12-23N-1E	RETENTION POND RETENTION POND	3,900 8,100
92	LAKE FOREST GLEN 10-23N-1E	RETENTION POND	8,500
93	LAND SUMMIT I 06-23N-2E	DETENTION POND	5,628
94	LAND SUMMIT II 07-23N-2E	DETENTION POND INFILTRATION TRENCH	15,115
95	LANDS SUMMIT 3 06-23N-2E	INFILTRATION POND	1,040
96	LANDS SUMMIT 4 07-23N-2E	DETENTION POND	17,211
97	LARGE LOT 86 30-25N-2E	DETENTION POND	13,500
98	LIBERTY POINTE 15-26N-1E	DETENTION TANK	975
99 100	LITTLETREE I & II 27-23N-1E	RETENTION POND (EAST) RETENTION POND (WEST)	4,003 145,320
101 102	LOOKOUT POINT 07-26N-2E	RETENTION POND (NORTH) RETENTION POND (SOUTH)	4,800 11,000
103	MADRONA HEIGHTS 35-25N-1E	DETENTION POND	2,903
104	MANCHESTER COURT 21-24N-2E	DETENTION POND	6,825
105	MAPLE GROVE 02-23N-2E	DETENTION TANK	4,948
106 107	MARION AVENUE 28-24N-2E	DETENTION POND (EAST) DETENTION POND (WEST)	5,048 12,000
108 109	MAYVOLT HILLS 05-23N-2E	DETENTION POND (UPPER) DETENTION POND (LOWER)	7,980 17,457
110	MEADOW VIEW 12-25N-1W	DETENTION POND	8,000
111	THE MEADOWS 26-25N-1E	DETENTION POND	42,840
112 113	MEGAN HEIGHTS 28-24N-2E	DETENTION POND (UPPER) DETENTION POND (LOWER)	16,000 10,325
114	MILLRIDGE 17-23N-2E	DETENTION POND	4,559
115	MORNINGSIDE ESTATES 20-25N-1E	DETENTION POND	2,850
116	NORTHFIELD 34-26N-1E	DETENTION POND	133,225
117	OAK PARK 27-25N-1E	DETENTION POND	10,625
118	OPAL COURT 23-25N-1E	DETENTION TANK	1,690

119	ORCHARD BY THE BAY 34-25N-1E	DETENTION POND	3,750
120	OWL'S PEAK 17-28N-2E	DETENTION POND	7,088
121	PARKWOOD 31-24N-2E	INFILTRATION POND	182,466
122	PERDEMCO VILLAGE 12-23N-1E	INFILTRATION POND	5,078
123	PHEASANT BLUFF 12-25N-1E	DETENTION TANK	1,571
124	PHEASANT RUN 35-25N-1E	DETENTION POND	8,288
125	POLK AVENUE ESTATES 2 28-24N-2E	DETENTION POND	3,120
126	POLK AVE EXTENTION 28-24-2E	DETENTION POND	6,678
127	PONDEROSA PARK 01-23N-1E	INFILTRATION POND	52,130
128	PUMP STATION #22 10-25N-1E	DETENTION POND	72,320
129	RAINTREE STREET 28-24N-2E	DETENTION TANK	1,180
130	RAMBLEWOOD STREET 28-24N-2E	DETENTION TANK	2,830
131	RED OAKS 27-25N-1E	DETENTION POND	3,381
132	RED SPRUCE 31-24N-2E	BIOFILTRATION SWALE	
133 134	RIDGECREST 24-23N-1E	INFILTRATION POND DETENTION POND	103,950 4,421
135	RIDGEPOINT WEST 09-25N-1E	DETENTION POND	145,400
136	RIDGETOP BOULEVARD 03-25N-1E	DETENTION POND	30,869
137	RIDGETOP REGIONAL 15-25N-1E	DETENTION POND	116,487
138	RIDGEVIEW I & II 15-25N-1E	DETENTION POND	
139	SHERLYN 2 12-23N-1E	DETENTION POND	2,739
140 141	SHILOHWOOD 27-25N-1E	INFILTRATION POND DETENTION POND	3,108 3,355
142	SILVER RIDGE 22-25N-1E	DETENTION TANK	4,935
143	SILVER RIDGE TOWNHOUSE 09-25N-1E	SWALE	
144	SILVERDALE WAY 09-25N-1E	DETENTION POND	21,648

145	SILVERHILL II 04-25N-1E	DETENTION POND	36,665
146	SILVERHILL V 03-25N-1E	DETENTION POND	3,470
147	SKYLINE ESTATES 23-25N-1E	DETENTION TANK	3,295
148	SKYVIEW 27-25N-1E	DETENTION TANK	2,984
149	SOUTHRIDGE 15-25N-1E	DETENTION POND	7,800
150	SOUTHWOOD 12-23N-1E	DETENTION POND	4,400
151	SPRINGHILL 25-25N-1E	DETENTION POND	2,550
152	STAMPEDE PARK 27-25N-1E	DETENTION TANK	3,641
153	STEELE CREEK I/II 23-25N-1E	DETENTION POND	21,738
154	SUMMER HILL II 01-23N-1E	INFILTRATION POND	19,250
155	SUNDOWN PLACE 34-25N-1E	DETENTION TANK	1,767
156	SUNGATE 24-25N-1E	DETENTION TANK	1,854
157	SUNNYSLOPE STATION 07-23N-1E	DETENTION POND	28,731
158	SUNNYSLOPE SWALE 07-23N-1E	SWALE	
159	SUNRIDGE 17-23N-2E	DETENTION POND	19,300
160	SUNSET WEST I &II 22-25N-1E	DETENTION POND	7,398
161	SURFCREST ESTATES 14-27N-1E	RETENTION POND	7,263
162 163	TALL SHADOWS 34-23N-1E	DETENTION POND RETENTION POND	28,517 7,193
164	TAREE HEIGHTS 35-27N-2E	DETENTION TANK	1,399
165	TAYLOR STREET 28-24N-2E	BIOFILTRATION SWALE	
166	TERRACE HEIGHTS 29-25N-1E	DETENTION POND	5,030
167	THACKERY HILLS 10-25N-1E	DETENTION POND	31,900
168	TOWN'S SUMMIT I & II 19-25N-1E	DETENTION POND 2 CELLS	17,217 47,624
169	TURNSTONE PLACE 26-27N-1E	DETENTION POND	13,960

170	TWELVE OAKS 17-25N-1E	DETENTION POND	39,197
171	VARSITY PARK 30-25N-2E	DETENTION POND	3,370
172	VERGEER POND 27-25N-1E	DETENTION POND	1,520
173	VICTORIA VILLAGE 06-23N-1E	INFILTRATION POND	7,685
174	WAAGA WAY I 23-25N-1E	DETENTION POND	
175	WAAGA WAY II 22-25N-1E	DETENTION POND	
176	WAAGA WAY III 15-25N-1E	DETENTION POND	
177	WAAGA WAY IV 16-25N-1E	DETENTION POND	
178	WEATHERSWOOD 06-23N-2E	BIOFILTRATION SWALE	
179	WEST WIND 18-25N-1E	INFILTRATION POND	5,775
180	WEST WIND DIV I 17-25N-1E	DETENTION POND	15,158
181 182 183	WESTRIDGE II 04-25N-1E	DETENTION POND ("0") DETENTION POND ("C") DETENTION POND ("D")	5,770 6,120 6,530
184 185 186	WHISPER RIDGE 30-25N-1E	DETENTION POND DETENTION POND DETENTION POND	8,856 4,372 8,051
187	WHISPER RIDGE II 30-25N-1E	DETENTION POND	55,206
188	WILLAMETE WOODS 07-25N-1E	DETENTION POND	7,210
189	WILLOW WOOD 23-25N-1E	DETENTION POND	4,828
190	WILSHIRE I & II 23-25N-1E	DETENTION POND	8,930
191	WINCHESTER VIL 12-23N1E	DETENTION POND	35,827
192 193	WINDSONG 30-25N-1E	DETENTION TANK (UPPER) DETENTION TANK (LOWER)	4,398 8,050
194 195 196	WOODCREST 04-25N-1E	DETENTION POND ("C") DETENTION POND ("L") DETENTION POND ("T")	5,600 25,200 5,600
197	WOODS & MEADOWS 04-26N-1E	RETENTION POND	183,563
FUTURE PONDS			
1	ADMIRALTY VIEW 16-28N-2E	INFILTRATION TRENCH	

2	BANNER HILL 10-23N-1E	DETENTION POND	2,673
3	BAYWATCH 23-26N-1E	DETENTION POND	6,652
4	BLUBERRY MEADOWS 35-25N-2E	DETENTION POND	
5	BRECKENRIDGE 10-25N-1E	INFILTRATION TRENCH	
6	BROWNSVILLE ESTATES 13-25N-1E	DETENTION POND	20,318
7	CANYON ESTATES 30-25N-2E	DETENTION POND	74,000
8	CANYON ESTATES II 30-25N-2E		
9	CANYON ESTATES III 30-25N-2E		
10	COUNTRYSIDE ESTATES	DETENTION POND	6,594
11	05-23N-2E	DETENTION POND	2,608
12	COVINGTON PLACE 01-23N-1E	DETENTION POND	73,300
13	ENETAI HEIGHTS	DETENTION POND	26,313
14	17-24N-2E	DETENTION POND	18,692
15	EVERGREEN RIDGE 1	INFILTRATION POND	750
16	02-25N-1E	INFILTRATION POND	2,850
17		DETENTION POND	8,438
18		DETENTION TANK	500
19	EVERGREEN RIDGE 2 02-25N-1E	DETENTION POND	8,682
20	FARNODOLE 27-25N-1E	DETENTION POND	37,511
21	FLINTWOOD & DIV 2 08-25N-1E	DETENTION POND	8,558
22	FREMANTLE 01-23N-1E	INFILTRATION POND	14,284
23	GALEEL 01-23N-1E	DETENTION TANK	5,501
24	GRACY TRAILS 31-27N-2E	DETENTION POND	53,630
25	GRAND PINE 26-25N-1E	DETENTION POND	63,400
26	GRAND RIDGE	DETENTION POND	2,456
27	12-23N-1E	DETENTION POND	33,377
28	GRAVMOR 35-24N-1E	RETENTION POND	1,300
29	HARBOR LIGHTS	DETENTION POND	11,045
30	30-24N-2E	DETENTION POND	11,094
31	HARBOR LIGHTS 1st	DETENTION POND	33,610
32	30-24N-2E	DETENTION POND	20,654
33		DETENTION POND	4,850

34	HIDDEN VALLEY 18-25N-1E	DETENTION POND	110,849
35	HIDDEN VALLEY II 17/18-25N-1E	DETENTION POND	7,346
36	HIGH POINT PARK 30-24N-2E	DETENTION POND	3,900
37	HIGH POINTE II 30-25N-1E	DETENTION POND	18,403
38	HONEYSETT PLACE 02-25N-1E	DETENTION POND	16,728
39	LAKE HILLS 17-24N-1E	DETENTION POND DETENTION POND	27,474 53,689
40	LAKENESS MEADOWS 05-26N-1E	DETENTION POND	2,330
41	MEADOW COURT 25-25N-1E	DETENTION POND	23,498
42 43 44 45	McCORMICK WOOD 10 9/16-23N-1E	DETENTION POND DETENTION POND DETENTION POND DETENTION POND	15,681 60,548 10,018 28,662,480
46	McPHERSON GLEN 07-23N-2E	DETENTION POND	
47	MONTANA STREET 21-24N-2E	DETENTION POND	1,440
48	MOSHER CREEK 26-25N-1E	DETENTION POND	
49	NORTH FORTY II 10-25N-1E	INFILTRATION POND	27,700
50	PARKLAND GREEN 1 & 2 12-23N-1E	DETENTION POND	182,628
51	PORT ORCHARD REPLAT 28-24N-1E	DETENTION POND	1,130
52	RHODODENDRON FOREST 04-26N-1E	INFILTRATION POND	25,475
53	RHODODENDRON RIDGE 09-26N-1E	INFILTRATION POND	13,100
54 55	RIDGE CREEK 25-23N-1E	DETENTION POND INFILTRATION TRENCH	19,159 3,640
56	RIDGEVIEW III/IV 15-25N-1E	DETENTION POND	29,400
57	RIDGEVIEW V 15-25N-1E	CONVEYANCE	
58	SHADOWLAND 13-25N-1E	DETENTION POND	24,680
59	SHEFFIELD PARK II & III 25-25N-1E	DETENTION POND	17,799
60	SILVER RIDGE III 09-25N-1E	DETENTION TANK	5,520

61 62	SILVERHILL VII 03-25N-1E	DETENTION POND INFILTRATION POND	49,518 109,627
63	SILVERHILL VIII 03-25N-1E	DETENTION POND	10,988
64	SILVERHILL NBP 03-25N-1E	CONVEYANCE	
65	SOUTH LAKE RIDGE 19-23N-2E		
66	SPENCER RIDGE 23-23N-1E	RETENTION TANK	414
67	SUMMERWIND IV 15-25N-1E		
68	THACKERY HILLS II 10-25N-1E		
69 70	TIMBER MEADOWS 05-24N-1W	DETENTION POND INFILTRATION POND	4,844 11,638
71	TRENTON CREEK 07-24N-1E	DETENTION POND	27,128
72	TRUMAN STREET 28-24N-2E	INFILTRATION TRENCH	1,506
73	WAGHORN HILLS 34-27N-1E		
74	WHISPER RIDGE III 30-25N-1E	DETENTION POND	119,972
75 76 77	WOODS & MEADOWS II 03-26N-1E	INFILTRATION POND DETENTION POND DETENTION POND	32,713 74,073 26,146
78	WOODS & MEADOWS 3 & 4 34-27N-1E		
PRIVATE RESIDENTIAL			
1	ABBEY ROW 02-24N-1E	DETENTION TANK	1,168
2	BAY SERENE 13-25N-1E	CONVEYENCE	
3	BREIDABLICK PARK 27-27N-1E	DETENTION POND	19,473
4	BUCKLIN RIDGE I-III 15-25N-1E	DETENTION POND	31,000
5	CENTRAL HIGHLANDS 27-25N-1E	DETENTION TANK	1,799
6	CITY SIGHTS II 21-24N-2E	DETENTION POND	5,076
7	FIELDSTONE 02-24N-1E	DETENTION POND	36,650
8	FOREST RIM 30-25N-1E	CONVEYANCE	
9	GREEN GLEN 25-25N-1E	DETENTION POND	30,954

10 11 12	GREENWOOD PLACE 34-23N-1E	INFILTRATION POND INFILTRATION POND INFILTRATION POND	34,734 22,446 9,032
13	HARBOR VISTA 21-24N-2E	DETENTION POND	5,278
14	HERON COVE 09-26N-2E	CONVEYENCE	
15	HERITAGE HILL 04-25N-1E	DETENTION TANK	596
16 17 18	HIDDEN HIGHLANDS 26-23N-1E	INFILTRATION POND INFILTRATION POND INFILTRATION POND	7,282 6,327 5,184
19	HILLTOP WOODS 26-27N-1E	INFILTRATION BASIN	
20 21	HORSESHOE LAKE 10-22-1E	INFILTRATION TANK INFILTRATION TANK	7,500 6,300
22	LEXINGTON 26 727-23N-1E	INFILTRATION POND	26,848
23	MT.VIEW HIGHLANDS 20-24N-2E	INFILTRATION TRENCH	
24	NEVADA AVENUE 33-24N-1E	INFILTRATION TRENCH	1,105
25	PACIFIC FIRS 01-23N-1E	INFILTRATION POND	7,250
26	PINECONE RIDGE 17-23N-2E	INFILTRATION TRENCH	
27	PIONEER HEIGHTS 34-27N-1E	INFILTRATION POND	2,605
28	ROSECROSS 01-25N-1E	SWALE	
29	SCANDIA ESTATES 27-26N-1E		
30	VALLEY HIGH 23-23N-1E	CONVEYANCE	614
31 32	WILDWOOD ACRES 20-27N-2E	DETENTION POND DETENTION POND	4,185 8,708
33	WILDERWOOD II 32-25N-1W	DETENTION POND	5,400

LEVEL OF SERVICE

As of January 1998, the Kitsap County Surface and Stormwater Management Program assumes maintenance responsibility for approximately 200 stormwater facilities. Another 110 newly constructed and private residential facilities are to be included in the SSWM Inspection and Maintenance Programs within the next two years. Approximately 25 percent ($1,390,000) of the 1998 SSWM Program budget is slated for inspection, maintenance, and retrofitting of existing County stormwater facilities.

The level of service (LOS) for stormwater management facilities is reflected by the goals and objectives of the County's SSWM Program. The SSWM Capital Improvement Program, adoption of the Kitsap County Stormwater Management Ordinance, and watershed planning activities undertaken by the Department of Community Development all contribute to the public's level of service expectations.

Since January 1995, land development activities requiring permits and approvals from Kitsap County have been conditioned to meet the minimum requirements of WSDOE's "Stormwater Management Manual for the Puget Sound Basin". The Kitsap County Stormwater Management Ordinance and Design Manual, the technical equivalent of the WSDOE Manual, was adopted by the Board of Commissioners in December 1996 and implemented in April 1997.

The current level of service complies with the applicable State regulations described above. Land development activities requiring land use approval from Kitsap County are currently conditioned to meet the water quality, runoff control, and erosion control requirements of Kitsap County's Stormwater Management Ordinance and Design Manual.

The Kitsap County Storm Drainage Ordinance and Design Manual requires development projects to provide water quality enhancement for up to the 6-month, 24-hour duration storm event. Runoff rates from development sites are required to meet stream bank erosion control standards by releasing one-half of the pre-developed 2-year/24-hour duration runoff rate during a 2-year/24-hour duration event, and matching pre-developed 10-year and 100-year/24-hour duration runoff rates. Construction sites are also required to provide erosion and sedimentation controls for up to the 2-year storm event. The County's proposed level of service for stormwater management will continue to meet the same standard.

CAPITAL FACILITIES PROJECTS AND FINANCING

The Capital Improvement Program (CIP) for SSWM consists of three major elements: the construction of a stormwater Maintenance Waste Processing Facility (Decant Facility) to process wastes from stormwater system maintenance; the construction of regional stormwater facilities; and other necessary capital improvements which include fish passage barrier elimination, flood reduction, and runoff quality enhancement projects. In April 1997, Kitsap County contracted with CH2M Hill, Inc. for preparation of SSWM's Capital Facilities Plan. The general scope of the project includes creating a clear set of objectives for future capital facilities planning, collecting appropriate data, and establishing criteria for processing and sorting relevant information. The plan is also intended to rank existing stormwater problems and prioritize basin planning efforts, taking into account future land use, habitat values and other basin conditions. The plans is scheduled for completion and adoption in March 1998.

Funding for stormwater capital improvements comprises approximately 10-percent of the annual SSWM revenue, or approximately $425,000 of the total $4,260,000 revenue. The SSWM Program, and the revenue base, was established in 1995. Since that time, all program funds unexpended were transferred to the SSWM Construction Fund for capital projects. The attached seven year plan represents a conservative approach to budgeting and completing SSWM capital projects. Over the seven year period 1998-2004, unallocated funds will be spent down until reaching the annual capital allocation of $425,000. Where feasible, grant funds and other revenue sources for capital projects are aggressively pursued. Grants are highly competitive and available sources have been reduced in recent years. Therefore, grants are considered supplemental to the SSWM Capital Facilities Plan. Consideration is also being given to financing options for stormwater capital projects planned for potential annexation and incorporation areas so that repayment arrangements can be made through interlocal agreements or other mechanisms.

Maintenance Waste Processing Facility

A Stormwater Maintenance Waste Processing Facility is necessary to provide appropriate processing and disposal of stormwater system maintenance waste generated by maintenance of both private and public facilities within unincorporated Kitsap County. Maintenance wastes have been shown to contain low to moderate levels of toxics and heavy metals which require disposal in accordance with guidelines developed by the Washington State Department of Ecology and the Bremerton-Kitsap County Health District. In September 1997, Woodward-Clyde Consultants completed final design plans for the facility, which is located at the Central Kitsap Wastewater Treatment Plant. O'Brien-Kreitzberg, Inc. was retained for construction management services. These services will include third party review of plans and contract documents as well as management of construction costs and activities. The construction contract was awarded to TEK Construction of Ferndale, Washington in November 1997 and the facility is scheduled for completion in the summer of 1998. Staff is currently working on the development of a system for tracking treated wastes and an associated procedures manual.

Regional Stormwater Facility Construction

Kitsap County has made significant progress to address stormwater problems on a regional basis. During 1997, the following projects were initiated or in progress.

Manchester Regional Improvements

In November 1997, Kitsap County executed a contract with CH2M Hill for development of a plan to address ongoing flooding problems in the Manchester area. The project is identifies and characterizes existing and future drainage problems in the study area, develop a sequence of activities to resolve the problems, and prepare conceptual level design drawings of up to four capital projects. The project site is bounded by Mile Hill Road on the south, Woods Road on the west, the Manchester Fuel Depot on the north, and Puget Sound on the east. Initiation of the project is contingent upon completion of aerial mapping of the study area, the contract for which was approved by the Board in December 1997 and is expected to be completed in spring 1998.

Port of Bremerton

The County and the Port of Bremerton have an interlocal agreement which outlines the cooperation planned for construction and maintenance of stormwater facilities at Port sites. The Port has contracted for the design of a regional facility serving a large portion of Olympic View Industrial Park, and currently has a 750,000 cu. ft. detention facility with biofiltration facilities serving the airport.

Silverdale Regional Improvements

A contract with KCM, Inc. for evaluation and resolution of flooding problems in the Clear Creek corridor was executed by the Board in August 1997. This phase of the study is focused on developing solutions to the flooding problems in the Myhre Road/Silverdale Way area. The project scope, however, is intended to lay the ground work for a future basin-wide Clear Creek Comprehensive Stormwater Management Plan.

Hansville Flood Study

In August 1997, the Board of Commissioners approved a contract with Entranco, Inc. for a flood study and alternatives analysis report for the Hansville Road/Point No Point area. The study will review and analyze existing and predicted future problems and develop up to three alternatives for resolving ongoing flooding problems occurring northeast of the intersection of Hansville and Point No Point Roads and to the wetland south of the Point No Point Lighthouse. The alternatives report is expected to be completed in early 1998, with development of final plans and specifications initiated shortly thereafter.

Suquamish Regional Improvements

In December 1997, Kitsap County executed a contract with Walker and Associates for aerial mapping of the Suquamish area. The mapping is anticipated to be completed in spring 1998. A scope of work has been prepared for development of a master

stormwater plan addressing ongoing drainage problems in Suquamish, and selection of a design consultant for design services is in progress.

Several SSWM Program elements play an important part in the identification and prioritization of regional CIP projects. SSWM's Capital Improvement Plan, slated for completion in spring 1998, will present a strategy for future watershed planning and regional CIP projects based upon existing and future land use, flooding impacts to public and private properties, habitat values and other infrastructure needs. Regional capital projects initiated to date address cumulative impacts of past land use practices. It is our goal to work more proactively and constructively with the development community and other agencies to arrive at mutually beneficial solutions to regional stormwater quality and quantity problems.

Other Capital Improvements

In cooperation with the SSWM Advisory Committee, the Board of Commissioners, and other interested parties, a project selection/prioritization matrix was completed and implemented in 1997. Potential projects were prioritized and placed on SSWM's proposed Capital Facilities Plan. Significant progress has been made toward addressing ongoing localized flooding problems, resolving County owned fish passage barriers and replacing aging systems. In 1997, the following projects were initiated or in progress:

Dogfish Creek Watershed

During 1997, two fish passage culverts were constructed within the Dogfish Creek watershed. Designs were completed and permitted on two additional barrier removals within the watershed, and these are scheduled for construction during summer of 1998. The final design for an additional fish passage culvert on Dogfish Creek should be completed in time for the 1998 construction season. A watershed approach to resolving fish passage barriers is an efficient approach because it reduces design and construction costs. This approach also motivates private property owners to work with Stream Team to resolve private fish passage barriers and improve the habitat.

Little Bear Creek at Bethel Burley Road

The existing twin box culverts on Bethel-Burley Road present a significant velocity barrier to adult and juvenile salmon. The initial concept of resolving the barrier was to construct a fishway to increase flow depths in the culvert. After performing a hydraulic analysis of the structure, it was found that the culverts required replacement to prevent potential flooding of adjacent properties. A final design for the replacement has been completed, and the project is scheduled for construction in the summer of 1998.

Eldorado Hills Drainage Improvements

SSWM completed the design of conveyance improvements within the Plat of Eldorado Hills. The project is intended to address drainage impacts to property owners, private property, and El Dorado Blvd. This project is scheduled to go out to bid in the spring of 1998.

Big Scandia Creek Culvert and Fishway

The culvert at Big Scandia Creek at Scandia Road has been recently identified by the Department of Fish and Wildlife as Kitsap County's most significant fish passage barrier. On October 13, 1997, the Board of Commissioners approved a contract with Parametrix for final design of a replacement culvert on Scandia Road, and a new fishway at the Viking Way stream crossing. The two projects, scheduled for construction in the summer of 1998, will open up approximately 16,500-square meters of rearing habitat and 7,000-square meters of spawning habitat.

Illahee Creek at Illahee Road

Design of a replacement of the twin 36-inch diameter culverts on Illahee Creek (also known as Schutt Creek) was completed during 1997. The existing culverts are a partial barrier to Coho Salmon and Cutthroat trout, and a complete barrier to Chum Salmon. The project will enhance the dedicated work done by community members to restore habitat and return salmon to the stream. The project has been complicated by difficulties in acquiring easements for construction and maintenance of the proposed culvert and downstream controls.

Allen's Corner

Design and permitting of conveyance improvements north of Tracyton on Tracyton Blvd. were completed in 1996. Difficulties in securing easements from affected property owners has delayed the project. It is hoped that this project can be completed during the summer of 1998.

Spring Creek at Scenic Drive

During 1997, FishPro, Inc. was retained by SSWM for final design of a fish friendly culvert on Spring Creek at Scenic Drive. The project will open up approximately 600-feet of salmon spawning and rearing habitat lying downstream of SR 3. It is our hope that WSDOT will replace the SR 3 culvert, which is a complete barrier to fish passage, providing an additional one mile of habitat upstream. Replacement of the State Highway culvert will provide an additional mile of habitat upstream of SR 3.

The SSWM Capital Improvement Program strives to address on-going drainage problems which are not likely to be financed by the County's Road Fund. The objective of this program element is to secure sufficient funding to address serious flooding problems located beyond County rights-of-way. Funds will be used for upgrading existing storm systems in areas where capacity is shown to be inadequate.

TABLE SD-2
CFP PROJECTS AND FINANCING PLAN
(All Amounts Are Times $1,000)

STORMWATER

(1) COST/REVENUES	(2) 1995	(3) 1996	(4) 1997	(5) 1998	(6) 1999	(7) 2000	(8) TOTAL
Capacity Projects: Regional							
1. Master Stormwater Basin Planning							
Cost		216.7	202.0				418.7
Rev - SW Utility Fee		216.7	202.0				418.7
2. Regional Stormwater Facilities (Unidentified)							
Cost		255.0	170.0		44.0	39.0	508.0
Rev - SW Utility Fee		255.0	170.0		44.0	39.0	508.0
3. Manchester Regional Improvements							
Cost				180.0	180.0	60.0	420.0
Rev - SW Utility Fee				180.0	180.0	60.0	420.0
4. Silverdale Area Regional Improvements							
Cost				235.0	60.0		295.0
Rev - SW Utility Fee				235.0	60.0		295.0
5. Suquamish Regional Drainage Improvements							
Cost				70.0	61.0	31.0	162.0
Rev - SW Utility Fee				70.0	61.0	31.0	162.0
6. Hansville Regional Drainage Improvements							
Cost				110.0	62.5	10.0	182.5
Rev - SW Utility Fee				110.0	62.5	10.0	182.5
7. Navy Yard City Regional Improvements							
Cost						50.0	50.0
Rev - SW Utility Fee						50.0	50.0
8. Bethel Road @ Sedgwick Regional Improvements							
Cost						75.0	75.0
Rev - SW Utility Fee						75.0	75.0
Sub-Total	**0.0**	**471.7**	**372.0**	**595.0**	**407.5**	**265.0**	**2,111.2**

TABLE SD-2
CFP PROJECTS AND FINANCING PLAN
(All Amounts Are Times $1,000)

STORMWATER

(1) COST/REVENUES	(2) 1995	(3) 1996	(4) 1997	(5) 1998	(6) 1999	(7) 2000	(8) TOTAL
Non-Capacity Projects:							
9. Maintenance Waste Decant Facility							
Cost				705.0			705.0
Rev - SW Utility Fee				705.0			705.0
10. General/Emergency Response Construction							
Cost				45.0	92.5		137.5
Rev - SW Utility Fee				45.0	92.5		137.5
11. Schutt Creek Culvert Replacement							
Cost				175.0			175.0
Rev - SW Utility Fee				175.0			175.0
12. Allen's Corner Conveyance Improvements							
Cost				50.0			50.0
Rev - SW Utility Fee				50.0			50.0
13. Dogfish Creek Culvert Replacements							
Cost				27.5			27.5
Rev - SW Utility Fee				27.5			27.5
14. Eldorado Hills Drainage Improvements							
Cost				55.0			55.0
Rev - SW Utility Fee				55.0			55.0
15. Spring Creek Culvert Replacement							
Cost				38.7			38.7
Rev - SW Utility Fee				38.7			38.7
16. Scandia Creek Culvert and Fishway Replacement							
Cost				127.0			127.0
Rev - SW Utility Fee				127.0			127.0
Sub-Total	**0.0**	**0.0**	**0.0**	**1,223.2**	**92.5**	**0.0**	**1,315.7**

TABLE SD-2
CFP PROJECTS AND FINANCING PLAN
(All Amounts Are Times $1,000)

STORMWATER

(1) COST/REVENUES	(2) 1995	(3) 1996	(4) 1997	(5) 1998	(6) 1999	(7) 2000	(8) TOTAL
Non-Capacity Projects:							
17. McCormick Creek Culvert Replacement							
Cost				76.5			76.5
Rev - SW Utility Fee				76.5			76.5
18. Fragaria Creek Culvert Replacement							
Cost				8.8			8.8
Rev - SW Utility Fee				8.8			8.8
19. Mosher-Pheasant Run Conveyance Improvements							
Cost				37.0			37.0
Rev - SW Utility Fee				37.0			37.0
20. Johnson Creek at Viking Way Fishway Replacement							
Cost					75.0		75.0
Rev - SW Utility Fee					75.0		75.0
21. Steele Creek Culvert Replacements							
Cost					60.0		60.0
Rev - SW Utility Fee					60.0		60.0
22. Strawberry Creek at Silverdale Way Culvert Replacement							
Cost					15.0	210.0	225.0
Rev - SW Utility Fee					15.0	210.0	225.0
23. Strawberry Creek at Anderson Hill Road Culvert Replacement							
Cost					10.0		10.0
Rev - SW Utility Fee					10.0		10.0
24. X-Tributary to Strawberry Creek at Frontier Culvert Replacement							
Cost							0.0
Rev - SW Utility Fee							0.0
Sub-Total	**0.0**	**0.0**	**0.0**	**122.3**	**160.0**	**210.0**	**492.3**

TABLE SD-2
CFP PROJECTS AND FINANCING PLAN
(All Amounts Are Times $1,000)

STORMWATER

(1) COST/REVENUES	(2) 1995	(3) 1996	(4) 1997	(5) 1998	(6) 1999	(7) 2000	(8) TOTAL
Non-Capacity Projects:							
25. Little Boston Creek at Little Boston Road Culvert Replacement							
Cost							0.0
Rev - SW Utility Fee							0.0
26. Clear Creek at Mountain View Road Culvert Replacement							
Cost							0.0
Rev - SW Utility Fee							0.0
27. X-Tributary to Clear Creek at Mountain View Fish Passage Improvements							
Cost							0.0
Rev - SW Utility Fee							0.0
Sub-Total	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
SUMMARY: COSTS/REVENUES							
Costs	0.0	471.7	372.0	1,940.5	660.0	475.0	3,919.2
Existing Revenues:							
SW Utility Fee	0.0	471.7	372.0	1,940.5	660.0	475.0	3,919.2
Grants	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Revenues	0.0	471.7	372.0	1,940.5	660.0	475.0	3,919.2
BALANCE	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**

TRANSPORTATION

CURRENT FACILITIES

The County's road system inventory, which does not include any streets within the City of Bremerton, consists of 973 County roadway miles (major collectors = 209 miles, minor collectors = 107 miles, local access = 657 miles) and 24 County-owned bridges. In addition, the inventory includes 101.7 miles of state highways outside city limits (principal arterials = 44.7 miles, minor arterials = 53.5 miles, major collectors = 3.4 miles) and 0.5 mile of state-owned bridges.

Table TR-1, Roadway Facility Inventory, lists each road facility as well as its current capacity, volume-to-capacity (V/C) ratios, and street location. The County's Comprehensive Plan "Part III Figure Book" graphically shows the location of existing County roadway facilities, as well as any proposed 1995-2000 County roadway capital facilities.

LEVEL OF SERVICE

Washington's Growth Management Act (GMA) requires service level standards for both highways and transit services. The Washington State Department of Transportation (WSDOT) has extended this requirement to cover vehicle and passenger ferries, as well. The GMA requires that each jurisdiction's Level of Service (LOS) standards be coordinated within the region and be supported by local ordinance, but the standards and the methods used are up to the local jurisdictions.

Under GMA, the focus is on the performance of the whole road system, not on individual intersections or roadways. The level of service standards are a tool to help keep the transportation system in balance with the needs of future population growth and development.

A methodology and set of standards have been drafted for the Kitsap County Transportation Plan. The standards will help determine concurrency (i.e., balance) between transportation and land use elements of the County's Comprehensive Plan, as required by GMA. The County has four choices if it finds the standards cannot be met.

1. Modify the land use plan, placing tighter controls on the amount and type of development to minimize traffic.

2. Construct additional transportation facilities to support increased travel demand from new development.

3. TDM measures.

Table TR-1. Kitsap County Roadway Facility Inventory

Map Location	Roadway Facility	Daily Roadway Capacity	1994 Volumes	Subarea	V/C Ratio
1	Big Valley E of SR 3	19,334	980	North	0.05
2	Big Valley Rd N of SR 307	20,666	1,640	North	0.08
6	Brownsville Hwy N of SR 303	19,334	3,860	North	0.20
7	Brownsville Hwy S of SR 308	23,334	3,590	North	0.15
9	Central Valley Rd S of SR 308	20,666	3,570	North	0.17
10	Clear Creek Rd S of Rude Rd	23,334	3,090	North	0.13
11	Fairgrounds Bl E of Old Military Rd	9,538	7,650	North	0.80
12	Fairgrounds Rd E of Central Valley Rd	9,538	6,310	North	0.66
13	Finn Hill E of Clear Creek Rd	19,334	1,650	North	0.09
14	Finn Hill E of Rhododendron Ln	20,666	1,390	North	0.07
15	Finn Hill E of SR 3	14,100	8,600	North	0.61
16	Hansville Rd N of Little Boston Rd	24,444	3,680	North	0.15
17	Hansville Rd N of SR 104	24,444	2,980	North	0.12
18	Illahee Rd N of Ocean View Blvd	5,866	1,150	North	0.20
19	Illahee Rd S of Brownsville Hwy	19,334	1,650	North	0.09
20	Illahee Rd W of University Point Cir	9,538	2,480	North	0.26
21	Indianola W of South Kingston Rd	20,666	3,280	North	0.16
23	Lincoln Dr West of Noll Rd	20,666	5,050	North	0.24
24	Little Boston Rd E of Hansville Rd	22,000	1,110	North	0.05
26	McWilliams E of SR 303	19,334	6,570	North	0.34
27	McWilliams W of Old Military Rd	9,538	4,010	North	0.42
28	McWilliams W of SR 303	9,538	3,550	North	0.37
29	Miller Bay Rd S of SR 104	23,334	3,920	North	0.17
30	Miller Bay Rd W of Augusta Ave	23,334	4,560	North	0.20
32	Ocean View W of Illahee Rd	19,334	5,970	North	0.31
33	Old Military S of Fairgrounds Rd	8,462	2,500	North	0.30
36	Pioneer Way W of Lofall Rd	23,334	1,490	North	0.06
37	Ridgetop Blvd S of Hillsboro Dr	8,462	N/A	North	N/A
106	Ridgetop Blvd; N of SR 303	8,462	N/A	North	N/A
38	Sherman Hill Rd W of Viking Ave	16,666	1,040	North	0.06
39	Silverdale Way S of SR 308	22,000	11,400	North	0.52
119	Silverdale Way N of SR 303	15,400	13,020	North	0.85
22	South Kingston Rd E of Indianola Rd	20,666	2,180	North	0.11
40	Stottlemeyer Rd S of Gunderson Rd	19,334	5,240	North	0.27
41	Sunset Ave N of McWilliams Rd	19,334	2,780	North	0.14
42	Suquamish Cut-off Rd E of Division Ave	8,462	6,960	North	0.82
43	Suquamish Cut-off Rd N of Agate Pass Bridge	22,000	6,930	North	0.32
44	Suquamish Cut-off Rd W of Division Ave	20,666	N/A	North	N/A
45	Sylvan Way E of Perry Ave	9,538	4,120	North	0.43
46	Totten Rd N of SR 305	22,000	1,560	North	0.07
47	Trenton Ave N of Sylvan Way	9,538	5,730	North	0.60
49	Twin Spits W of Hansville Rd	7,000	1,180	North	0.17
50	Viking Ave S of SR 305	13,728	8,410	North	0.61
51	Viking Way N of Sherman Hill	15,600	8,300	North	0.53
52	Viking Way N of SR 308	22,000	14,440	North	0.66
53	Viking Way S of Sherman Hill	22,000	11,680	North	0.53
31	West Kingston E of Miller Bay Rd	20,666	5,010	North	0.24
54	West Kingston W of SR 104	23,334	4,830	North	0.21
55	Anderson Hill Rd E of Old Frontier	14,100	14,110	Central	1.00
56	Anderson Hill Rd N of Bucklin Hill Rd	14,100	11,360	Central	0.81
57	Anderson Hill Rd S of Bucklin Hill Rd	14,100	2,480	Central	0.18
58	Anderson Hill W of SR 3	19,334	9,960	Central	0.52
59	Bucklin Hill Rd E of Anderson Hill Rd	14,100	12,760	Central	0.90
60	Bucklin Hill Rd E of Nels Nelson Rd	19,334	10,320	Central	0.53

Table TR-1. Kitsap County Roadway Facility Inventory

61	Bucklin Hill Rd E of Silverdale Way	31,820	10,140	Central	0.32
62	Bucklin Hill Rd E of Tracyton Blvd	15,100	9,620	Central	0.64
63	Bucklin Hill Rd W of Tracyton Blvd	15,100	9,620	Central	0.64
64	Bucklin Hill Rd W of Central Valley Rd	19,334	7,410	Central	0.38
65	Bucklin Hill Rd; Silverdale Way to Dahl Rd	14,100	12,760	Central	0.90
66	Central Valley Rd N of Fairgrounds Rd	9,538	6,910	Central	0.72
67	Central Valley Rd N of McWilliams Rd	9,000	4,230	Central	0.47
69	Central Valley Rd S of Fairgrounds Rd	10,076	4,700	Central	0.47
70	Central Valley Rd N of SR 303	19,334	7,560	Central	0.39
71	Chico Way S of Newberry Hill Rd	20,666	6,680	Central	0.32
72	Chico Way S of Northlake Way	20,666	4,420	Central	0.21
156	Clear Creek Rd N of Trigger Ave	22,000	5,850	Central	0.27
75	Fairgrounds Rd E of Tracyton Blvd	9,538	4,490	Central	0.47
76	Fairgrounds Rd W of Central Valley Rd	9,538	5,940	Central	0.62
77	Fairgrounds Rd; Central Valley Rd to SR 303	9,538	6,010	Central	0.63
68	Hanberry St N of Riddle Rd	9,000	5,240	Central	0.58
78	Holly Rd W of Green Mountain Rd	22,000	N/A	Central	N/A
79	Holly Rd W of Seabeck Hwy	20,666	7,850	Central	0.38
80	Kitsap Mall Blvd N of SR 3	15,100	11,060	Central	0.73
81	Kitsap Mall Blvd S of SR 3	30,908	23,430	Central	0.76
109	Kitsap Mall Blvd W of Silverdale Way	30,908	N/A	Central	N/A
82	Mickelberry Rd N of Bucklin Hill Rd	12,818	8,970	Central	0.70
83	Mickelberry Rd S of Myhre Rd	12,818	8,610	Central	0.67
84	Myhre Rd E of Silverdale Way	12,818	6,120	Central	0.48
85	Myhre Rd W of Silverdale Way	12,818	12,460	Central	0.97
86	N Central Valley S of SR 303	9,538	9,610	Central	1.01
87	Nels Nelson Rd N of Fairgrounds Rd	9,538	2,330	Central	0.24
88	Newberry Hill Rd W of Chico Way	19,334	9,090	Central	0.47
90	Newberry Hill Rd W of Provost Rd	20,666	10,140	Central	0.49
91	Newberry Hill Rd W of SR 3	19,334	8,220	Central	0.43
89	Newberry Hill Rd; SR 3 to Provost Rd	19,334	11,070	Central	0.57
92	Newberry Hill E of Seabeck Hwy	23,334	5,720	Central	0.25
93	Northlake Way S of Seabeck Hwy	9,538	6,610	Central	0.69
94	Old Frontier Rd S of Westgate Rd	20,666	4,530	Central	0.22
95	Olympic View Rd N of Anderson Hill Rd	19,334	5,800	Central	0.30
35	Pine Rd N of Riddell Rd	8,462	4,810	Central	0.57
96	Perry Ave S of Sylvan Way	9,538	5,990	Central	0.63
97	Perry Ave; Sheridan to E 30th St	9,538	4,710	Central	0.49
98	Perry Ave; Sylvan Way to Riddell Rd	9,538	5,230	Central	0.55
99	Pine Rd S of Riddell Rd	8,462	4,810	Central	0.57
100	Provost Rd S of Anderson Hill Rd	20,666	4,770	Central	0.23
101	Randall Way E of Kitsap Mall Blvd	12,818	8,430	Central	0.66
102	Riddell Rd E of Hansberry St	9,538	5,380	Central	0.56
103	Riddell Rd E of Pine Rd	9,538	5,870	Central	0.62
104	Riddell Rd E of SR 303	9,538	5,650	Central	0.59
105	Riddle Rd W of Hansberry St	8,462	6,450	Central	0.76
107	Ridgetop Blvd E of Mickelberry Rd	15,100	13,740	Central	0.91
108	Ridgetop Blvd E of Silverdale Way	12,818	11,520	Central	0.90
110	Ridgetop Blvd; S of SR 303	14,600	17,415	Central	1.19
111	Seabeck Hwy S of Holly Rd	23,334	5,090	Central	0.22
112	Seabeck Hwy S of Newberry Hill Rd	23,334	5,350	Central	0.23
113	Seabeck Hwy W of Anderson Hill Rd	6,400	1,850	Central	0.29
114	Seabeck Hwy W of Northlake Way	9,538	3,150	Central	0.33
115	Seabeck-Holly S of Holly Rd	20,666	2,850	Central	0.14
116	Sheridan Rd E of SR 303	12,818	10,520	Central	0.82
117	Sheridan W of Perry Ave	9,000	7,330	Central	0.81

Table TR-1. Kitsap County Roadway Facility Inventory

118	Silverdale Way N of Bucklin Hill Rd	38,635	22,800	Central	0.59
120	Silverdale Way S of SR 303	38,635	17,060	Central	0.44
121	Silverdale Way; Anderson Hill Rd to Bucklin Hill Rd	22,650	11,990	Central	0.53
74	Silverdale Way; Newberry Hill Rd to Anderson Hill Rd	20,666	11,570	Central	0.56
122	Stampede BL N of Tracyton Blvd	9,538	1,390	Central	0.15
123	Stampede Bl S of Fairgrounds Rd	9,538	2,780	Central	0.29
124	Sylvan Way E of Wheaton Way	9,538	N/A	Central	N/A
125	Tracyton Bl E of Stampede Blvd	8,462	5,410	Central	0.64
126	Tracyton Blvd S of Bucklin Hill Rd	15,100	8,550	Central	0.57
127	Tracyton Blvd S of Fairgrounds Rd	9,538	8,540	Central	0.90
129	Tracyton Blvd; N of Fairgrounds Rd	9,538	4,270	Central	0.45
48	Trenton Ave S of Sylvan Way	9,538	4,540	Central	0.48
130	Trigger Ave W of SR 3	20,666	5,570	Central	0.27
137	Alaska N of Mile Hill Dr	9,000	4,480	South	0.50
138	Banner Rd E of Olalla Valley Rd	19,334	1,210	South	0.06
139	Banner Rd N of SR 160	9,538	3,400	South	0.36
140	Banner Rd S of Southworth Dr	9,538	3,590	South	0.38
141	Banner Rd S of SR 160	22,000	7,170	South	0.33
142	Beach Dr N of Lidstrom Rd	9,538	5,250	South	0.55
158	Beach Dr N of Main St	6,400	2,060	South	0.32
146	Bethel Rd N of Lider Rd	22,000	11,920	South	0.54
144	Bethel Rd N of Lund Ave	10,076	14,230	South	1.41
145	Bethel Rd N of SR 160	10,076	11,060	South	1.10
143	Bethel Rd S of Lund Ave	10,076	13,650	South	1.35
147	Bethel Rd S of SR 160	22,000	11,060	South	0.50
148	Bethel-Burley Rd N of Mullenix Rd	22,000	3,880	South	0.18
149	Bethel-Burley Rd N of Pine Rd	22,000	5,860	South	0.27
151	Burley-Olalla E of SR 16	22,000	8,900	South	0.40
152	Burley-Olalla W of Olalla Valley Rd	19,334	4,560	South	0.24
153	Burley-Olalla W of SR 16	22,000	5,850	South	0.27
154	California N of Mile Hill Dr	8,462	4,540	South	0.54
155	Christopherson Ave; SR 3 to Belfair Valley Rd	8,462	N/A	South	N/A
157	Clifton Rd W of Anderson Hill Rd	22,000	3,000	South	0.14
159	Colchester Dr N of Mile Hill Dr	6,666	3,680	South	0.55
160	Collins E of Baby Doll Rd	6,400	2,370	South	0.37
161	Crescent Valley Rd N of Pierce County	22,000	1,730	South	0.08
162	Crescent Valley Rd S of Banner Rd	20,666	2,400	South	0.12
163	Glenwood Rd N of Pine Rd	20,666	2,450	South	0.12
164	Glenwood Rd S of Lake Flora Rd	20,666	2,800	South	0.14
165	Glenwood Rd N of Pierce County	23,334	2,410	South	0.10
166	Glenwood S of Sidney Rd	19,334	9,270	South	0.48
167	Jackson Ave N of Lund Ave	9,538	12,690	South	1.33
168	Jackson Ave N of Salmonberry Rd	9,538	9,393	South	0.98
169	Jackson Ave N of SR 160	9,538	8,390	South	0.88
170	Jackson Ave S of Lund Ave	9,538	12,170	South	1.28
171	Jackson Ave S of Mile Hill Dr	9,538	10,860	South	1.14
172	Jackson Ave; SR 160 to Salmonberry Rd	9,538	8,390	South	0.88
173	Lake Flora Rd W of Glenwood Rd	22,000	2,380	South	0.11
174	Lakeway Blvd W of Bethel-Burley Rd	20,666	5,400	South	0.26
175	Lider Rd E of Glenwood Rd	22,000	1,280	South	0.06
176	Lider Rd E of Sidney Rd	20,666	2,540	South	0.12
177	Lider Rd W of Bethel Rd	20,666	2,590	South	0.13
178	Locker Rd N of SR 160	22,000	1,720	South	0.08
179	Long Lake Rd N of SR 160	19,334	5,920	South	0.31

Table TR-1. Kitsap County Roadway Facility Inventory

180	Long Lake Rd S of Mile Hill Dr	19,334	8,020	South	0.41
181	Long Lake Rd S of SR 160	9,538	5,430	South	0.57
182	Long Lake Rd W of Mullenix Rd	22,000	2,200	South	0.10
183	Lund Ave E of Bethel Rd	14,307	10,910	South	0.76
184	Lund Ave W of Bethel Rd	19,334	16,440	South	0.85
185	Lund Ave W of Jackson Ave	14,307	12,230	South	0.85
187	Mile Hill Dr E of Baby Doll Rd	22,650	7,900	South	0.35
188	Mile Hill Dr E of Jackson Ave	25,550	9,500	South	0.37
189	Mile Hill Dr E of Woods Rd	23,334	6,790	South	0.29
190	Mile Hill Dr W of Baby Doll Rd	22,650	9,770	South	0.43
191	Mile Hill Dr W of Jackson Ave	29,325	10,500	South	0.36
192	Mile Hill Dr W of Woods Rd	23,334	7,300	South	0.31
193	Mile Hill Rd E of California Ave	23,334	4,820	South	0.21
194	Mullenix Rd E of Phillips Rd	22,000	3,790	South	0.17
195	Mullenix Rd E of SR 16	22,000	5,200	South	0.24
196	Mullenix Rd W of Olalla Valley Rd	22,000	3,980	South	0.18
197	Olalla Valley Rd N of Burley-Olalla Rd	20,666	1,820	South	0.09
198	Olalla Valley S of Mullenix Rd	22,000	3,320	South	0.15
199	Old Belfair Valley Rd W of SR 3	9,538	N/A	South	N/A
200	Olney Ave S of Beach Dr	8,462	6,050	South	0.71
202	Phillips Rd N of SR 160	9,538	3,540	South	0.37
203	Salmonberry E of Bethel Rd	9,538	3,610	South	0.38
204	Sidney Rd N of Lakeway Blvd	23,334	7,850	South	0.34
205	Sidney Rd N of SR 160	10,076	5,670	South	0.56
206	Sidney Rd S of Lider Rd	23,334	10,400	South	0.45
207	Southworth Dr E of Banner Rd	10,076	2,850	South	0.28
208	Southworth Dr N of Locker Rd	23,334	4,040	South	0.17
209	Southworth Dr W of Banner Rd	10,076	5,990	South	0.59
210	Sunnyslope Rd S of SR 3	9,000	2,290	South	0.25
134	Werner Rd W of Sunnyhill Rd	23,334	3,630	South	0.16
218	Willows Rd S of Pine Rd	22,000	3,820	South	0.17
219	Woods Rd N of Mile Hill Dr	8,462	3,420	South	0.40

4. Relax the LOS standards. The County can accept lower levels of service to encourage further growth and minimize the need for additional transportation facilities.

The Transportation Land Use Balance will be monitored through the County's Concurrency Management System. Transportation concurrency will be evaluated for key facilities and on a system-wide basis. By having system-wide and facility-based roadway LOS standards, Kitsap County can define preliminary capacity needs.

The County and WSDOT can then begin to plan corridor studies that will define the characteristics and location of a particular roadway improvement. At the project level, the State Environmental Policy Act (SEPA) process will continue to guide the more specific planning and analysis efforts.

Uses of Level of Service Standards

As measures of transportation system effectiveness, level of service standards can help jurisdictions identify where and when transportation improvements are needed, and when development or growth will affect system operation. Level of service provides a standard below which a transportation facility or system is not considered adequate.

Level of service standards can be used to evaluate the impact of proposed developments on the surrounding road system. They can assure that all developments are served by a safe, efficient and cost-effective road system. They can also be used to identify problems, suggest remedial actions, and apportion costs between public and private sources. LOS standards are a cornerstone in the development of equitable traffic impact fee systems, which makes development pay some of the costs for improvements to the transportation infrastructure.

Measuring Transportation System Performance

The Road System As A Whole. For a preliminary assessment of system-wide transportation concurrency, Kitsap County has established the following performance standard: *85 percent of the County Road lane miles in the transportation network must be at or below maximum LOS/volume-to-capacity standards. Conversely, 15 percent of the lane miles will be permitted to exceed LOS/volume-to-capacity standards.* By adopting a system-wide standard that allows for some deviation, the County is acknowledging the fact that not every roadway facility or link in the network will meet the adopted facility LOS standards all the time, given the limits of County, state, and federal funding and timing of project implementation. Measures of system-wide concurrency will be conducted periodically during development of the comprehensive plan, and during later subarea and corridor studies. The 15% allowance shall relate to individual development proposals undergoing a concurrency test. This 15% allowance shall not extend beyond 6 years from the date of development approval.

At the Roadway Link Level. The level of service for roadway segments or links is analyzed with two primary purposes in mind. First, this site-specific LOS can be used, with the help of a travel demand model, to evaluate areas of congestion within a transportation network--leading to the development of a long-range transportation facilities plan.

Traffic forecasts from the model will be analyzed to determine where capacity improvements should be considered. Second, roadway link LOS analysis is used to assess concurrency or if facilities are meeting the LOS standards.

Kitsap County uses traditional engineering methodology to assess roadway link LOS. Roadway travel volumes are compared to roadway capacity to develop a ratio known as volume-to-capacity (V/C). The volume-to-capacity ratios relate directly to measures of level of service. Table TR-2 shows the relationships between LOS, V/C ratios, peak hour, and free flow speed on an arterial.

Table TR-2. V/C Ratio Ranges As They Relate To LOS

LOS	Volume to capacity ratio range	Percent of free flow speed (peak hour)
A	.50 and below	90% or greater
B	.60 to .69	70% to 90%
C	.70 to .79	50%
D	.80 to .89	40%
E	.90 to .99	33%
F	1.00 and above	25% or less

There are six levels of service on a scale of A to F (designed like a school grading scale). LOS A represents the best operating conditions, and LOS F the worst. The characteristics of the six levels of service are summarized in Table TR-3.

Table TR-3. Definition of Arterial Levels of Service

Level of Service A--describes primarily free flow operations at average travel speeds, usually about 90 percent of the free flow speed for the arterial class. Vehicles are completely unimpeded in their ability to maneuver within the traffic stream. Stopped delay at signalized intersections is minimal.

Level of Service B--represents reasonably unimpeded operations at average travel speeds, usually about 70 percent of the free flow speed for the arterial class. The ability to maneuver within the traffic stream is only slightly restricted and stopped delays are not bothersome. Drivers are not generally subjected to appreciable tension.

Level of Service C--represents stable conditions; however, ability to maneuver and change lanes in mid block location may be more restricted than in LOS B, and longer queues and/or adverse signal coordination may contribute to lower average travel speeds of about 50 percent of the average free flow speed for the arterial class. Motorists will experience appreciable tension while driving.

Level of Service D--borders on a range in which small increases in flow may cause substantial increases in approach delay and, hence, decreases in arterial speed. This may be due to adverse signal progression, inappropriate signal timing, high volumes, or some combination of these. Average travel speeds are about 40 percent of free flow speed.

Level of Service E--characterized by significant approach delays and average travel speeds of one-third the free flow speed or lower. Such operations are caused by some combination of adverse progression, high signal density, extensive queuing at critical intersections, and inappropriate signal timing.

Level of Service F--characterizes arterial flow at extremely low speeds below one-third to one-quarter of the free flow speed. Intersection congestion is likely at critical signalized locations, with resultant high approach delays. Adverse progression is frequently a contributor to this condition.

Source: 1985 Highway Capacity Manual, Special Report 209, Transportation Research Board, Washington, D.C. 1985, page 11-4

The LOS scale has been adopted by the Institute of Transportation Engineers, the Transportation Research Board, and by most jurisdictions throughout the country. The scale is also accepted and generally understood by the public and elected officials.

Draft Level Of Service Standards For Capacity And Congestion. Kitsap County's objective is to allow a greater amount of congestion in the more densely developed and urbanized areas of the County; with a lower amount of congestion in rural, residential, and scenic areas. This reflects the different characteristics of land use and transportation in these areas.

In rural areas, for example, the system of major roads must have sufficient access to the abutting land uses; but because of the low level of land development, rural roads have small capacity requirements. In contrast, urban areas are very active places that attract and generate high volumes of traffic and ensuing congestion. Therefore, in order to facilitate through traffic, major roads need to have limited access to adjacent land uses while the more minor roads serve as access points to the surrounding development. Furthermore, the increased density and activity in an urban area inherently results in higher levels of congestion. Drivers are aware of the differences in land use between urban and nonurban areas and are more tolerant of congestion, and the associated lower LOS, in an urban area than in a suburban or rural area.

The LOS standards shown in Table TR-4 applies to the facility's location and its functional classification. Specific details of the level of service methodology are given in the technical memorandum entitled Level of Service Methodology and Standards, dated August 31, 1993.

Table TR-4. Draft Roadway Capacity/Congestion LOS Standards

Functional Classification	Maximum V/C Ratio/LOS	
	Urban	Rural
Principal Arterial	.89/D	.79/C
Minor Arterial	.89/D	.79/C
Collector	.89/D	.79/C
Minor Collector	.89/D	.79/C
Residential/Local	.79/C	.79/C

Relationship to Concurrency Management

Concurrency involves matching public facilities and new development. The concept of concurrency predates the Growth Management Act (GMA) of 1990 for some public facilities (i.e., present regulations require that adequate water and sewer be available before development is completed). The State Environmental Policy Act has also set a precedent for concurrency by requiring development to mitigate impacts on public facilities. The GMA extends concurrency to transportation facilities by requiring that new development be served by adequate roads and public transportation service, and that development is not permitted to cause these transportation facilities to operate below level of service standards that are adopted by local governments in their comprehensive plans. "Adequate capacity refers to the maintenance of concurrency" (WAC 365-195-835).

Standards for Other Transportation Modes

Transit Level of Service. Kitsap Transit uses a variety of factors to measure the level of service of each component of its service. Though not all factors apply to all components, the multifaceted approach allows the agency to gauge a number of performance characteristics that are important to the success of transit service in Kitsap County. Service coverage, span of service, and other performance criteria by service type are used to measure transit levels of service. The criteria utilized by Kitsap Transit include peak and nonpeak headways, bus stop spacing, accessibility, load factor and equipment size, transit/auto travel time ratio, and service hours. Table TR-5 summarizes the desirable service levels for each of the services provided by Kitsap Transit.

Ferry Level of Service. Washington State Ferries (WSF) determines level of service on each route using a system that measures the number of boat waits that can typically be expected by ferry patrons at each ferry terminal. The delays are reported for both weekdays and weekends during each of the four seasons at each ferry terminal.

The ferry service role in Kitsap County is both that of a commuter service and a recreational service. Ferry service is defined by RCW and WAC as a portion of the state highway system. As such, it functions as a highway, delivering the state's mission statement (as a highway for the transit of goods and people). Demands on the ferry system are typical of a state arterial: commuter traffic, general purpose traffic, and freight. Kitsap County encourages the ferry system to increase its functional and operational ability to act as a state highway arterial, capable of moving typical arterial volumes of traffic.

While commuters use the ferry almost exclusively in the morning and evening during the week, most recreational travel occurs during the middle of the day and on weekends. The unique travel patterns of each type of user dictated a separate analysis be performed for weekdays and weekends. This separation allows a better portrayal of the delay characteristics of each period. In the WSF draft approach to LOS standards, it was suggested that foot passengers and preferential vehicles be dealt with separate from nonpreferential vehicles, and that 100 percent accommodation be the standard for foot passengers and preferential vehicles. Thus, these patrons are not subjected to the delays calculated using the level of service methodology.

Table TR-5: Transit Level of Service in Kitsap County

Service classification	Peak/non-peak headways	Bus stop spacing	Accessibility	Load factor/ equipment size	Travel time ratio (transit/auto)	Service span (days/week, hours/day)
Cross-Sound Ferry Terminal Zone	To ferry schedules (Use as downtown shuttles between)	As needed (1/4 to 1/2 mi.) plus neighborhood P&R lots (25-100 spaces)	Within 1/2 mile of 90% of the population & employees in zone	1.0 or less Small buses to provide greater geographic coverage	1.25 to 1.5 (Goal of 1 or ?)	M-F, Peak
Commuter Express	To ferry schedules or major employers work-start time	Major P&R lots (200-400 spaces) and connection points with local service	Within 3 miles of 80% of population	1.0 or less Large buses	1.0 or less	M-F, Peak
Urban Corridor Express Service	15/30 (can vary to meet ferry schedule)	At centers and major route connections	Within 3 miles of 75% of population	1.2 Sized to demand	1.0-1.5	7 Days, 12-16 hrs/day
Urban Residential Connector Service	30/60 (can vary to meet ferry schedule)	1/4 mile	Within 1/4 mile of 80% of pop+empl.	1.2 Small to medium buses	2.0	7 Days, 12-16 hrs/day
Rural Connector	60/120	Designated pickup location and curb to curb (on-call)	Within 5 miles of 75% of rural pop+empl. (for semi-routed)	1.0 Small buses	2.0-3.0	M-F, 10-12 hrs/day; limited weekend service
Subscription Bus/Vanpool	As needed to meet commuter demand	As needed, plus neighborhood P&R spaces	N/A	1.0 Equipment sized to specific trip demand	1.15	M-F, Peak hours and back shifts, if requested
Paratransit (ADA)	As needed	N/A	N/A	1.0 Small buses and minivans	N/A	Service hours on par with service levels by zone

Similarly, traffic volumes vary with each season. Recreational traffic volumes are far higher in the summer than winter, although commuter volumes are relatively constant throughout the year. On some routes, WSF increases and reduces the sizes of the operating vessels to correspond with shifts in demand. In order to accurately convey the conditions at all times, the year is divided into four seasons to account for changes in travel demand and vessel capacity.

To arrive at the number of boat wait value, the busiest period of the day is broken into 5 minute segments, and the number of vehicles waiting for the ferry during each segment is recorded. Each of the recorded queue lengths is divided by the capacity of the ferry to arrive at volume to capacity ratios for each five minute of the peak period.

The number of boat wait is determined by calculating the 85th percentile volume to capacity ratio for the peak period. The 85th percentile is the statistical value that is exceeded 15 percent of the time. In this application, the 85th percentile value means that during the busiest time of the day, 85 percent of the patrons can expect delays the same or less than the reported value, while 15 percent of the patrons may experience delays as long or longer than the reported value.

Traffic conditions are predicted for each season, using historical daily traffic volumes as a basis for projections, and the number of boat delay for each season is calculated. It should be noted that the 85th percentile traffic volume was chosen as the typical traffic volume for each season. This means that 85 percent of the time, traffic congestion (and therefore delay) will be the same or lighter than the reported condition, while 15 percent of the time (roughly two weeks each season) congestion will be heavier than the reported condition.

No formal delay standards have been set by WSF for each terminal. The Kitsap Regional Planning Council (KRPC) and the Peninsula Regional Transportation Planning Organization (PRTPO), however, have both made formal recommendations to WSF on existing and future level of service standards for all terminals within Kitsap County based upon these draft LOS standards. Table TR-6 summarizes recommendations by travel mode for ferry level of service standards at terminals within Kitsap County.

Table TR-6: KRPC Recommendations for Auto Ferry Level of Service in Kitsap County

Terminal and Mode	Level of Service
Auto Travel	
Fauntleroy/Southworth	Maximum 2 boat wait
Seattle/Bremerton	Maximum 1 boat wait
Seattle/Bainbridge Island	Maximum 2 boat wait
Edmonds/Kingston	Maximum 1 boat wait
HOV and Nonmotorized Travel	
All terminals	Zero (0) boat wait
Freight and Goods Movement	
Seattle/Bremerton (5:00 am to 2:00 pm)	Zero boat wait (westbound)
Edmonds/Kingston (5:00 am to 2:00 pm)	Zero boat wait (westbound)
Seattle/Bremerton (9:00 am to 3:00 pm)	Zero boat wait (eastbound)
Edmonds/Kingston (9:00 am to 3:00 pm)	Zero boat wait (eastbound)

CAPITAL FACILITIES PROJECTS AND FINANCING

Transportation facilities include 100 improvements to capital facilities at various locations throughout the County at a cost of $38,654,400. The proposed financing plan is shown on Table TR-7.

TABLE TR-7

CFP PROJECTS AND FINANCING PLAN
(All Amounts Are Times $1,000)

TRANSPORTATION

(1) COST/REVENUES	(2) 1995	(3) 1996	(4) 1997	(5) 1998	(6) 1999	(7) 2000	(8) TOTAL
1. Bucklin Hill Road							
Silverdale Way E to Tracyton Blvd							
Major Widening, New Lanes w/Bridge, MP 0.25 to MP 1.06							
Cost	16.0	101.5	46.3	100.0	670.0	800.0	1,733.8
Rev- ISTEA-STP(U)		87.6	39.5	86.0	332.0	432.0	977.1
Rev- Impact fees					135.0	147.0	282.0
Rev- Local Discretionary Rev*	16.0	13.9	6.8	14.0	203.0	221.0	474.7
2. Holly Road West							
Seabeck-Holly Rd to Wildcat Lake, MP 0.00 to MP 3.889							
Resurface, Widen, & Culvert Replacement							
Cost	110.9	40.4	1,502.7	150.0			1,804.0
Rev- RAP	54.5	32.3	549.3				636.1
Rev- Local Discretionary Rev*	56.4	8.1	953.4	150.0			1,167.9
3. Holly Road East							
Wildcat Lake to Seabeck Highway, MP 3.889 to MP 5.020							
Resurface, Widen, & Culvert Replacement							
Cost	27.7	16.4	58.3	745.0			847.4
Rev- RAP	13.6	10.5	37.3	446.0			507.4
Rev- Local Discretionary Rev*	14.1	5.9	21.0	299.0			340.0
4. Fairgrounds Road							
Central Valley to Nels Nelson MP to MP							
Widen, Resurface, Bicycle & Pedestrian Facility							
Cost		4.8					4.8
Rev- Local Discretionary Rev*		4.8					4.8
Subtotal	154.6	163.1	1,607.3	995.0	670.0	800.0	4,390.0

TABLE TR-7

CFP PROJECTS AND FINANCING PLAN

(All Amounts Are Times $1,000)

TRANSPORTATION

(1) COST/REVENUES	(2) 1995	(3) 1996	(4) 1997	(5) 1998	(6) 1999	(7) 2000	(8) TOTAL
5. Jackson Ave & Lund Ave Signalization							
Widening of Intersection w/Right Turn Lanes & New Signal Design							
Cost	64.8	185.8	187.4				438.0
Rev- Local Discretionary Rev*	64.8	185.8	187.4				438.0
6. Bethel Ave & Lund Ave Signalization							
Widening of Intersection w/Right Turn Lanes & New Signal Design							
Cost	55.0	304.5	0.2				359.7
Rev- ISTEA-STP(U)		251.0					251.0
Rev- Impact fees	22.7						22.7
Rev- Local Discretionary Rev*	32.3	53.5	0.2				86.0
7. Big Beef Cr Culvert Rep - Holly Rd							
Replace Dual 6" Culverts Crossing Holly Rd w/Arch Culvert or Small Bridge							
Cost	253.2	0.8					254.0
Rev- ISTEA-STP(R)	210.6	0.5					211.1
Rev- Local Discretionary Rev*	42.6	0.3					42.9
8. Kingston Traffic Improvements w/WSDOT							
Traffic Circulation Improvements in Downtown Kingston							
Cost	10.8	9.2					20.0
Rev- ISTEA-STP(U&R)		7.5					7.5
Rev- Local Discretionary Rev*	10.8	1.7					12.5
Subtotal	**383.8**	**500.3**	**187.6**	**0.0**	**0.0**	**0.0**	**1,071.7**

TABLE TR-7

CFP PROJECTS AND FINANCING PLAN

(All Amounts Are Times $1,000)

TRANSPORTATION

(1) COST/REVENUES	(2) 1995	(3) 1996	(4) 1997	(5) 1998	(6) 1999	(7) 2000	(8) TOTAL
9. Central & Washington Streets							
Traffic Circulation Improvements in Downtown Kingston							
Cost		23.1	308.4				331.5
Rev- ISTEA-STP(U&R)		15.6	7.8				23.4
Rev- Local Discretionary Rev*		7.5	300.6				308.1
10. West 1st Street NE							
Traffic Circulation Improvements in Downtown Kingston							
Cost		1.1	16.4	430.0			447.5
Rev- ISTEA-STP(U&R)		1.0	13.2	371.0			385.2
Rev- Local Discretionary Rev*		0.1	3.2	59.0			62.3
11. West Kingston Rd							
Miller Bay to SR 104 MP 0.00 to MP 2.16							
Major Reconstruction, Pedestrian & Bicycle Facility							
Cost	44.8	34.2	14.5	1,610.0			1,703.5
Rev- ISTEA-STP(R)	21.7	21.1		435.0			477.8
Rev- Impact fees	14.6						14.6
Rev- RAP				500.0			500.0
Rev- Local Discretionary Rev*	8.5	13.1	14.5	675.0			711.1
12. Gorst to Brem Ferry Study w/City of Bremerton							
Participation w/City of Bremerton							
Cost	8.0	0.1		60.0	153.0	68.0	289.1
Rev- Local Discretionary Rev*	8.0	0.1		60.0	153.0	68.0	289.1
Subtotal	**52.8**	**58.5**	**339.3**	**2,100.0**	**153.0**	**68.0**	**2,771.6**

TABLE TR-7

CFP PROJECTS AND FINANCING PLAN

(All Amounts Are Times $1,000)

TRANSPORTATION

(1) COST/REVENUES	(2) 1995	(3) 1996	(4) 1997	(5) 1998	(6) 1999	(7) 2000	(8) TOTAL
13. Silverdale Access/Circulation Study							
Route Study Between SR 3 & Anderson Hill Rd							
Cost	15.9	112.1	54.4				182.4
Rev- Local Discretionary Rev*	15.9	112.1	54.4				182.4
14. Hansville Area Collector							
Hansville Rd to Hood Canal Dr, Route Study							
Cost	32.3	68.7	1.5				102.5
Rev- ISTEA-STP(R)		59.4					59.4
Rev- Impact fees	12.0						12.0
Rev- Local Discretionary Rev*	20.3	9.3	1.5				31.1
15. Suquamish Pedestrian Walkways							
Placement Of Pedestrian Walkways And Path Hubbing Suquamish Elementary School							
Cost	1.6	50.6					52.2
Rev- Local Discretionary Rev*	1.6	50.6					52.2
16. Tracyton Blvd Extension Phase I							
MP 3.39 to MP 3.98							
Cost	0.4						0.4
Rev- Local Discretionary Rev*	0.4						0.4
Subtotal	**50.2**	**231.4**	**55.9**	**0.0**	**0.0**	**0.0**	**337.5**

TABLE TR-7

CFP PROJECTS AND FINANCING PLAN

(All Amounts Are Times $1,000)

TRANSPORTATION

(1) COST/REVENUES	(2) 1995	(3) 1996	(4) 1997	(5) 1998	(6) 1999	(7) 2000	(8) TOTAL
17. Tracyton Blvd Extension Phase II							
MP 3.360 to MP 3.609							
Cost	44.1						44.1
Rev- Local Discretionary Rev*	44.1						44.1
18. Tremont Street/County participation							
w City of Port Orchard							
Cost	10.4						10.4
Rev- Local Discretionary Rev*	10.4						10.4
19. Lake Flora Road							
Widen, realign, channelize intersection, MP 6.33 to MP 6.49							
Cost	289.1	0.8					289.9
Rev- ISTEA-STP(R)	250.1						250.1
Rev- Impact fees	23.0						23.0
Rev- Local Discretionary Rev*	16.0	0.8					16.8
20. Silverdale Way, Left turn lane							
at NW Schold Place, MP 2.271 to MP 2.879							
Cost	236.1						236.1
Rev- Local Discretionary Rev*	236.1						236.1
Subtotal	**579.7**	**0.8**	**0.0**	**0.0**	**0.0**	**0.0**	**580.5**

TABLE TR-7

CFP PROJECTS AND FINANCING PLAN

(All Amounts Are Times $1,000)

TRANSPORTATION

(1) COST/REVENUES	(2) 1995	(3) 1996	(4) 1997	(5) 1998	(6) 1999	(7) 2000	(8) TOTAL
21. Mile Hill							
left turn lane at Bulman Rd, MP 1.092 to 1.308							
Cost	187.6						187.6
Rev- Local Discretionary Rev*	187.6						187.6
22. Driftwood Key Cul de sac Improvements							
Grade preparation and paving							
Cost	33.5						33.5
Rev- Local Discretionary Rev*	33.5						33.5
23. Clifton Rd Five Corners							
Widen and overlay, MP 1.21 to MP 1.29							
Cost	173.9						173.9
Rev- Local Discretionary Rev*	173.9						173.9
24. Illahee Rd NE							
Pave shoulders and drainage improvements, MP 1.237 to MP 1.587							
Cost	173.1						173.1
Rev- Local Discretionary Rev*	173.1						173.1
Subtotal	**568.1**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**568.1**

TABLE TR-7

CFP PROJECTS AND FINANCING PLAN

(All Amounts Are Times $1,000)

TRANSPORTATION

(1) COST/REVENUES	(2) 1995	(3) 1996	(4) 1997	(5) 1998	(6) 1999	(7) 2000	(8) TOTAL
25. Randall Way							
Widen, drainage, pave and grade from MP 0.71 to MP 1.03							
Cost	72.0						72.0
Rev- Local Discretionary Rev*	72.0						72.0
26. Silverdale Way Geotech Study							
Geotechnical study for future widening of Silv Way between Chico Way and Byron							
Cost	33.4						33.4
Rev- Local Discretionary Rev*	33.4						33.4
27. Park & Ferry Streets Drainage							
Reconstruct ditches, install catch basins and culverts							
Cost	56.8						56.8
Rev- Local Discretionary Rev*	56.8						56.8
28. Silverdale Loop/Anderson Hill Rd							
Safety improvement for site distance							
Cost	25.7						25.7
Rev- Local Discretionary Rev*	25.7						25.7
Subtotal	**187.9**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**187.9**

TABLE TR-7

CFP PROJECTS AND FINANCING PLAN

(All Amounts Are Times $1,000)

TRANSPORTATION

(1) COST/REVENUES	(2) 1995	(3) 1996	(4) 1997	(5) 1998	(6) 1999	(7) 2000	(8) TOTAL
29. Barber Cut-Off Rd							
Drainage, widen shoulders and pave							
Cost	200.2						200.2
Rev- Local Discretionary Rev*	200.2						200.2
30. NW Phinney Bay							
Slope Stabilization and roadway reconstruction including drainage							
Cost	57.4						57.4
Rev- Local Discretionary Rev*	57.4						57.4
31. Coho Run							
Structural overlay, MP 0.00 to MP 0.81							
Cost	114.1						114.1
Rev- Local Discretionary Rev*	114.1						114.1
32. Jackson Ave & Sedgwick Rd Signal							
Traffic signal & intersection improvements							
Cost	50.5	7.6					58.1
Rev- Impact Fees	18.6						18.6
Rev- Local Discretionary Rev*	31.9	7.6					39.5
Subtotal	**422.2**	**7.6**	**0.0**	**0.0**	**0.0**	**0.0**	**429.8**

TABLE TR-7

CFP PROJECTS AND FINANCING PLAN

(All Amounts Are Times $1,000)

TRANSPORTATION

(1) COST/REVENUES	(2) 1995	(3) 1996	(4) 1997	(5) 1998	(6) 1999	(7) 2000	(8) TOTAL
33. Chico Way Culvert Replacement							
Culvert replacement & rehabilitation of streambed							
Cost	229.4	5.0					234.4
Rev- Local Discretionary Rev*	229.4	5.0					234.4
34. Indianola Road							
Resurface, widen, drainage improvements, MP 0.921 to MP 1.838							
Cost		30.8	1,013.7				1,044.5
Rev- RAP		24.6	284.0				308.6
Rev- Local Discretionary Rev*		6.2	729.7				735.9
35. Erlands Point Bridge							
Reconstruction of bridge including roadway, drainage and other improvements							
Cost	24.9	72.1	412.1				509.1
Rev- Local Discretionary Rev*	24.9	72.1	412.1				509.1
36. County Wide Guardrail							
Spot Guardrail Installation & Upgrades							
Cost	61.1	78.5					139.6
Rev- Local Discretionary Rev*	61.1	78.5					139.6
Subtotal	**315.4**	**186.4**	**1,425.8**	**0.0**	**0.0**	**0.0**	**1,927.6**

TABLE TR-7

CFP PROJECTS AND FINANCING PLAN

(All Amounts Are Times $1,000)

TRANSPORTATION

(1) COST/REVENUES	(2) 1995	(3) 1996	(4) 1997	(5) 1998	(6) 1999	(7) 2000	(8) TOTAL
37. County Wide Lighting/Signal Upgrades							
Upgrade illumination & traffic control devices							
Cost				50.0	100.0	100.0	250.0
Rev- Local Discretionary Rev*				50.0	100.0	100.0	250.0
38. County Wide Safety Improvements							
Spot Shoulder Widening For Bicycle & Pedestrian Access							
Cost			74.1	100.0	150.0	150.0	474.1
Rev- Local Discretionary Rev*			74.1	100.0	150.0	150.0	474.1
39. County Wide Fish Passage Corrections							
Culvert Replacement for fish passage							
Cost					250.0	250.0	500.0
Rev- Local Discretionary Rev*					250.0	250.0	500.0
40. County Wide Greenways							
Comprehensive Plan							
Cost	114.1						114.1
Rev- ISTEA-Enhancement	77.7						77.7
Rev- Local Discretionary Rev*	36.4						36.4
Subtotal	**114.1**	**0.0**	**74.1**	**150.0**	**500.0**	**500.0**	**1,338.2**

TABLE TR-7
CFP PROJECTS AND FINANCING PLAN

(All Amounts Are Times $1,000)

TRANSPORTATION

(1) COST/REVENUES	(2) 1995	(3) 1996	(4) 1997	(5) 1998	(6) 1999	(7) 2000	(8) TOTAL
41. Countywide Surfacing Upgrades							
Spot Roadway Surfacing Upgrades From Gravel To ACP							
Cost					100.0	100.0	200.0
Rev- Local Discretionary Rev*					100.0	100.0	200.0
42. Liebly & Blumers							
County Road Improvement District To Bring Existing Gravel Road to County Standards Includes Clearing, Grubbing, Grading, & Asph Surfacing - Comm Dist #2 (1/4 Acre Tracts #13)							
Cost	316.7	71.8					388.5
Rev- Special Assessment	316.7	71.8					388.5
43. Old Sawmill Lane							
County Road Improvement District To Bring Existing Gravel Road To County Standards Includes Clearing, Grubbing, Grading, & Asphalt Surfacing - Comm Dist #3							
Cost	51.1	553.0	163.4				767.5
Rev- Special Assessment	51.1	453.0	63.4				567.5
Rev- Local Discretionary Rev*	0.0	100.0	100.0				200.0
44. SE Cedar Road East							
Bethel-Converse MP 0.25 to MP 0.60, Shoulder Improvements Near School							
Cost		0.1	15.2				15.3
Rev- Local Discretionary Rev*		0.1	15.2				15.3
Subtotal	**367.8**	**624.9**	**178.6**	**0.0**	**100.0**	**100.0**	**1,371.3**

TABLE TR-7

CFP PROJECTS AND FINANCING PLAN

(All Amounts Are Times $1,000)

TRANSPORTATION

(1) COST/REVENUES	(2) 1995	(3) 1996	(4) 1997	(5) 1998	(6) 1999	(7) 2000	(8) TOTAL
45. Lakeway Blvd SE							
Fairview-Triviere MP 0.54 to MP 1.04, Shoulder Improvements Near School							
Cost		5.2	27.3				32.5
Rev- Local Discretionary Rev*		5.2	27.3				32.5
46. Hansville Road NE							
SR 104 to Old Hansville MP 0.00 To MP 2.60, Overlay Exist Chip Seal Shoulder							
Cost		216.8					216.8
Rev- Local Discretionary Rev*		216.8					216.8
47. Almira Rd Extension							
Grade and overlay, MP 0.000 to MP 0.309							
Cost		39.5					39.5
Rev- Local Discretionary Rev*		39.5					39.5
48. Anderson Hill Slide							
Repair and reinforce slide area and pave							
Cost		22.4	244.8				267.2
Rev- ISTEA - STP(R)		16.6	72.7				89.3
Rev- Local Discretionary Rev*		5.8	172.1				177.9
Subtotal	**0.0**	**283.9**	**272.1**	**0.0**	**0.0**	**0.0**	**556.0**

TABLE TR-7

CFP PROJECTS AND FINANCING PLAN

(All Amounts Are Times $1,000)

TRANSPORTATION

(1) COST/REVENUES	(2) 1995	(3) 1996	(4) 1997	(5) 1998	(6) 1999	(7) 2000	(8) TOTAL
49. Seabeck Hwy							
Shoulders Improvements For Heavy Pedestrian Traffic							
Cost		1.6	5.6	80.0			87.2
Rev- Local Discretionary Rev*		1.6	5.6	80.0			87.2
50. Jackson Ave Shoulder Improvements							
Shoulders Improvements For Heavy Pedestrian Traffic, MP 0.197 to 0.897							
Cost		139.8	4.2				144.0
Rev- Local Discretionary Rev*		139.8	4.2				144.0
51. Beach Drive Trail							
Repair seawall and greenway trail							
Cost		32.5					32.5
Rev- Local Discretionary Rev*		32.5					32.5
52. SW Imperial Way							
Structural overlay							
Cost		87.7					87.7
Rev- Local Discretionary Rev*		87.7					87.7
Subtotal	**0.0**	**261.6**	**9.8**	**80.0**	**0.0**	**0.0**	**351.4**

TABLE TR-7

CFP PROJECTS AND FINANCING PLAN

(All Amounts Are Times $1,000)

TRANSPORTATION

(1) COST/REVENUES	(2) 1995	(3) 1996	(4) 1997	(5) 1998	(6) 1999	(7) 2000	(8) TOTAL
53. Wade Road NW							
Grade and pave, MP 0.000 to MP 0.882							
Cost		72.1					72.1
Rev- Local Discretionary Rev*		72.1					72.1
54. Unnamed Road							
Grade and pave unnamed road off of Olympic View Rd NW, MP 0.000 to MP 0.235							
Cost		9.7					9.7
Rev- Local Discretionary Rev*		9.7					9.7
55. McWilliams Rd/SR 303 Intersection							
Intersection improvements including channelization, sidewalks, drainage, signal system upgrade							
Cost		72.1	9.4	400.0			481.5
Rev- SEPA				120.0			120.0
Rev- Local Discretionary Rev*		72.1	9.4	280.0			361.5
56. Redwing Trail							
Grading and pave shoulders for pedestrian traffic							
Cost		0.2	18.6				18.8
Rev- Local Discretionary Rev*		0.2	18.6				18.8
Subtotal	**0.0**	**154.1**	**28.0**	**400.0**	**0.0**	**0.0**	**582.1**

TABLE TR-7

CFP PROJECTS AND FINANCING PLAN

(All Amounts Are Times $1,000)

TRANSPORTATION

(1) COST/REVENUES	(2) 1995	(3) 1996	(4) 1997	(5) 1998	(6) 1999	(7) 2000	(8) TOTAL
57. Northlake Way Bridge							
Reconstruct bridge using pre-cast bridge structure							
Cost		0.8	465.7				466.5
Rev- Local Discretionary Rev*		0.8	465.7				466.5
58. Seabeck Hwy Bridge							
Scour repair and pave							
Cost		14.7	98.1				112.8
Rev- Local Discretionary Rev*		14.7	98.1				112.8
59. Newberry Hill Road							
Provost Road To Dickey, MP 2.15 To MP 2.74, Slope Stabilization, climbing & auxiliary lanes, signalization							
Cost	70.5	7.5	255.9	2,360.0	1,950.0		4,643.9
Rev- ISTEA-STP(U)		2.9	209.3	1,120.0			1,332.2
Rev- UATA					1,800.0		1,800.0
Rev- Impact Fees					60.0		60.0
Rev- Local Discretionary Rev*	70.5	4.6	46.6	1,240.0	90.0		1,451.7
60. DOT Project Participation							
Various Projects Countywide							
Cost	44.2	56.3	0.2	50.0	50.0	50.0	250.7
Rev- Local Discretionary Rev*	44.2	56.3	0.2	50.0	50.0	50.0	250.7
Subtotal	**114.7**	**79.3**	**819.9**	**2,410.0**	**2,000.0**	**50.0**	**5,473.9**

TABLE TR-7

CFP PROJECTS AND FINANCING PLAN

(All Amounts Are Times $1,000)

TRANSPORTATION

(1) COST/REVENUES	(2) 1995	(3) 1996	(4) 1997	(5) 1998	(6) 1999	(7) 2000	(8) TOTAL
61. S. Kingston to Miller Bay Road							
S. Kingston Road To Miller Bay Road New Link Study							
Cost	23.4						23.4
Rev- Local Discretionary Rev*	23.4						23.4
62. SR 3/SR 303 Interchange							
Interchange improvements, participation w/WSDOT							
Cost		1.3	22.3	2,775.0	2,710.0	1,350.0	6,858.6
Rev- Impact Fees					88.0	55.0	143.0
Rev- TIB			7.2	917.0	877.0	436.0	2,237.2
Rev- WSDOT				886.0	1,265.0	777.0	2,928.0
Rev- ISTEA-STP(U)				752.0	345.0		1,097.0
Rev- Local Discretionary Rev*		1.3	15.1	220.0	135.0	82.0	453.4
63. Knapp Creek Culvert							
Culvert replacement with fish passage design							
Cost			8.1	407.0			415.1
Rev- Local Discretionary Rev*			8.1	407.0			415.1
64. Hoffman Culvert Replacement							
Culvert replacement with fish passage design							
Cost			12.0	105.0			117.0
Rev- Local Discretionary Rev*			12.0	105.0			117.0
Subtotal	**23.4**	**1.3**	**42.4**	**3,287.0**	**2,710.0**	**1,350.0**	**7,414.1**

TABLE TR-7

CFP PROJECTS AND FINANCING PLAN

(All Amounts Are Times $1,000)

TRANSPORTATION

(1) COST/REVENUES	(2) 1995	(3) 1996	(4) 1997	(5) 1998	(6) 1999	(7) 2000	(8) TOTAL
65. Gold Creek Road							
Participation with Mason County							
Cost			24.9				24.9
Rev- Local Discretionary Rev*			24.9				24.9
66. Olalla Valley Road Bridge							
Scour Repairs							
Cost				115.0			115.0
Rev- Local Discretionary Rev*				115.0			115.0
67. Lindvog Road NE							
SR 104 to W Kingston Rd							
Cost			13.7	960.0	850.0		1,823.7
Rev- ISTEA-STP(U)(R)				780.0	194.0		974.0
Rev- Impact Fees					262.0		262.0
Rev- Local Discretionary Rev*			13.7	180.0	394.0		587.7
68. Lund Ave Bridge							
Slope stabilization at abutment							
Cost				45.0	250.0		295.0
Rev- Local Discretionary Rev*				45.0	250.0		295.0
Subtotal	**0.0**	**0.0**	**38.6**	**1,120.0**	**1,100.0**	**0.0**	**2,258.6**

TABLE TR-7

CFP PROJECTS AND FINANCING PLAN

(All Amounts Are Times $1,000)

TRANSPORTATION

(1) COST/REVENUES	(2) 1995	(3) 1996	(4) 1997	(5) 1998	(6) 1999	(7) 2000	(8) TOTAL
69. Carney Lake Rd							
From J.M. Dickenson Rd to Co. Line MP 0.00 to MP 1.84 Reconstruction							
Cost			1.9	69.0	750.0		820.9
Rev- RAP					500.0		500.0
Rev- Local Discretionary Rev*			1.9	69.0	250.0		320.9
70. So Keyport Road							
Slide stabilization repair							
Cost				80.0	300.0		380.0
Rev- Local Discretionary Rev*				80.0	300.0		380.0
71. Locker Rd Culvert							
Culvert replacement with fish passage design							
Cost			9.2	107.0			116.2
Rev- Local Discretionary Rev*			9.2	107.0			116.2
72. Brownsville Gilberton Bridge							
Scour Repairs							
Cost				100.0			100.0
Rev- Local Discretionary Rev*				100.0			100.0
Subtotal	**0.0**	**0.0**	**11.1**	**356.0**	**1,050.0**	**0.0**	**1,417.1**

TABLE TR-7

CFP PROJECTS AND FINANCING PLAN

(All Amounts Are Times $1,000)

TRANSPORTATION

(1) COST/REVENUES	(2) 1995	(3) 1996	(4) 1997	(5) 1998	(6) 1999	(7) 2000	(8) TOTAL
73. Hallman Road							
Slope Stability, Realignment							
Cost				50.0	50.0	150.0	250.0
Rev- Local Discretionary Rev*				50.0	50.0	150.0	250.0
74. Mile Hill Drive							
Long Lake Rd to Colchester Dr							
Widen, safety & intersection improvements							
Cost				65.0	185.0	300.0	550.0
Rev- HES						200.0	200.0
Rev- Impact Fees					74.0	40.0	114.0
Rev- Local Discretionary Rev*				65.0	111.0	60.0	236.0
75. Jackson Avenue S.E.							
Lund Ave to Mile Hill Drive							
Pave shoulders, resurface, drainage							
Cost				50.0	150.0	400.0	600.0
Rev- Impact Fees					60.0	160.0	220.0
Rev- Local Discretionary Rev*				50.0	90.0	240.0	380.0
76. Salmonberry Road							
Phillips Road to Long Lake Road							
Widen and reconstruct 3-R Stds							
Cost				30.0	40.0	70.0	140.0
Rev- Impact Fees				7.0	9.0	28.0	44.0
Rev- Local Discretionary Rev*				23.0	31.0	42.0	96.0
Subtotal	**0.0**	**0.0**	**0.0**	**195.0**	**425.0**	**920.0**	**1,540.0**

TABLE TR-7

CFP PROJECTS AND FINANCING PLAN

(All Amounts Are Times $1,000)

TRANSPORTATION

(1) COST/REVENUES	(2) 1995	(3) 1996	(4) 1997	(5) 1998	(6) 1999	(7) 2000	(8) TOTAL
77. Viking Way Concept Evaluation							
SR 308 to City Limits							
Cost and impact study, widen to 5 lanes							
Cost				75.0	75.0		150.0
Rev- Impact Fees				15.0	15.0		30.0
Rev- Local Discretionary Rev*				60.0	60.0		120.0
78. Lund Avenue SE							
Bethel Road to Hoover St							
Widen to 5 lanes							
Cost				15.0	30.0	300.0	345.0
Rev- Impact Fees				4.0	8.0	120.0	132.0
Rev- Local Discretionary Rev*				11.0	22.0	180.0	213.0
79. Sunnyslope Road Concept Evaluation							
Lake Flora Rd to Crossing Place							
Cost & impact study for major reconstruct							
Cost				35.0	50.0		85.0
Rev- Local Discretionary Rev*				35.0	50.0		85.0
80. Stavis Bay Road Bridge							
Stavis Bay Road at Stavis Creek							
Rehab, timber bridge							
Cost						215.0	215.0
Rev- Local Discretionary Rev*						215.0	215.0
Subtotal	**0.0**	**0.0**	**0.0**	**125.0**	**155.0**	**515.0**	**795.0**

TABLE TR-7

CFP PROJECTS AND FINANCING PLAN

(All Amounts Are Times $1,000)

TRANSPORTATION

(1) COST/REVENUES	(2) 1995	(3) 1996	(4) 1997	(5) 1998	(6) 1999	(7) 2000	(8) TOTAL
81 Tracyton Blvd							
Allens Corner to Holland Road							
Widen, shoulders, drainage improvements							
Cost						59.0	59.0
Rev- Impact fees						24.0	24.0
Rev- Local Discretionary Rev*						35.0	35.0
82 Silverdale Circulation Improvements							
Circulation Improvements around mall area							
Implement 1997 Study							
Cost						350.0	350.0
Rev- Impact fees						248.0	248.0
Rev- Local Discretionary Rev*						102.0	102.0
83 Stevens Road							
Bandix Road to County Line							
Widen, resurface, drainage improvements 2-R Stds							
Cost						328.0	328.0
Rev- Local Discretionary Rev*						328.0	328.0
84 Hood Canal Drive NE							
Cliffside Road to Hood Canal Place							
Widen & pave shoulders, resurface 3-R Stds							
Cost						505.0	505.0
Rev- RAP						404.0	404.0
Rev- Local Discretionary Rev*						101.0	101.0
Subtotal	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**1,242.0**	**1,242.0**

TABLE TR-7
CFP PROJECTS AND FINANCING PLAN
(All Amounts Are Times $1,000)

TRANSPORTATION

(1) COST/REVENUES	(2) 1995	(3) 1996	(4) 1997	(5) 1998	(6) 1999	(7) 2000	(8) TOTAL
85. Little Boston Road NE							
Cliffside Road to Hansville Rd							
Widen & pave shoulders, resurface, 3-R Stds							
Cost						470.0	470.0
Rev- RAP						376.0	376.0
Rev- Local Discretionary Rev*						94.0	94.0
86. Widme Road							
Totten Road to Lincoln Road							
Minor widening & resurfacing 2-R Stds							
Cost						45.0	45.0
Rev- Local Discretionary Rev*						45.0	45.0
87. Orchard Avenue SE							
At intersection w Olalla Rd							
Realign intersection							
Cost						205.0	205.0
Rev- Local Discretionary Rev*						205.0	205.0
88. Bethel Road Concept Evaluation							
Lund Ave to Ives Mills Rd							
Cost & impact study, widen to 5 lanes							
Cost						110.0	110.0
Rev- Impact Fees						44.0	44.0
Rev- Local Discretionary Rev*						66.0	66.0
Subtotal	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**830.0**	**830.0**

TABLE TR-7

CFP PROJECTS AND FINANCING PLAN

(All Amounts Are Times $1,000)

TRANSPORTATION

(1) COST/REVENUES	(2) 1995	(3) 1996	(4) 1997	(5) 1998	(6) 1999	(7) 2000	(8) TOTAL
89. Bethel-Burley Road SE							
Burley-Olalla Rd to Holman Road							
Widen & pave shoulders, resurface 3-R Stds							
Cost						80.0	80.0
Rev- RAP						36.0	36.0
Rev- Local Discretionary Rev*						44.0	44.0
90. Glenwood Road							
Lake Flora Road to Lider Road							
Widen & pave shoulders, resurface, 3-R Stds							
Cost						145.0	145.0
Rev- RAP						116.0	116.0
Rev- Local Discretionary Rev*						29.0	29.0
91. Glenwood Road							
JH Road to Lake Flora Road							
Widen & pave shoulders, resurface, 3-R Stds							
Cost						113.0	113.0
Rev- RAP						90.0	90.0
Rev- Local Discretionary Rev*						23.0	23.0
92. Sidney Road							
County Line to Lakeway Blvd							
Widen, resurface, 3-R Stds							
Cost						160.0	160.0
Rev- RAP							0.0
Rev- Local Discretionary Rev*						160.0	160.0
Subtotal	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**498.0**	**498.0**

TABLE TR-7

CFP PROJECTS AND FINANCING PLAN

(All Amounts Are Times $1,000)

TRANSPORTATION

(1) COST/REVENUES	(2) 1995	(3) 1996	(4) 1997	(5) 1998	(6) 1999	(7) 2000	(8) TOTAL
93. East Bremerton/Silverdale MIS							
East Bremerton to Silverdale							
Study for feasibility of alternate routes							
Cost						300.0	300.0
Rev- Impact Fees						120.0	120.0
Rev- Local Discretionary Rev*						180.0	180.0
94. SR 305 Corridor Improvements							
Port Madison Reservation to Poulsbo City Limits							
Mobility improvements WSDOT Participation							
Cost						43.0	43.0
Rev- Impact Fees						17.0	17.0
Rev- Local Discretionary Rev*						26.0	26.0
95. Seabeck-Holly Road Bridge							
Seabeck-Holly Road at Anderson Creek							
Replace timber bridge							
Cost						105.0	105.0
Rev- BRS						77.0	77.0
Rev- Local Discretionary Rev*						28.0	28.0
96. Glenwood Road							
Pine Road to Christmas Tree Lane							
Widen & pave shoulders, resurface, 3-R Stds							
Cost						71.0	71.0
Rev- RAP						36.0	36.0
Rev- Local Discretionary Rev*						35.0	35.0
Subtotal	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**519.0**	**519.0**

TABLE TR-7

CFP PROJECTS AND FINANCING PLAN

(All Amounts Are Times $1,000)

TRANSPORTATION

(1) COST/REVENUES	(2) 1995	(3) 1996	(4) 1997	(5) 1998	(6) 1999	(7) 2000	(8) TOTAL
97. Carney Lake Road							
Alta Vista Dr to J.M. Dickenson Rd							
Widen, realign, resurface, 3-R Stds							
Cost						23.0	23.0
Rev- RAP						18.0	18.0
Rev- Local Discretionary Rev*						5.0	5.0
98. Mile Hill Drive/SR166 Concept Evaluation							
Jackson Ave to Long Lake Rd							
Cost and impact study, widen to 5 lanes							
Cost						70.0	70.0
Rev- Impact Fees						28.0	28.0
Rev- Local Discretionary Rev*						42.0	42.0
99. Spruce Road Bridge							
Spruce Road at Unnamed Creek							
Replace bridge							
Cost						55.0	55.0
Rev- PWTF						49.0	49.0
Rev- Local Discretionary Rev*						6.0	6.0
100. East Fenton Road Bridge							
East Fenton Road at Burley Creek							
Replace bridge							
Cost						55.0	55.0
Rev- PWTF						49.0	49.0
Rev- Local Discretionary Rev*						6.0	6.
Subtotal	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**203.00**	**203.00**

TABLE TR-7

CFP PROJECTS AND FINANCING PLAN

(All Amounts Are Times $1,000)

TRANSPORTATION

(1) COST/REVENUES	(2) 1995	(3) 1996	(4) 1997	(5) 1998	(6) 1999	(7) 2000	(8) TOTAL
SUMMARY: COSTS/REVENUE							
Costs	3,334.7	2,553.2	5,090.5	11,218.0	8,863.0	7,595.0	38,654.3
Existing Revenues:							
Local Discretionary Revenues*	2,247.8	1,497.8	3,806.8	4,779.0	2,839.0	3,468.0	18,638.4
Impact Fees	90.9	0.0	0.0	26.0	711.0	1,031.0	1,858.9
ISTEA- STP/Other Federal	560.1	463.2	342.5	3,544.0	871.0	709.0	6,489.8
Local Assessment	367.8	524.8	63.4	0.0	0.0	0.0	956.0
Trust Fund	0.0	0.0	0.0	0.0	0.0	98.0	98.0
SEPA	0.0	0.0	0.0	120.0	0.0	0.0	120.0
State (RAP, TIA, UATA) (WSDOT)	68.1	67.4	877.8	2,749.0	4,442.0	2,289.0	10,493.3
Subtotal	3,334.7	2,553.2	5,090.5	11,218.0	8,863.0	7,595.0	38,654.4
Total Revenues	**3,334.7**	**2,553.2**	**5,090.5**	**11,218.0**	**8,863.0**	**7,595.0**	**38,654.4**
Balance	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**

- Local Discretionary Revenues: County road tax and motor vehicle fuel tax. These forecast a portion of the revenue transferred to the County road construction fund.

WATER SUPPLY, TREATMENT, AND DISTRIBUTION

BACKGROUND

The purpose of this section of the Capital Facilities Plan (CFP) is to demonstrate that adequate facilities are available for water service within Kitsap County as population increases. The CFP identifies existing inventories and needs, forecasts future water supply facility needs, and includes a financial plan to indicate revenue sources to be used to fund the increase in services.

The following section includes water facilities owned by public and private entities in Kitsap County. This section of the CFP includes all Group "A" Community Water Systems within the County, as identified by the State Department of Health, which include 15 or more connections, as identified by the State Department of Health (DOH). The inventories, projected demand, and corresponding capacity and facilities needs, as shown in this section of the CFP, meet the requirements of the Growth Management Act RCW 36.70A.070(3)(a) and (b).

General purpose governments, such as the County, and the Cities are responsible for capital facility planning to ensure that plans are consistent with the Land Use Element of the Comprehensive Plan and that services can be provided. Capital plans for water service within urban growth areas must be carefully coordinated. The County has developed population allocations for areas of the county as part of its land use analysis. These allocations provide an estimated minimum number of people to plan for to meet future demand for growth and have been made for individual water systems.

Kitsap County Water Systems

Water systems are now classified into two categories, Group A (former Classes 1-3) and Group B (former Class 4) systems. Currently, more than 95 percent of the total County population is served by Group A water systems with the remaining 5 percent served by Group B systems having two to nine connections. Most of the Group B systems were developed with a shallow well to serve short plat or small subdivision and serve only that development. Kitsap County has experienced a proliferation of Group B water systems in recent years. There were 450 public water systems in the County in 1978, which increased to 1145 systems by March of 1992. The Kitsap County Group B systems account for approximately 7 percent of all public water systems in the State of Washington.

As shown in Table WF-1 below, the State Department of Health has identified total of 127 Group "A" systems that serve more than 95% of the County's population. Each of these water systems is inventoried in Table WF-2 of the section of the CFP. The County's Comprehensive Plan "Part III Figure Book" graphically shows the location of existing and proposed 1995-2000 water system capital facilities.

Table WF-1: Kitsap County Group "A" Water Systems

Group A	Class 1	100 connections or more	30
	Class 2	10-99 connections	97
		Total	127

Each of the Group "A" water systems is required by the State to develop a Water System Comprehensive Plan which must be updated at least every five years. Significant infrastructure changes must be incorporated in the water system plan and approved by the State before they can be constructed.

Kitsap County Water Planning Programs

Kitsap Public Utility District (KPUD) has been designated by the Kitsap County Board of Commissioners as having countywide responsibility for technical, managerial, financial, operational and support services needed to provide satisfactory water resource development, protection and utility service. The KPUD also functions as a Satellite System Management Operator throughout the county by provision of direct service, contract service, and support service.

The KPUD currently operates fourteen (14) separate water systems and has operated and maintained detached satellite systems for approximately twenty years. The KPUD has worked cooperatively with the County and local water purveyors to initiate the Ground Water Management Plan (GWMP) process. The District and County have also jointly sponsored the preparation of a Coordinated Water System Plan (CWSP) for Kitsap County. Both agencies joined Washington State Department of Ecology (WSDOE) and the U.S. Geological Survey (USGS) in an earlier groundwater study on Bainbridge Island.

Kitsap County Ground Water Management Plan. To meet the requirements of the Ground Water Management Act the KPUD is currently involved with the development of the "Draft Kitsap County Ground Water Management Plan" (GWMP). All of Kitsap County has been identified as a groundwater management area. KPUD is coordinating its activities with water districts in the county as well as other members of the Kitsap County Groundwater Advisory Committee. The plan has been funded through grant money from the Department of Ecology and was prepared under a program initiated by the Washington State Legislature in 1985. It directed Ecology to establish a process of designating groundwater areas for development of groundwater management programs.

Preparation of the GWMP has been done in accordance with the requirements of Chapter 173-100 WAC, Ground Water Management Areas and Programs. These regulations led to the designation of Kitsap County as a Ground Water Management Area (GWMA) on October 7, 1986. An Interlocal Agreement was entered into between the KPUD and the Kitsap County Board of Commissioners on December 15, 1986. This Agreement established both entities as co-lead agencies for the evaluation and preparation of the GWMP.

A Ground Water Advisory Committee (GWAC) was formed in accordance with WAC 173-100-050, to guide development of the GWMP. The GWAC is composed of a variety of public and private interest groups, potable and non-potable water users. In view of limited grant funding, preparation of the GWMP was segregated into two grants. Activities of the first grant have focused on collecting and evaluating background data regarding the quantitative and qualitative aspects of the groundwater resource, along with identifying resource management and strategy issues which need to be addressed in the second grant. Ultimately, the process to develop the plan will result in the coordination of land use and waste disposal policies and the adoption of ordinances by local governments.

Kitsap County Coordinated Water System Plan. The Coordinated Water System Plan (CWSP) presents an assessment of municipal and industrial water supply needs in Kitsap County and a program to effectively provide supply and service to customers throughout the area. The CWSP is being developed to comply with Chapter 70.116 RCW and Chapter 246-293 WAC developed by the Water Utility Coordinating Committee (WUCC). The CWSP provides a process and strategy for the existing water utilities to define their role in a program consistent with adopted land use polices and projected growth strategy. The regional water supply, transmission, and storage plan represents the collective views of the WUCC and integrates the findings of the Kitsap County Ground Water Management Plan.

Water Conservation As Per Groundwater Plan Volume III

Water conservation in the County should be enhanced as follows:

- County government should support Group-A water utilities as they pursue ongoing conservation programs. These programs should include both supply and demand management measures within individual service areas.

- Members of the Water Purveyors of Kitsap County (WATERPAK) should provide basic conservation kits and literature for water users. They should also evaluate the advisability of county-wide program to retrofit existing homes with low flow toilets low-flow shower heads, restricted flow aerators, and other appropriate devices on a cost effective basis.

- Water utilities should initiate and/or continue leak detection programs that identify problem water losses in distribution systems. The Kitsap County WATERPAK should evaluate a regional approach to leakage analysis efforts.

- The WATERPAK should develop and maintain a comprehensive, model water conservation program for small utilities. The conservation program should include conservation objectives, demand forecasting methods, program activities and level of effort, budget estimates, savings estimates, and evaluation and monitoring criteria. Program activities should include education, system monitoring and improvements, promotion of conservation devices, incentives for customers, water production monitoring, drought response conservation, and other appropriate supply and demand management measures.

- WATERPAK should conduct joint conservation efforts with Pierce and Mason counties.

INVENTORY OF WATER SYSTEMS FACILITIES

This section of the CFP inventories each of 127 Group "A" Water Systems serving the County, the totals of which are shown above in Table WF-1. Table WF-2 below identifies the name of each water system, the portion of the 1994 County population it serves, and the current and DOH approved connections. In addition, the general characteristics of several major water systems shown in Table WF-2 are summarized below. The summary includes a brief description of existing key service areas and conditions of 18 water systems of the 127 water systems shown in Tables WF-1 and Table WF-2, which serve 81% of the County's population. There are a total of 1,065 private water purveyors in the County. In addition, there are numerous private property owners who hold, as of yet, unused water rights.

Kitsap Public Utility District Water System Facilities

The general characteristics of 8 major water systems managed by the KPUD are summarized below. More detailed information on each system is included in Tables WF-1 and WF-2..

Vinland (PUD). The Vinland system was formed in October 1994 through the intertie of the Edgewater Estates and Bella Vista systems. The system is located north of the Bangor Submarine Base in Sections 4 and 5 of Township 26N, Range 1E and Section 27, Township 27N Range 1E. The topography within the area rises from Sea level near Hood Canal to elevations of 260 feet along Pioneer Way and 280 feet at Edgewater Estates to the North.

Eldorado Hills (PUD). Eldorado Hills is located in Section 31 and 32, Township 25N, Range 1E. It serves an area that ranges from approximately 100 feet to 500 feet in elevation. In 1984, Eldorado homeowners who were dissatisfied with their water service, requested that the District condemn and take over the water system. After a lengthy legal process, the water system was acquired by the District in the summer of 1986. Eldorado Hills serves only residential customers.

North Peninsula (PUD). The North Peninsula water system was created in 1995 through the consolidation of the Kingston, Hansville, and Gamblewood, Jefferson Point, Jefferson Beach Estates, and Newelhurst water systems. The system serves residential and commercial customers. Currently, the system has water rights to serve 8,000 new residents.

Indianola Water System (PUD). The Indianola Water System is located north of Port Madison and east of Miller Bay. It is within the Port Madison Indian Reservation. The water system is situated in Sections 10, 11, 14, 15, and 16, Township 26N, Range 2E. Changes in elevation throughout this system are dramatic ranging from sea level to near 360 feet. Moving from east to west along the service area, there are many steep ravines with seasonal surface water flow. A private individual owned the system until 1968 when it was acquired by a water district. The water district then petitioned KPUD to operate the system, which it has done since 1970.

Keyport Water System (PUD). A majority of the Keyport Water System is located in Section 35 and 36, Township 26N, Range 1E, along the south end of Liberty Bay. The remainder of the

system is situated in Sections 1 and 2, Township 25N, Range 1E. The topography within this system also varies substantially, rising from sea level to approximately 260 feet. The water system supplies a complete mix of residential, multi-family, and commercial uses within Keyport.

Miller Bay Estates Water System (PUD). The Miller Bay water system is located to the north and northwest of Indianola within the Port Madison Indian Reservation. The system is located in Sections 9 and 10, Township 26N, Range 2E. It extends from sea level to approximately 260 feet. The water system was installed and owned by a private developer for the use of residential customers in the Miller Bay plat. KPUD acquired the system in January 1981. It still serves only residential customers with the exception of one commercial unit.

Suquamish Water System (PUD). The Suquamish Water System is located along Puget Sound, north of Agate Passage bridge in Sections 8, 9, 16, 17, 20, 21, 28 and 29, Township 26N, Range 2E; about 75 percent of the system is within the Port Madison Indian Reservation. Topography within this service area ranges dramatically from north to south. Elevations generally extend from sea level on the eastern edge to a ridge of 360 feet in the middle before falling off on the western edge. The Suquamish water system was originally owned by the Suquamish Improvement Club before KPUD assumed operational and maintenance responsibilities in June 1982. Currently the system serves a diverse mix of residential and commercial customers.

Long Lake View Estates Water System (PUD). The Long Lake View Estates Water System is located east of Long Lake in Section 17 of Township 23N Range 02E. The topography within the area rises from 200 feet near the lake to approximately 360 ft to the east. The system was purchased by the KPUD in 1996. It presently serves approximately 336 customers.

Municipal Water Systems

City of Bremerton. The Current service area includes approximately 5,300 acres within the Bremerton City limits and approximately 6,800 acres within Kitsap County. This description does not include other areas with service area agreements, such as: Puget Sound Naval Shipyard, Jackson Park, East Park, Tracyton and Rocky Point Water Districts or the City of Port Orchard.

The City of Bremerton Water Utility service area is essentially contiguous with the surrounding water purveyors. Erland Point Water District is located at the northwestern boundary of the Bremerton Water Utility service area. All of the remaining west and northern sides of the Bremerton Water Utility service area was recently claimed by the Silverdale Water District. The City of Bremerton Water Utility service area is bounded to the east by the North Perry Avenue Water District, and to the south by the City of Port Orchard and the Sunnyslope Water District. Currently, areas of boundary uncertainty exist between the City of Bremerton Water Utility service area and the Sunnyslope Water District service area. An unclaimed area exists between the Erland Point Water District and the City of Bremerton Water Utility service area. The City currently supplies water to the Port of Bremerton Airport and Olympic View Industrial Park. The City has committed to serve Port Blakely properties to the west of Kitsap Lake from their Anderson Creek wellfield.

City of Port Orchard. The existing service area is that property within the established City limits. The City is primarily a residential community with commercial development located to the north and east. Inside the City are two schools and various apartment units.

State Highway 166 extends along the north of the City and travels eastward from it. Commercial development has typically occurred along the corridor. Since the opening of the Port Orchard Bypass, commercial development has begun to accelerate in the Bethel corridor. Residential development is occurring primarily in the center of the City. The northern half of the City has the greatest population density. The property development becomes more rural toward the south.

The City no longer requires annexation to receive water service. It is the policy of the City to provide utility service outside its corporate limits, if the Council approves the action. The customer will be charged a 50 percent monthly surcharge. The City currently serves Berry lake Mobile Home Park, Home Court, and Sidney Glen Elementary School in unincorporated Kitsap County.

City of Poulsbo. The City of Poulsbo is a community of about 5,280 people located at the north end of Liberty Bay in Kitsap County. The center of the City is on the east shore of the bay about one mile south of the head of the bay. The City extends around the head of the bay and about one-half mile south on the west side. The City limits are about two miles down the east side of the bay. The City incorporated area extends up from the shore into the low hills. It reaches elevations of 300 to 400 feet on the east, and 100 to 200 feet on the north and west.

The City has a policy requiring new customers outside City limits to file petitions for annexation and to provide power of attorney to the Mayor to file petitions of annexation. This redundant system has assured that annexation occurred, and that the water system service area is within the City of Poulsbo.

Other Water Systems

Annapolis Water District. The District serves the unincorporated areas lying east of the City of Port Orchard and was formed in 1946 with the acquisition of the water system serving Orchard Heights Housing Project, built by the Federal Housing Authority. The District is geologically part of the Puget Sound Lowlands. These Lowlands are hilly, glacial drift plain, covered with small ridges and rounded hills formed by glaciation. The ridges and hills rise less than 200 feet above the plain, with lakes and peat bogs filling many of the depressions. Long Lake is located in the southern portion of the District, and is used primarily for recreation and aesthetic enjoyment.

Manchester Water District. The Manchester Water District serves the Southworth, Colby and Manchester areas. The District's southern boundary borders Sedgwick Road and extends to Colvos Passage of Puget Sound. To the west, the boundary follows Woods Road and a portion overlaps into the Annapolis Water District.

The existing water system serving the District is comprised of two service levels. There is a storage reservoir in each of these subsystems. These services levels are delineated by the 180-foot contour running through the District. The low level system (elevation 275) serves approximately 65 percent of the customers. The high level (elevation 430) system has a majority of the Water District supply and storage capacity located in it and is growing at a faster rate than the low level system.

North Perry Avenue Water District. The District extends from Illahee to Keyport Road along Port Orchard Bay and is bounded to the south by the City of Bremerton. Although the two systems are connected, this interconnection is not currently utilized. However, this connection could be activated to aid either district under emergency conditions. Silverdale Water District bounds North Perry Avenue Water District to the west. The long-range plan for the two districts is to enter into an agreement to intertie strictly for emergency use. The recent change to the boundary took into consideration demand and growth factors to the area and therefore, no further changes to the North Perry Avenue service area are anticipated in the near future.

At the end of 1989, the KPUD took over a small section of the north end of the North Perry Avenue Water District. This change had a minimum effect on the North Perry Avenue water system because the rural area had only a minor influence on the overall demand. Any additional changes between the two district's service areas are not foreseen to happen within the study period.

Silverdale Water District-Dawn Park Water Company. The Silverdale Water District Service Area includes a portion of the Clear Creek valley and Dyes Inlet with Bucklin Ridge to the east and the Newberry Hill-Anderson Hill area to the west. The wide variations of elevation require nine separate interconnected pressure zones for adequate service. These zones are numbered 1 through 9. The District serves a variety of land uses through out the existing service area. The District serves the regional shopping mall, the old town business district north of Dyes Inlet and single family and multi-family units interspersed throughout the service area.

The Island Lake aquifer is under investigation to determine if it is being over drafted due to land use developments and new high capacity wells (Spirit Ridge Well No.4). The District asked the firm Robinson & Noble to determine if there was a connection between the lake and the well. The state suspended granting new water rights in the aquifer pending completion of the investigation.

Rocky Point Water District No. 12. The Rocky Point Water District serves an area on the west side of City of Bremerton, that is outside the City limits and generally encompasses the peninsula known as Rocky Point. The southern boundary is Kitsap Way. The majority of the system was constructed in the early 1940s. Several extensions have been made since that time to complete the system as it exists today. District is surrounded by water or the existing City of Bremerton's systems. The system serves approximately 530 customers. Most of these are residential customers, with a few commercial customers adjacent to Kitsap Way in the southern end of the District. There is some vacant land in the District that could provide space for the construction of additional residential units. However, part of the area is not suitable for septic

tanks, which will preclude home construction at this time. Therefore it is not anticipated that much expansion will occur in the near future.

Tracyton Water District. The District is located northeast of the City of Bremerton in the Tracyton community on Dyes Inlet. The Tracyton Water District has a similar situation to the Rocky Point Water District with the City of Bremerton providing the water supply and maintenance to the water Distribution system. The condition of the current system is unknown. The District may prepare a water system facility plan in the near future.

Sunnyslope Water District. The service area includes the community of Sunnyslope primarily south of SR 3, northeast of the Bremerton National Airport and east of McCormick Woods. The service area does cross the highway and is contiguous with the City of Bremerton Watershed. The District primarily serves single family residential units at 1 dwelling unit or greater per acre.

Port Gamble. Pope Resources owns and operates the water system serving the townsite, including 40 residences along with limited commercial activities and the former millsite. The domestic system is supplied by groundwater and stored in a 45,000 gallon above-ground concrete reservoir. The fire flow and common area irrigation system is separate from domestic and is fed by a series of springs, stored in a 300,000 gallon open reservoir and pumped into the fire distribution system.

Additional infrastructure will be constructed as necessary to meet the needs of the UGA and will be financed by private funding sources.

Systems Inventory Summary Table

Table WF-2 shows the inventory of existing conditions the 127 Group "A" Community Water Systems, which currently serve the County. The inventory includes the name of the water system, County population currently served, and existing and approved DOH connections.

Summary of Existing Conditions

All the Group "A" water systems inventoried in Table WF-1 for Kitsap County have sufficient water resources to meet existing average demand. The Annapolis Water District and the City of Poulsbo need to seek additional groundwater sources to meet future demand. The Annapolis District needs to seek additional sources to offset a deficit for current peak demands to meet Washington State Department of Health requirements. The City of Poulsbo have surface spring water sources that will need to be replaced as a result of new EPA water quality standards.

The water inventories indicate that a majority of the systems in Kitsap County have a range of deficiencies when meeting the requirements as outlined in the Kitsap County Uniform Fire Code. These systems generally need to increase the size of piping, need additional looping to increase water pressure for fire flow, or increase frequency of hydrant placement to meet spacing requirements. Some water systems such as Sunnyslope Water District have limited descriptions of existing conditions.

There is currently a backlog of approvals of water rights for water systems in the State of Washington caused principally by the lack of DOE staff to process the volumes of applications. In addition, the State Supreme Court's decision, which challenged the state's authority to regulate among competing water right holders has added delay and confusion to the process. Until further notice, Ecology is processing water right applications that involve health and safety only. The backlog may limit the ability for water systems to get water rights approval for future growth. North Perry Water District is still waiting for approval of water rights application that were submitted in 1989. Silverdale Water District has water rights applications pending since 1988.

The Department of Ecology states that the availability of future water sources to meet growth demands in the County is not resolved. Kitsap County PUD No. 1 has completed Phase 1 of the basin assessment process. Where adequate information exists, the Department of Ecology will begin processing applications in those subareas. However, the data for many subareas is still outstanding; the final decisions regarding water availability to address growth are still in question.

TABLE WF-1
CURRENT INVENTORY OF GROUP "A" COMMUNITY WATER SYSTEMS
KITSAP COUNTY

System Name	Population (1994)	Current Connections	Approved Connections
Agate West	262	47	47
Alpinewood	228	91	99
Annapolis	17,436	4,452	6,669
Apex	424	97	150
Avellana (KPUD)	98	39	39
City of Bainbridge Island	7,494	1,196	*1,196
Bear Cub	146	55	55
Bethel East	146	52	55
Bill Point	207	78	84
BKS	166	60	66
City of Bremerton	45,292	19,251	*19,251
Brianwood	48	19	20
Bridletree	133	53	53
Bucklin Hill	91	29	47
Burley Water	68	27	0
Camp David	55	22	40
Cedarbrook	85	34	38
Cedar Glen MHP	273	135	135
Clear Creek Estates	74	33	36
Country Meadows	78	31	31
Crystal Creek	103	41	41
Crystal Springs	45	18	22
Desert Park	91	18	0
Driftwood Cove (KPUD)	108	43	120
Eight Wedgwick	48	19	16
Eldorado Hills (KPUD)	360	144	145
Emerald Heights	190	75	79
Erland Point	1,854	567	1,002
Ferncliff	48	16	17
Fjordland	48	16	16
Fragaria Landing	319	38	45
Forest Creek	80	32	33
Foss Road	83	33	41
Frog Pond	1,212	475	479
Gala Pines (KPUD)	128	51	80
Gatewood Mobile Manor	58	23	23
Glenwood East	70	32	34
Glenwood West	73	32	34

TABLE WF-1
CURRENT INVENTORY OF GROUP "A" COMMUNITY WATER SYSTEMS
KITSAP COUNTY

System Name	Population (1994)	Current Connections	Approved Connections
Graham Place	35	14	22
Green Mountain Acre	73	29	29
Harbor Water	9,491	Varies	*Varies
Hidden Acres	53	21	26
Hintzville Acre	15	58	60
Hood Canal High	50	20	23
Holly	176	69	99
Homestead Acre	83	33	44
Hoot Ridge	45	18	18
Horizon West	2,210	801	880
Hunt	50	20	24
Indian Hills (KPUD)	108	43	45
Indianola (KPUD)	1373	549	721
Inwood	78	31	36
Island Lake	823	220	278
Island Utilities	88	32	32
Johanson	165	37	37
Keyport (KPUD)	785	314	1,141
Kingston Farms	90	36	45
Kitsap PUD	45,925	Varies	Varies
Klahanie (KPUD)	80	32	40
Lake Emelia	43	17	17
Lincoln Hill	38	15	19
Little Tree	135	54	54
Lofall	53	21	30
Long Lake View Estates (KPUD)	840	336	351
Lookout Point	43	17	28
Mainland View	103	41	57
Manchester	8,436	2,225	4,370
Manzanita	40	16	0
Mayvolt	100	40	41
McCormick Woods	912	379	750
Meadowmeer	592	233	298
Miller Bay (KPUD)	928	371	456
Minter Creek	115	46	55
Navy Yard (KPUD)	210	84	90
Nesika Bay	93	37	38
North Bainbridge	3,947	1,322	1,655

TABLE WF-1
CURRENT INVENTORY OF GROUP "A" COMMUNITY WATER SYSTEMS
KITSAP COUNTY

System Name	Population (1994)	Current Connections	Approved Connections
North Peninsula (KPUD)	206	2,809	4,230
North Perry	16,985	6,308	7,520
Olalla	63	25	25
Old Bangor	176	37	41
Olympic Terrace	72	19	0
Olympic View	47	18	20
Parkview Terrace	1,580	632	672
Pebble Ridge	69	35	42
Phelps Road	61	20	26
Pine Lake	175	70	46
Pine Road	45	18	20
Pioneer Hill	68	27	34
Port Gamble	100	40	45
Port Madison	314	88	99
Port Orchard	4,700	1,579	*1,579
Poulsbo	7,059	1,958	*3,222
Poulsbo Heights	73	29	32
Priddy Vista	178	71	85
Prospect Point	93	37	47
Puddingstone	52	24	32
Regency Park	77	28	30
Rhododendron Heights	80	32	0
Rockaway Beach	207	65	0
Rocky Point	1,873	530	0
Royalwood	91	32	32
Sandy Hook	210	84	90
Sea View	83	33	57
Seabeck (KPUD)	155	62	150
Seavue	60	24	0
Sherman Hill	40	16	24
Silverdale	18,879	4,218	7,518
Sivo Acre	58	23	24
South Bainbridge	2,514	941	1,027
South Keyport	88	35	41
Spruce Road	68	27	31
Stavis Creek (KPUD)	53	21	21
Strawberry Hills (KPUD)	233	93	93
Sunnycove	90	36	0
Sunnyslope	1,016	369	486

TABLE WF-1
CURRENT INVENTORY OF GROUP "A" COMMUNITY WATER SYSTEMS
KITSAP COUNTY

System Name	Population (1994)	Current Connections	Approved Connections
Sunrise Beach	55	22	40
Suquamish (KPUD)	3050	1220	2,749
Surfcrest	127	46	54
Tahuyeh Lake	482	186	259
Tracyton	1,597	691	752
Viewside	115	46	64
Vinland (KPUD)	1980	792	1,602
Wauna Easley	50	20	31
Wicks Lake	490	196	230
Wilderwood	102	29	49
Wilderwood HOA	68	27	42
Wye Lake	400	40	46
Total	**213,200**		

* = No limit on connection for large municipal water systems; established by State Department of Health.

LEVELS OF SERVICE

The State Department of Health (DOH) reviews water systems using a LOS of 800 gallons per connection per day (GPCD). DOH uses this LOS to determine the number of approved connections for each system. Therefor, the LOS used for Kitsap County Capital Facilities Plan will be the state standard of 800 GPCD. LOS will be expressed in terms of Residential Equivalency (RE) and will assume 2.50 people per household (Based on data from the 1995 Puget Sound Regional Council's Population and Employment Forecast).

Water Systems Population and Demand Forecasts

Table WF-2 show population forecasts for Group "A" water systems with 100 connections or more, as well as smaller systems with 15-99 connections, which will primarily serve UGAs. The water system allocation figures are based on the forecast adopted by the Kitsap Regional Planning Council May 4, 1994. The forecast will provide water purveyors a minimum number to plan for during the 20-year planning period.

When allocating forecasted population, the County used the incorporated district boundaries for public systems and existing service areas for private systems. A figure of 2.50 persons per household was used as a county wide average to determine residential water service connections. Residential water connections were used as the measurement of existing and projected water system capacity requirements.

Most of the water systems in the county have done a good job of keeping up with growth and making provisions for the future. The adequacy of each system considered in this plan is judged primarily on the number of connections now, the number of connections authorized for the system by the State Health Department and the number of connections that will be needed based on 6, and 20 year population allocations.

Of the 127 Group "A" water systems inventoried, none had significant projected deficiencies for the 6 year CIP planning period (1995-2000). Rocky Point, Tracyton, and the City of Port Orchard have facility plans under review by the State Department of Health in 1996, and did not have information for the number of approved connection available at this time. Poulsbo, Annapolis, North Perry, and Silverdale are expected to experience relatively rapid population growth, and may experience potential shortfalls based on demand projection for the year 2012.

TABLE WF-2

ANALYSIS OF KITSAP COUNTY POPULATION AND WATER DEMAND REQUIREMENTS

(YEARS 2000 AND 2012)

System Name	2000 Population	Required Connections (ERUs)	State DOH Approved Connections	Surplus/ Deficit	2012 Population	Required Connections (ERUs)	State DOH Approved Connections	Surplus/ Deficit	Agreement Date (WSP)**
Agate West	276	50	47	-3	118	47	47	0	11/28/94
Alpinewood	228	91	99	8	248	99	99	0	
Annapolis	20,864	8,346	6,669	-1,677	22,345	8,938	6,669	-2,269	11/8/95
Apex	460	184	150	-34	482	193	150	-43	4/30/96
Avellana (KPUD)	98	39	39	0	98	39	39	0	Under Review
City of Bainbridge Island*	9,620	3,848	3,848	0	9,720	3,888	3,888	0	2/8/96
Bear Cub	149	60	55	-5	155	62	55	-7	11/9/88
Bethel East	146	58	55	-3	146	58	55	-3	
Bill Point	213	85	84	-1	213	85	84	-1	12/5/88
BKS	165	66	66	0	165	66	66	0	
City of Bremerton*	51,228	20,491	20,491	0	69,304	27,722	27,722	0	3/28/96
Brianwood (KPUD)	48	19	20	1	50	20	20	0	Under Review
Bridletree	133	53	53	0	133	53	53	0	Under Review
Bucklin Hill	91	36	47	11	91	36	47	11	2/15/95
Burley Water	68	27	0	-27	68	27	0	-27	Due
Camp David (KPUD)	55	22	40	18	55	22	40	18	Under Review
Cedarbrook	85	34	38	4	85	34	38	4	
Cedar Glen MHP	273	109	135	26	273	135	135	0	11/15/94
Clear Creek Estates	78	31	36	5	85	34	36	2	4/5/95
Country Meadows	78	31	31	0	78	31	31	0	Due
Crystal Creek	103	41	41	0	103	41	41	0	
Crystal Springs	45	18	22	4	45	18	22	4	
Desert Park	101	40	0	-40	118	47	0	-47	Due
Driftwood Cove (KPUD)	225	90	120	30	290	116	120	4	Under Review
Eight Wedgwick	48	19	16	-3	48	19	16	-3	Due
Eldorado Hills (KPUD)	375	150	145	-5	390	156	145	-11	Under Review
Emerald Heights	190	76	79	3	190	76	79	3	Due
Erland Point	952	381	1,002	621	952	381	1,002	621	11/30/88
Ferncliff	50	20	17	-3	50	20	17	-3	Due
Subtotal	85,841	34,276	33,180	-1,096	105,414	42,191	40,451	-1,740	

TABLE WF-2
ANALYSIS OF KITSAP COUNTY POPULATION AND WATER DEMAND REQUIREMENTS
(YEARS 2000 AND 2012)

System Name	2000 Population	Required Connections	State DOH Approved Connections	Surplus/ Deficit	2012 Population	Required Connections	State DOH Approved Connections	Surplus/ Deficit	Agreement Date (WSP)**
Fjordland	40	16	16	0	40	16	16	0	Due
Fragaria Landing	113	45	45	0	113	45	45	0	
Forest Creek	80	32	33	1	83	33	33	0	Due
Foss Road	83	33	41	8	103	41	41	0	2/15/95
Frog Pond	1,269	508	479	-29	1,296	518	479	-39	11/21/88
Gala Pines (KPUD)	140	56	80	24	200	80	80	0	3/9/93
Glenwood East	70	28	34	6	70	28	34	6	Under Review
Glenwood West	73	29	19	-10	73	29	19	-10	Under Review
Graham Place	35	14	22	8	35	14	22	8	Due
Green Mountain Acre	73	29	29	0	73	29	29	0	Due
Harbor Crest (KPUD)		18				18			
Harbor Water*	10,950	4,380	4,056	-324	12,100	4,840	4,840	0	
Hidden Acres	53	21	26	5	53	21	26	5	Under Review
Hintzville Acre	145	58	60	2	145	58	60	2	
Hood Canal High	50	20	23	3	50	20	23	3	Due
Holly	191	76	99	23	206	82	99	17	11/23/88
Homestead Acre	83	33	44	11	83	33	44	11	
Hoot Ridge	45	18	18	0	45	18	18	0	Due
Horizon West	2,125	850	880	30	2,188	875	880	5	
Hunt	50	20	24	4	50	20	24	4	Due
Indian Hills (KPUD)	108	43	45	2	108	43	45	2	Under Review
Indianola (KPUD)	1785	714	721	7	2280	912	721	-191	3/9/93
Inwood	72	29	36	7	72	29	36	7	Due
Island Lake	880	352	278	-74	921	368	278	-90	Under Review
Island Utilities	88	35	32	-3	88	35	32	-3	
Johanson	197	79	37	-42	216	86	37	-49	Under Review
Keyport (KPUD)	913	365	1141	776	1075	430	1141	711	3/9/93
Kingston Farms (KPUD)	88	35	45	10	113	45	45	0	3/9/93
Kitsap PUD	56,244	7,736	11,915	4,179	64,575	8,882	11,915	3,033	
Klahanie (KPUD)	80	32	40	8	100	40	40	0	3/9/93
Subtotal	73,115	14,485	18,291	3,806	82,783	33,113	19,075	2,910	

TABLE WF-2
ANALYSIS OF KITSAP COUNTY POPULATION AND WATER DEMAND REQUIREMENTS
(YEARS 2000 AND 2012)

System Name	2000 Population	Required Connections	State DOH Approved Connections	Surplus/ Deficit	2012 Population	Required Connections	State DOH Approved Connections	Surplus/ Deficit	Agreement Date (WSP)**
Lake Emelia	43	17	17	0	43	17	17	0	Due
Lincoln Hill	38	15	19	4	38	15	19	4	Due
Little Tree	135	54	54	0	135	54	54	0	Under Review
Lofall	53	21	30	9	53	21	30	9	Due
Long Lake View Est (KPUD)	180	72	351	279	215	86	351	265	Under Review
Lookout Point	43	17	28	11	43	17	28	11	
Mainland View	123	49	57	8	123	49	57	8	
Manchester	9,300	3,720	4,370	650	10,700	4,280	4,370	90	3/19/96
Manzanita	40	16	0	-16	40	16	0	-16	Due
Mayvolt	100	40	41	1	100	40	41	1	Under Review
McCormick Woods	1,575	630	750	120	1,890	756	750	-6	3/15/93
Meadowmeer	621	248	298	50	621	248	298	50	
Miller Bay (KPUD)	1825	430	456	26	1140	456	456	-43	3/9/93
Minter Creek	115	46	55	9	115	46	55	9	
Navy Yard (KPUD)	225	90	90	0	225	90	90	0	3/9/93
Nesika Bay	93	37	38	1	93	37	38	1	Under Review
North Bainbridge	4,320	1,728	1,655	-73	4,320	1,728	1,655	-73	11/20/95
North Peninsula (KPUD)	8763	3505	4230	725	12,250	4900	4230	-670	3/9/93
North Perry	20,200	8,080	7,520	-560	23,570	9,428	7,520	-1,908	Under Review
Olalla	63	25	25	0	63	25	25	0	Under Review
Old Bangor	185	74	41	-33	191	76	41	-35	Due
Olympic Terrace	72	29	0	-29	72	29	0	-29	Due
Olympic View	47	19	20	1	47	19	20	1	Due
Parkview Terrace	1,706	632	672	40	1,706	682	672	-10	
Pebble Ridge	102	41	42	1	104	42	42	0	Due
Phelps Road	64	26	26	0	64	26	26	0	2/15/95
Pine Lake	175	70	46	-24	175	70	46	-24	Under Review
Pine Road	45	18	20	2	45	18	20	2	
Subtotal	39,472	15,738	16,184	446	44,600	17,840	16,184	-1,656	

TABLE WF-2
ANALYSIS OF KITSAP COUNTY POPULATION AND WATER DEMAND REQUIREMENTS
(YEARS 2000 AND 2012)

System Name	2000 Population	Required Connections	State DOH Approved Connections	2000 Surplus/ Deficit	2012 Population	Required Connections	State DOH Approved Connections	2012 Surplus/ Deficit	Agreement Date (WSP)**
Pioneer Hill	68	27	34	7	68	27	34	7	
Port Gamble	113	45	45	0	113	45	45	0	
Port Madison	314	126	99	-27	314	126	99	-27	
City of Port Orchard*	7,573	3,029	3,029	0	8,086	3,234	3,234	0	6/23/97
City of Poulsbo*	8,477	3,391	3,391	0	14,208	5,683	5,683	0	2/2/98
Poulsbo Heights (KPUD)	73	29	32	3	73	29	32	3	Under Review
Priddy Vista	178	71	85	14	178	71	85	14	Due
Prospect Point	93	37	47	10	93	37	47	10	Due
Puddingstone	56	22	32	10	57	23	32	9	Under Review
Regency Park	79	32	30	-2	82	33	30	-3	5/15/93
Rhododendron Heights	80	32	0	-32	80	32	0	-32	Due
Rockaway Beach	207	83	0	-83	207	83	0	-83	
Rocky Point	1,913	765	0	-765	1,945	778	0	-778	
Royalwood	92	37	32	-5	92	37	32	-5	5/15/93
Sandy Hook	210	84	90	6	210	84	90	6	
Sea View	83	33	57	24	83	33	57	24	Under Review
Seabeck (KPUD)	1028	411	672	-261	1933	773	150	-623	3/9/93
Seavue	60	24	0	-24	60	24	0	-24	Due
Sherman Hill	40	16	24	8	40	16	24	8	Due
Silverdale	22,092	8,837	7,900	-937	25,032	10,013	7,900	-2,113	12/8/89
Sivo Acre	58	23	24	1	58	23	24	1	Under Review
South Bainbridge	2,727	1,091	1,027	-64	2,727	1,091	1,027	-64	6/25/96
South Keyport	88	35	41	6	88	35	41	6	Due
Spruce Road	68	27	31	4	68	27	31	4	
Stavis Creek (KPUD)	53	21	21	0	53	21	21	0	Under Review
Strawberry Hills (KPUD)	233	93	93	0	233	93	93	0	Under Review
Sunnycove	90	36	0	-36	90	36	0	-36	Under Review
Sunnyslope	1,095	438	486	48	1,130	452	486	34	
Sunrise Beach	55	22	40	18	55	22	40	18	6/15/94
Subtotal	46,263	18,505	16,690	-1,815	55,518	22,207	19,187	-3,020	

TABLE WF-2
ANALYSIS OF KITSAP COUNTY POPULATION AND WATER DEMAND REQUIREMENTS
(YEARS 2000 AND 2012)

System Name	2000 Population	Required Connections	State DOH Approved Connections	Surplus/ Deficit	2012 Population	Required Connections	State DOH Approved Connections	Surplus/ Deficit	Agreement Date (WSP)**
Suquamish (KPUD)									3/9/93
Surfcrest	131	52	54	2	132	53	54	1	Due
Tahuyeh Lake	570	228	259	31	630	252	259	7	11/30/88
Tracyton	1,995	798	752	-46	2,020	808	752	-56	
Viewside	115	46	64	18	115	46	64	18	Due
Vinland (KPUD)									3/9/93
Wauna Easley	50	20	31	11	50	20	31	11	Due
Wicks Lake	550	196	230	34	660	196	230	34	
Wilderwood	116	46	49	3	130	52	49	-3	Under Review
Wilderwood HOA	73	29	42	13	73	29	42	13	Due
Wye Lake	100	40	46	6	100	40	46	6	Due
Subtotal	3,700	1,456	1,527	71	3,910	1,496	1,527	31	
TOTAL	248,390	84,460	85,872	1,412	292,224	116,847	96,424	-3,476	

Cities	76,898	101,318
Unincorporated	171,492	190,906
Total	248,390	292,224

* State Department of Health approves large municipal water systems for an unspecified number of connections. Number of required connections is an estimate only.

** State Department of Health requires a current water system plan at such time a water system is expanding. Most smaller Group "A" water systems are not aware that they should be preparing a water system plan, in accordance with WAC 246-290-100.

CAPITAL FACILITIES PROJECTS AND FINANCING

Tables WF3 through WF-20 show the capital facilities financing plans for the 18 water systems highlighted earlier in this section of the CFP. The tables list each water system's proposed capital projects, schedule of development during 1995-2000, costs by year, and sources of revenue required to pay for project costs. The cities and special purpose districts generally use the same sources of revenue to fund water system operations and maintenance. Water user fees are the primary sources of revenue for the cities and special districts system operations. They are used for capital projects through debt service and can be used for capital outlays. The cities and the districts have the authority and the ability to execute Utility Local Improvement Districts (ULIDs) (Local Utility Districts (LUDs) for KPUD) and pursue bonding of projects.

Other sources of funding are water service connection fees, property assessments, revenue bonds, developer improvements, mitigation or impact fees and Washington State and Federal grants and loans. Privately owned systems such as Port Gamble utilize private funding sources to finance capital facilities projects.

The City of Bremerton is the only water system in Kitsap County that has additional sources of revenue to fund water system improvements. The City generates revenue from timber harvesting in the watershed, which is contributed to a capital fund and a retained earnings account that is rolled over annually. At the end of 1991, there was a total water fund equity value of $27.6 million.

Table WF-3. City of Bremerton Water CIP Summary (costs in $1,000s)

Project name	1995	1996	1997	1998	1999	2000	Total project cost
Capacity Projects:							
Silverdale Mobile Estates Well #21		79					79
Domsea well development			90				90
Fairview storage reservoir		62.5	103	930			1,095.5
West 540 Zone Development		40	140	1310			1,490
West 650 Zone Development		818	660				1,478
36" Gorst transmission main	30						30
18" transmission main Kent St.			40	340			380
36" main extension					214	1928	2,142
Non-Capacity Projects:							
Reservoir seismic improvement		150	100	100	100	100	550
Alexander Lake dam repair		20	45	425			490
Pump Station #14 replacement		66	588				654
Port Washington Narrows pump sta					65	585	650
Corrosion control treatment facility		150	500				650
Warren Ave. bridge main		20	100				120
Water main replacement program	165	165	165	165	165	165	990
Pine Rd. (N) McWilliams to Well 2 distribution main			20	130			150
13th St. (High to Warren) dist main			25	225			250
N.W. 64th St. to Central Valley distribution main			8	72			80
W. Kitsap Lk. to Camp McKean distribution main				25	225		250
Land acquisition (McCormick)		152					152
Land acquis. (Union River/Gorst)		482					482
Deteriorated meters upgrade program	75	75	75	75	75	75	450
Utility system control & monitoring	137	100					237
Fire sprinklers and alarm system		40					40
Dewatered biosolids storage roof		42					42
Total cost	407	2461.5	2659	3797	844	2853	13,021.5
Revenues:							
Water fees	407	2461.5	2659	3797	844	2853	13,021.5
Balance	0	0	0	0	0	0	0

Table WF-4. City of Port Orchard Water CIP Summary (costs in $1,000s)

Project name	1995	1996	1997	1998	1999	2000	Total project cost
Non-Capacity Projects:							
1 MG Sedgwick Reservoir			500				500
Sedgwick 12" Main		200					200
Well #9		150					150
Sidney 12" Main				150			150
Hovde 8" Main					60		60
Sedgwick Loop 12" Main						250	250
Sherman Loop 8" Main						20	20
Melcher Main 8" Main						50	50
Total cost	0	350	500	150	60	320	1,380

Table WF-5. City of Poulsbo Water CIP Summary (costs in $1,000s)

Project name	1995	1996	1997	1998	1999	2000	Total project cost
Non-Capacity Projects:							
8" Line in third Avenue, Moe-Hostmnark (800 Ft.)		36					36
12" Line Viking Way (4,100 Ft.)		185					185
Total cost	0	221	0	0	0	0	221

Table WF-6. Vinland Water (PUD) CIP Summary (costs in $1,000s)

Project name	1995	1996	1997	1998	1999	2000	Total project cost
Capacity Projects:							
VI-01 New Olhava Well				106			106
VI-03 Rhododendron Lane Extension	11						11
Non-Capacity Projects:							
VI-02 Main Replacement Projects		197		189	208		594
Upgrade New Acquisitions		50	50	50	50	50	250
Total cost	11	247	50	345	258	50	961
Revenues:							
Developer/revenue				106	208		106
Capital facility charge/revenue	11	197		189			605
Revenue		50	50	50	50	50	250
Total revenue	11	247	50	345	258	50	961
Balance	0	0	0	0	0	0	0

Table WF-7. Eldorado Hills Water (PUD) CIP Summary (costs in $1,000s)

Project name	1995	1996	1997	1998	1999	2000	Total project cost
Non-Capacity Projects:							
EH-02 Main Replacement Projects				95			95
Total cost	0	0	0	95	0	0	95
Revenues:							
Revenue/municipal financing	0	0	0	0	0	0	0
Balance	0	0	0	0	0	0	0

Table WF-8. North Peninsula Water (PUD) CIP Summary (costs in $1,000s)

Project name	1995	1996	1997	1998	1999	2000	Total project cost
Non-Capacity Projects:							
NP-03 Wolfley Fireflow Reliability Project		281					281
KI-01 New Pump in Kingston Well 7		106					106
KI-02 Kingston Main Replacement Projects		67	71	76			214
HA-01 Point No Point Rd Main Replacement			119			142	261
GA-01 Gamblewood Main Replacement Projects				750	750		1,500
GA-02 Port Gamble Aquifer Study		105					105
Waggoner well upgrade	36						36
George's Corner main extension	309						309
Jefferson Beach water system (LUD #7)	761						761
Kingston Jefferson Beach transmission main	465						465
Hansville transmission main	922						922
Hansville Reservoir	368						368
Buck Lake Road to Cora Street main extension (Hans.)	20						20
South Kingston Reservoir	20						20
Total cost	3,091	559	190	826	750	142	5,558
Revenues:							
Revenue		559	71	76	0	0	706
Capital facility charge/developer	0	0	119	0	0	142	261
Public Works Trust Fund (PWTF)	0	0	0	750	750	0	1,500
Capital facility charge	56						56
Developer/PWTF/municipal financing	677						677
Municipal financing	921						971
PWTF/municipal financing	1,387						1,387
Total revenue	3,091	559	190	826	750	142	5,558
Balance	0	0	0	0	0	0	0

Table WF-9. Indianola Water (PUD) CIP Summary (costs in $1,000s)

Project name	1995	1996	1997	1998	1999	2000	Total project cost
Non-Capacity Projects:							
Main replacement projects			119	126			245
Source augmentation project					500		500
Total cost	0	0	119	126	500	0	745
Revenues:							
Revenue			119	126			245
Public Works Trust Fund					500		500
Total revenues	0	0	119	126	500	0	745
Balance	0	0	0	0	0	0	0

Table WF-10. Keyport Water (PUD) CIP Summary (costs in $1,000s)

Project name	1995	1996	1997	1998	1999	2000	Total project cost
Non-Capacity Projects:							
KE-01 Main Replacement Projects							135
KE-02 Joint Prod. Well N. Perry/PUD					135		
Total cost	0	0	0	0	135	0	135
Revenues:							
Revenue					135		135
Balance	0	0	0	0	135	0	0

Table WF-11. Miller Bay Estates Water (PUD) CIP Summary (costs in $1,000s)

Project name	1995	1996	1997	1998	1999	2000	Total project cost
None Planned	0	0	0	0	0	0	0
Total cost	0	0	0	0	0	0	0

Table WF-12. Suquamish Water (PUD) CIP Summary (costs in $1,000s)

Project name	1995	1996	1997	1998	1999	2000	Total project cost
Non-Capacity Projects:							
SU-02 Main Replacement Projects				189	179		368
SU-03 Loop With Gala Pines						426	426
Agate Crest booster station	31						31
Total cost	31	0	0	189	179	426	825
Revenues:							
Capital facility charge/revenue	0	0		189	0	426	794
Capital facility charge	31	0	0	0	0	0	31
Total revenues	31	0	0	189	179	426	825
Balance	0	0	0	0	0	0	0

Table WF-13. Annapolis Water CIP Summary (costs in $1,000s)

Project name	1995	1996	1997	1998	1999	2000	Total project cost
Capacity Project:							
275 gpm Well		127	135				262
Non-Capacity Projects:							
12" Supply Line on Mile Hill Rd to Saddle Club Rd		117		129			246
12" Supply Line on Bethel to Sedgwick		272					272
12" Supply line on Sedgwick to Long Lake		497					497
8" on Beach Drive				87			87
8" on Watauga Beach Drive				262			262
12" Supply Line to Van Skiver Standpipe					604		604
Total cost	0	1,013	135	478	604	0	2,230

Table WF-14. Rocky Point Water CIP Summary (costs in $1,000s)

Project name	1995	1996	1997	1998	1999	2000	Total project cost
(To come)							
Total cost							

Table WF-15. Tracyton Water CIP Summary (costs in $1,000s)

Project name	1995	1996	1997	1998	1999	2000	Total project cost
Not Available							
Total cost							

The Tracyton Water Department has no paid staff and is managed by three volunteer Commissioners. The Department is in the process of developing a facility plan and had no current or proposed CIP information available at this time. The Department expects to complete a facility plan in the fall of 1996.

Table WF-16. Manchester Water CIP Summary (costs in $1,000s)

Project name	1995	1996	1997	1998	1999	2000	Total Cost
Non-Capacity Projects:							
Sedgwick Rd PRV	26						26
Garfield Rd Pipe		42					42
Arvick Rd Pipe			70				70
Sedgwick Rd Pipe					279		279
Garfield Rd PRV		21					21
Arvick Rd PRV			23				23
Total cost	26	63	93	0	279	0	461

Table WF-17. North Perry Water CIP Summary (costs in $1,000s)

Project name	1995	1996	1997	1998	1999	2000	Total project cost
Capacity Projects:							
1000 gpm Well		150					150
Two 500 gpm wells		300					300
2.2 mg storage			250	2,000			2,250
Non-Capacity Projects:							
Paulson Well Connection - 315 Zone		120					120
8" System Loops - 315 Zone		777					777
Water Main Upgrades			2,000				2,000
Total cost	0	1,347	2,250	2,000	0	0	5,597

Table WF-18. Silverdale Water CIP Summary (costs in $1,000s)

Project name	1995	1996	1997	1998	1999	2000	Total project cost
Capacity Projects:							
Schold Road Well, Drill			100				100
Mountain View Well			210				210
Chena 1 mg Reservoir				210			210
Clear Creek Well					200		200
Old Frontier Well			250				250
Watershed Well						225	225
Anderson Hill Well						225	225
Apex Reservoir						230	230
Non-Capacity Projects:							
Anderson Hill PRV Control		5					5
Schold Road Well, Site Purchase		25	85				110
Schold Road Well, Pump Station			515				515
Telemetry and Control						100	100
North Perry Intertie						100	100
Total cost	0	30	1,160	210	200	880	2,480

Table WF-19. Sunnyslope Water CIP Summary (costs in $1,000s)

Project name	1995	1996	1997	1998	1999	2000	Total project cost
No Projects Planned	0	0	0	0	0	0	0
Total cost	0	0	0	0	0	0	0

Table WF-20. Port Gamble Water CIP Summary (costs in $1,000s)

Project name	1995	1996	1997	1998	1999	2000	Total project cost
No Projects Planned	0	0	0	0	0	0	0
Total cost	0	0	0	0	0	0	0

IV. IMPLEMENTATION PROGRAMS

The following programs shall be implemented by December 31, 1998, or such earlier date as may be adopted by the County, to ensure that the goals and policies established in the Capital Facilities Plan will be achieved or exceeded, and that the capital improvements will be constructed. Each implementation program will be adopted by ordinance, resolution or executive order, as appropriate for each implementation program.

Review of Applications for Development Permits

The County shall amend its land development regulations to provide for a system of review of various applications for development permits which applications, if granted, would impact the levels of service of certain public facilities. Such system of review shall assure that no final development permit shall be issued which results in a reduction in the levels of service below the standards adopted in Policy 1.3.1 for certain public facilities. The land development regulations shall include, at a minimum, the provisions of Policy 3.3 in determining whether a development permit can be issued.

The land development regulations shall also address the circumstances under which public facilities may be provided by applicants for development permits. Applicants for development permits may offer to provide public facilities at the applicant's own expense in order to insure sufficient capacity of certain public facilities. Development permits may be issued subject to the provision of public facilities by the applicant subject to the following requirements:

A. The County and the applicant enter into an enforceable development agreement which shall provide, at a minimum, a schedule for construction of the public facilities and mechanisms for monitoring to insure that the public facilities are completed concurrent with the impacts of the development, or the development will not be allowed to proceed.

B. The public facilities to be provided by the applicant are contained in the schedule of capital improvements of the Comprehensive Plan and will achieve and maintain the adopted standard for levels of service concurrent with the impacts of development.

Impact Fees

Impact fee ordinances shall require the same standard for the level of service as is required by Policy 1.3.1., and may include standards for other types of public facilities not addressed under Policy 1.3.1. All impact fee ordinances necessary to support the financial feasibility of this element shall be adopted, or amended to the required standard for the level of service by July 1, 1998.

Annual Budget

The annual budget shall include in its capital appropriations all projects in the schedule of capital improvements that are planned for expenditure during the subsequent fiscal year.

Update of Capital Facilities Plan

The Capital Facilities Plan shall be reviewed and updated annually. The Plan shall be updated in conjunction with the budget process and the release of the official population estimates and projections by the Office of Financial Management of the State of Washington. The update shall include:

A. Revision of population projections
B. Update of inventory of public facilities
C. Update of costs of public facilities
D. Update of public facilities requirements analysis (actual levels of service compared to adopted standards)
E. Update of revenue forecasts
F. Revise and develop capital improvements projects for the next six fiscal years
G. Update analysis of financial capacity
H. Amendments to the CFP, including amendments to levels of service standards, capital projects, and/or the financing plan sources of revenue.

Concurrency Implementation and Monitoring System

The County shall establish and maintain Concurrency Implementation and Monitoring Systems. The Systems shall consist of the following components:

A. Annual Report on the Capacity and Levels of Service of Public Facilities. The report shall summarize the actual capacity of public facilities compared to the standards for levels of service adopted in Policies 1.3.1 and 1.3.2, and forecast the capacity of public facilities for each of the six succeeding fiscal years. The forecast shall be based on the most recently updated schedule of capital improvements in the Capital Facilities Plan. The annual report shall provide the initial determination of the capacity and levels of service of public facilities for the purpose of issuing development permits during the 12 months following completion of the annual report. Each application, will be analyzed separately for concurrency, as described in B, below.

B. Public Facility Capacity Review of Development Applications. The County shall use the procedures specified in Implementation Program 1, above, to enforce the requirements of Policy 3.3 at the time each application for development in the unincorporated area is reviewed. Reviews of applications for development within the County's boundary will be conducted according to the terms of interlocal agreement(s) between the County and municipalities within the County. Records shall be maintained during each fiscal year to indicate the cumulative impacts of all

development permits approved during the fiscal year-to-date on the capacity of public facilities as set forth in the most recent annual report on capacity and levels of service of public facilities.

The land development regulations of the County shall provide that applications for development permits that are denied because of insufficient capacity of public facilities may be resubmitted after a time period to be specified in the land development regulations. Such time period is in lieu of, and not in addition to, other minimum waiting periods imposed on applications for development permits that are denied for reasons other than lack of capacity of public facilities. Land development regulations shall require that development commence within a specified time after a development permit is issued, or the development permit shall expire, subject to reasonable extensions of time based on criteria included in the regulations.

C. Review of Changes to Planned Capacity of Public Facilities. The County shall review each amendment to this Capital Improvement Element, in particular any changes in standards for levels of service and changes in the schedule of capital improvements, in order to enforce the requirements of Policy 3.1.4.

D. Concurrency Implementation Strategies. The County shall annually review the concurrency implementation strategies that are developed to implement Policy 3.3 of this Capital Facilities Plan. Such strategies may include, but are not limited to, the following:

(1) Standards for levels of service may be phased to reflect the County's financial ability to increase public facility capacity, and resulting levels of service, from year to year. Standards for levels of service may be phased to specific fiscal years in order to provide clear, unambiguous standards for issuance of development permits. Phased standards will appear in Policy 1.3.

(2) Standards for levels of service may be applied according to the timing of the impacts of development on public facilities. Final development permits, which impact public facilities in a matter of months, are issued subject to the availability of public facilities prior to the issuance of the building permit (except roads and transit which must be available within 6 years of the final development permit).

Preliminary development permits may be issued subject to public facility capacity, but the capacity determination expires unless the applicant provides financial assurances to the County and obtains subsequent development permits before the expiration of the initial development permit. As an alternative, the determination of public facility capacity for preliminary development permits can be waived with an agreement that a capacity determination must be made prior to issuance of any final development permit for the subject property. Such a waiver specifically precludes the acquisition of rights to a final development permit as a result of the issuance of the preliminary development permit. (See Policy 3.3.3 a and b)

(3) Public facility capital improvements are prioritized among competing applications for the same amount of facility capacity according to the criteria in Policy 1.5.2.d. If any applications have to be deferred to a future fiscal year because of insufficient capacity of

public facilities during the current fiscal year, the applications to be deferred will be selected on the basis of rational criteria.

E. Capacity of Public Facilities for Development Permits Issued Prior to Adoption of the Plan. The County will "reserve" capacity of public facilities for development permits for proposed development projects already "in the pipeline" that were issued by the County prior to the adoption of this Comprehensive Plan.

The County will recognize legitimate and substantial vested development rights obtained with some previous development permits. The County will identify properties which have vested development rights pursuant to procedures to be adopted in the land development regulations. Properties not identified by the County as having vested development rights may petition for a determination of such rights.

The County will reserve capacity of public facilities to serve the needs of properties with vested development rights. In the event that there is not sufficient capacity to serve the vested properties, the County will create a "lien" on future capacity of public facilities in order to serve the vested property at the adopted level of service standard before allowing non-vested property to use future public facility capacity. In such circumstances, the vested development will be allowed to commence in order to avoid a "taking" of the vested rights.

The County intends to require vested properties to commence development and to continue in good faith in order to maintain the "reservation" of capacity of public facilities which are provided by the County. The County also intends to evaluate the timing and estimated density/intensity of vested properties in order to phase the reservation of capacity to meet the probable needs of such properties. Experience indicates that some vested development permits are not used to the maximum allowable uses, densities or intensities, or reach such development limits over extended periods of time.

The County finds that it is not necessary to automatically "reserve" capacity of public facilities for non-vested development permits issued prior to the adoption of the plan. Such development permits should be subject to the concurrency requirement. The County finds that the population forecasts that are the basis for this plan are a reasonable prediction of the absorption rate for development, and that the capital facilities which are planned to serve the forecast development are available for that absorption rate. Reserving public facility capacity for non-vested previously issued development permits would deny new applicants access to public facilities, and would arbitrarily enhance the value of dormant development permits.

Evaluation Reports

Evaluation reports will address the implementation of the goals and policies of the Capital Facilities Plan. The monitoring procedures necessary to enable the completion of evaluation include:

A. Review of Annual Reports of the Concurrency Implementation and Monitoring System.

B. Review of Annual Updates of this Capital Facilities Plan, including updated supporting documents.

Contractor Performance System

The County has developed a system of monitoring the actual performance of contractors who design and/or construct public facilities for the County. The monitoring system tracks such items as actual vs. planned time schedule, and actual vs. bid cost. The performance of contractors are considered when the County awards contracts for public facilities.