

VIII. SNOHOMISH COUNTY

The Snohomish County portion of the study was divided into three transit corridors in order to facilitate the park-and-ride demand forecasting process. Permanent park-and-ride lots were grouped into logical corridors reflecting major network, geographic, and service features.

The resulting study corridors are:

- Southwest Snohomish
- North Snohomish
- Southeast Snohomish

The Snohomish County study area and its major transportation facilities are presented in Figure 8.1. The three individual corridors are presented along with their corresponding permanent park-and-ride lots in Figures 8.2 through 8.4.

DEMAND ESTIMATES AND FORECASTS

As indicated, the focus of the demand estimation approach was to provide corridor-level demand estimates for the major transit corridors in each county. Lot-specific forecasts developed as part of the described three-part methodology were aggregated to the corridor level; these estimates should not be viewed as site-specific implementation recommendations or forecasts. They are based on optimistic assumptions regarding lot placement, size, and transit service in order to develop a corridor-level “unconstrained” demand estimate. Detailed analyses based on committed transit services, known service area characteristics, competing services, and planned facility locations should be considered as part of site selection and design criteria for actual implementation.

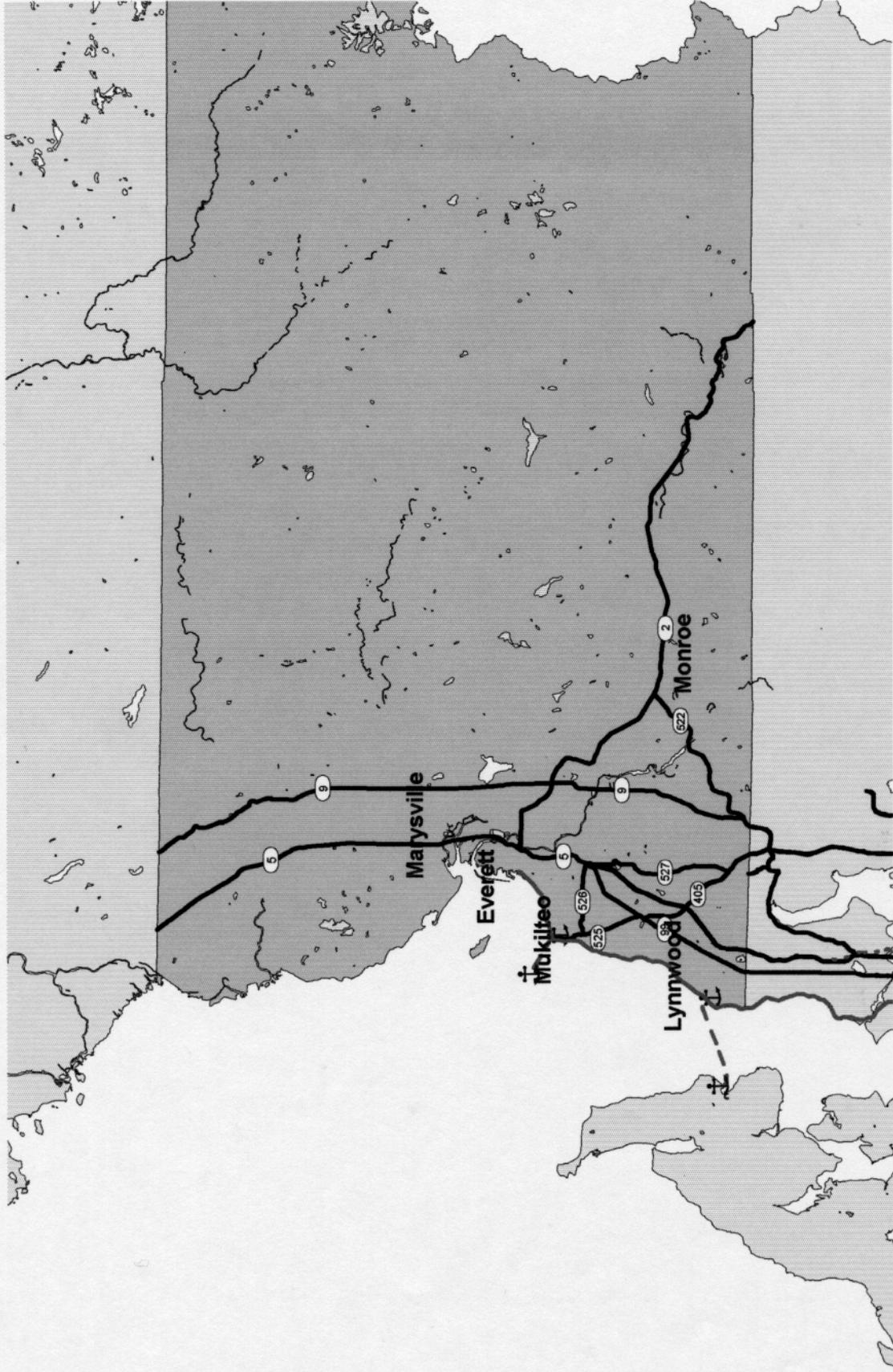
Existing Estimates

Based upon the previously-described methodology, inputs, and assumptions, existing year 2000 estimates were developed for the identified coverage-area lots for each transit corridor. A current need for 2450 additional stalls was identified for the county overall, with approximately 1000 identified for the Southwest corridor, 750 for the North corridor, and 700 for the Southeast corridor.





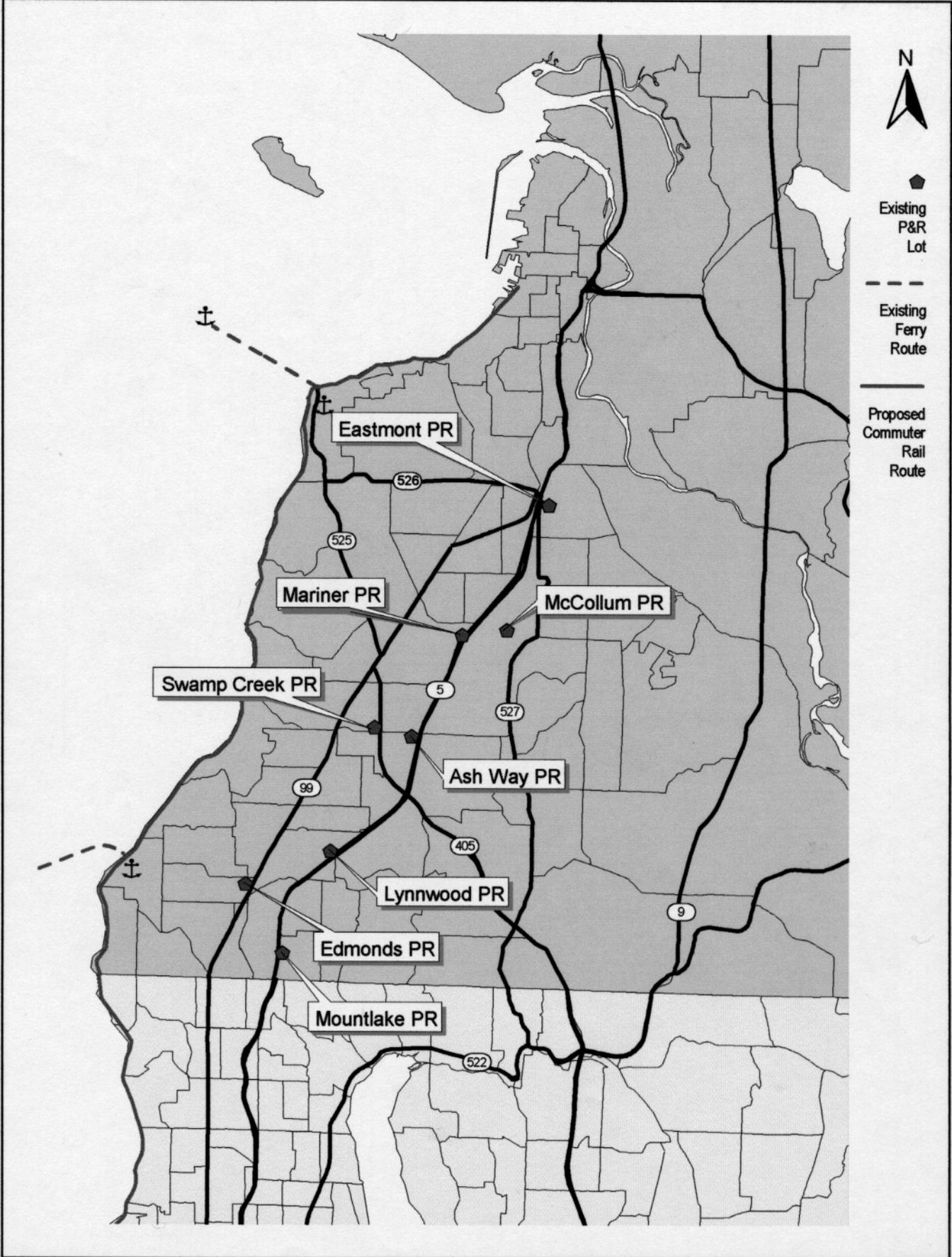
-  Existing Ferry Terminal
-  Existing Ferry Route
-  Proposed Commuter Rail Route



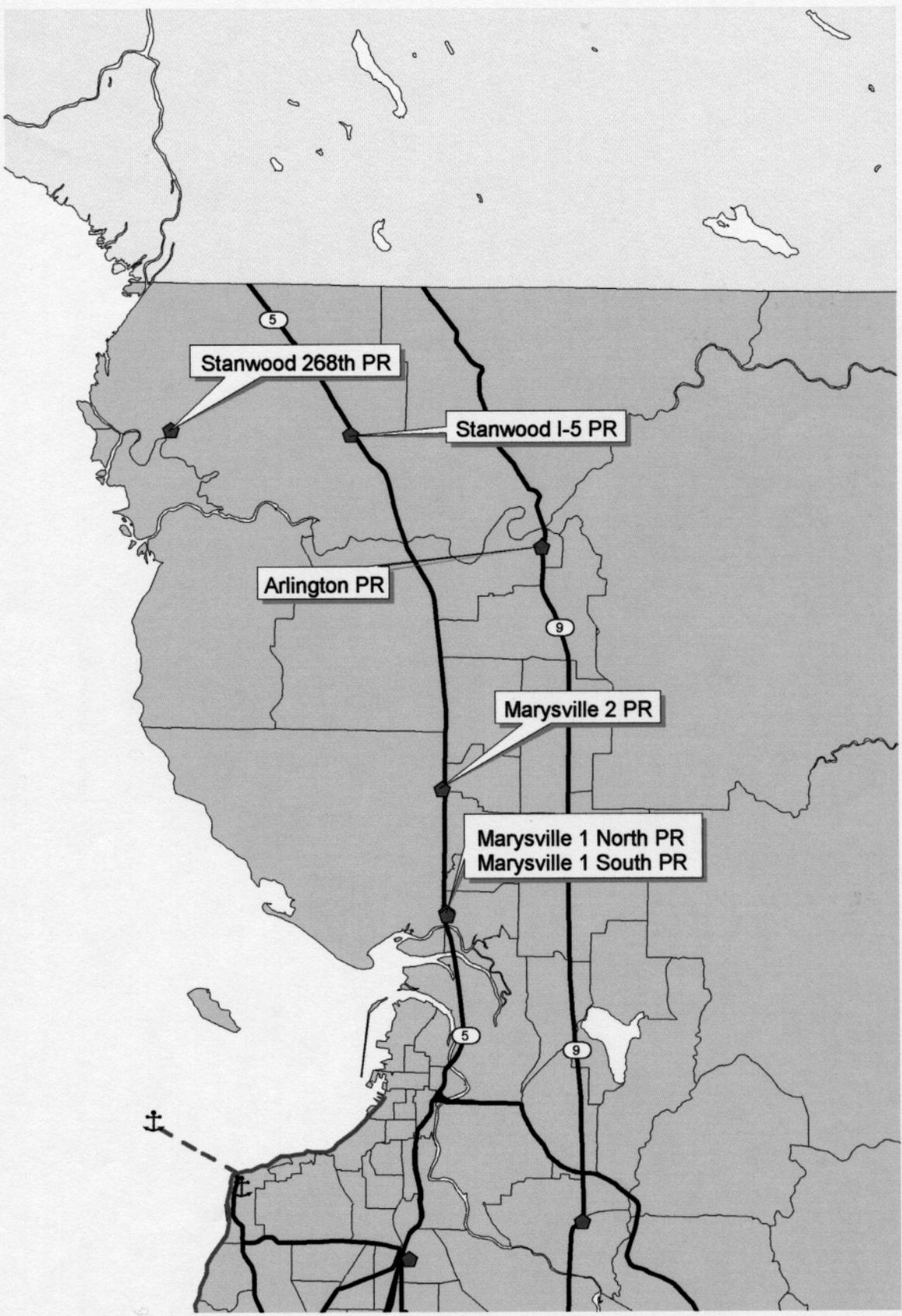
Snohomish County Study Area

Puget Sound Park-and-Ride System Update
FIGURE 8.1





Study Area for the SW Snohomish Corridor



Existing
P&R
Lot

Existing
Ferry
Terminal

Existing
Ferry
Route

Proposed
Commuter
Rail
Route



Study Area for the North Snohomish Corridor

Puget Sound Park-and-Ride System Update

FIGURE 8.3

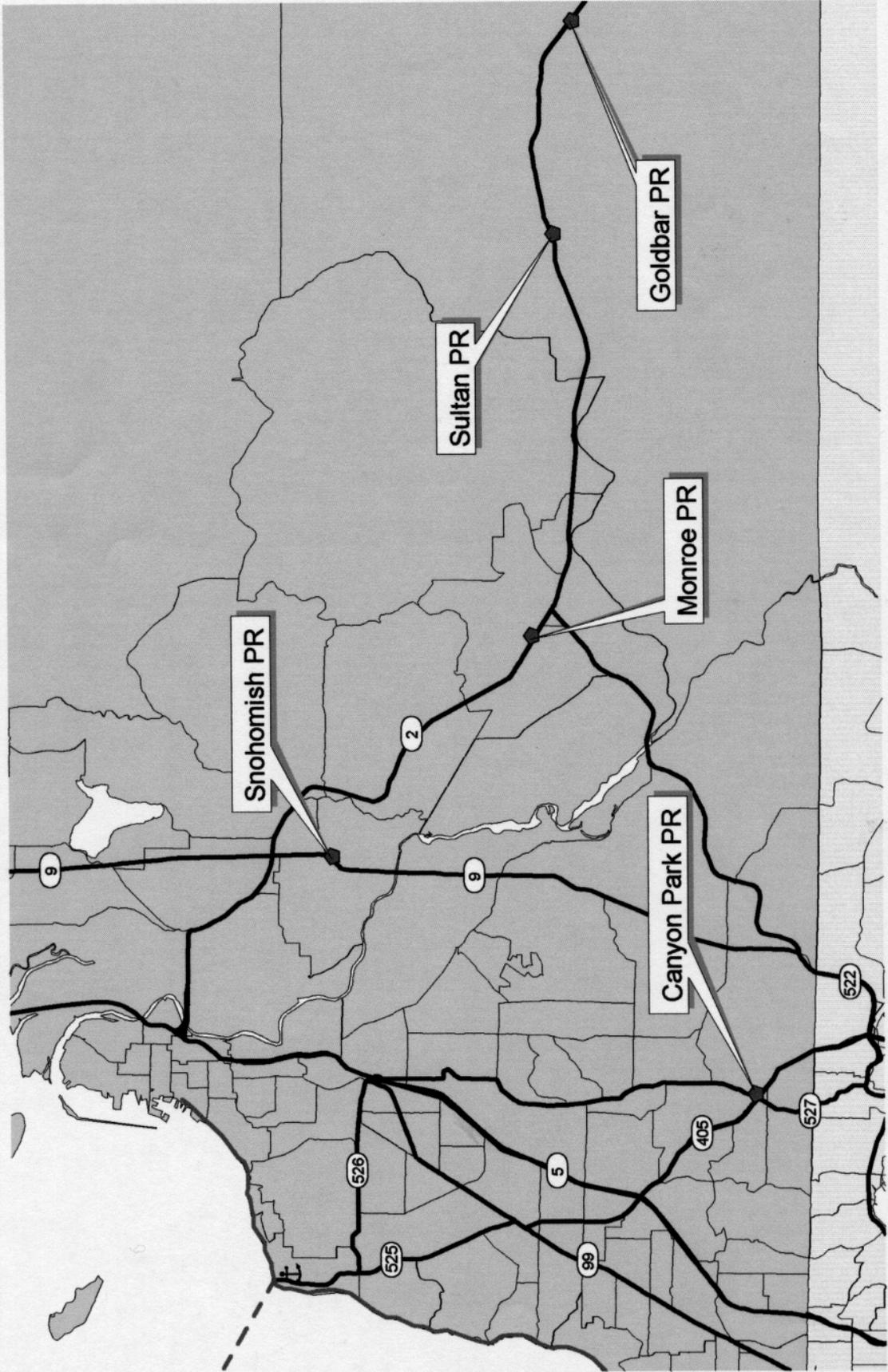


Existing P&R Lot

Existing Ferry Terminal

Existing Ferry Route

Proposed Commuter Rail Route



These estimates represent ideal demand conditions, unconstrained by lot placement, facility access, or transit service. All of these conditions strongly influence park-and-ride facility use¹. These existing year “unconstrained” estimates were the first step of the methodology developed for future demand forecasting. The results of this analysis are presented by corridor and lot in Table 8.1.

Future Forecasts

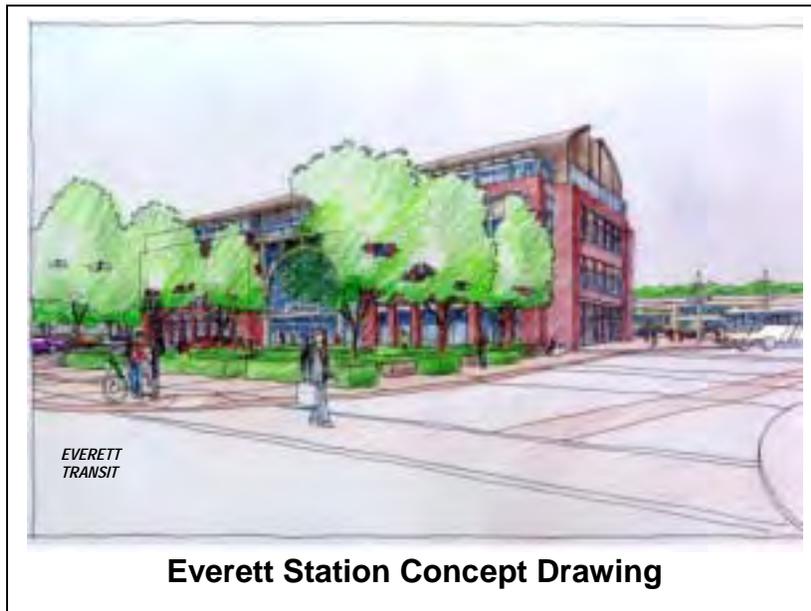
Year 2010 and 2020 forecasts were developed for the identified coverage-area lots for each transit corridor. These forecasts were based upon the base year demand estimates, and then grown at both the rate of population growth and the rate of ridership growth to provide a range of possible future demand.



Scale Model for Everett Station

2010

A future need of between 2850-3650 stalls in addition to the estimated year 2000 need was identified for the county overall, with approximately between 2200-2900 for the Southwest corridor, 250 for the North corridor, and 400-500 for the Southeast corridor for the year 2010. The population- and transit-based growth rates were similar for the North corridor, and thus did not produce a range of estimates. Demand analysis results are presented by corridor and lot in Table 8.1.



Everett Station Concept Drawing

2020

A future need of between 2250-3500 stalls in addition to the estimated year 2010 need was identified for the county overall, with approximately between 1600-2700 for the Southwest corridor, 300 for the North corridor, and 350-500 for the Southeast corridor for the year 2020. The population- and transit-based growth rates were again similar for the North corridor, and thus did not produce a range of estimates. Demand analysis results are also presented by corridor and lot in Table 8.1.

¹ Ibid.

Table 8.1

Parking Demand for Snohomish County					
Park & Ride Facility	Lot Capacity	Year 2000 Demand		Future Demand	
		Observed	Estimated	2010	2020
Southwest Snohomish P&R Lots (I-5)					
Mountlake Terrace	365	384	660	980 to 1070	1190 to 1430
Lynnwood	968	954	860	1360 to 1490	1650 to 1980
Ash Way/Swamp Creek	1427	912	900	1220 to 1340	1490 to 1790
Mariner/McCollum	1076	1084	780	1330 to 1460	1620 to 1950
Eastmont/S.Everett	351	85	740	940 to 1020	1150 to 1380
Mukilteo	Proxy	N/A	40	40	50
Everett Station	Proxy	N/A	1230	1550 to 1700	1880 to 2260
TOTAL	4187	3419	5210	7420 to 8120	9030 to 10840
North Snohomish P&R Lots (I-5, SR 9)					
Marysville 1	124	120	250	310	370
Marysville 2	104	90	310	370	450
Marysville East	Proxy	N/A	250	300	370
Smokey Point	Proxy	N/A	120	150	180
Arlington	27	24	90	110	130
Stanwood I-5	104	118	80	100	120
TOTAL	359	352	1100	1340	1620
Southeast Snohomish P&R Lots (SR 9, I-2)					
Lake Stevens	Proxy	N/A	330	470	570
Snohomish	106	48	140	170	200
South Snohomish	Proxy	N/A	80	100	120
Canyon Park	297	220	620	800 to 900	970 to 1230
Monroe	117	122	100	120	140
Sultan/Goldbar	89	23	40	50	60
TOTAL	609	413	1310	1710 to 1810	2060 to 2320
COUNTY TOTAL	5155	4184	7620	10,470 to 11,270	12,710 to 14,780

Notes:

These are corridor-level estimates and forecasts and do not represent site-specific implementation recommendations.

Assumed annual growth rate for I-5 Snohomish County: 1.019 - 1.052

Source: Parsons Brinckerhoff

RECOMMENDED PROGRAMMING & COST ESTIMATES

Southwest Snohomish experiences a large increase in demand over the various planning periods. A substantial six-year capital program by Community Transit and Sound Transit meets existing need but addresses only part of the need forecast for 2010. Large investments in expanded park-and-ride facilities would still be required to meet needs in the Long-Range planning period. For North Snohomish and Southeast Snohomish, growth is less dramatic, showing more consistent and moderate increases in additional needs. The total additional capital need for Snohomish County is similar to that of King County.

Calculated need for new park-and-ride stalls in Snohomish County is presented in Table 8.2. The finalized recommended project programming is presented along with cost estimates in Table 8.3 and Figure 8.5.

Table 8.2

Transit Corridor	Programming Period				Total (2000-2030)
	Short-Term (Existing 2000 Need)	Mid-Range (2000 Need Unmet by 6-Yr. Program)	Long-Range (Additional 2010 Need)	MTP Horizon (Additional 2020 Need)	
	Southwest Snohomish	2,250	-1,550	1,500	
North Snohomish	1,050	900	300	350	1,700
Southeast Snohomish	1,000	700	600	500	2,100
TOTALS	4,300	50	2,400	3,450	10,150

Notes:

Numbers rounded to the nearest 50.

Short-term stall numbers represent estimated year 2000 need.

Mid-Range stall numbers represent the estimated year 2000 need minus existing 6-year programming.

Long-Range and MTP Horizon stall numbers represent forecasted needs in addition to the previous planning period, i.e., in addition to Mid-Range and Long-Range, respectively.

The Total column represents total forecasted need between 2000-2030. It therefore excludes numbers in the Mid-Range column.

Negative numbers represent current programming in excess of forecasted need for that planning period.

Source: Parsons Brinckerhoff

Table 8.3

Snohomish County Proposed Project Program

Map #	Stalls	Corridor	Location	Facility Type	ROW Cost Area	Estimated Construction Cost	Estimated ROW Cost	Estimated Total Cost
<i>Short-Term 2000-2006</i>								
S1	400	SW Snohomish	I-5 Mountlake Terrace	Structure		N/A	N/A	\$5,850,000
S2	1,000	SW Snohomish	I-5 East Everett	Surface		N/A	N/A	\$6,752,000
S3	400	SW Snohomish	I-5 South Everett/I-5 @ 112th	Surface		N/A	N/A	\$17,796,000
S4	300	SW Snohomish	I-5 Lynnwood Transit Center	Surface	SW Urban	\$1,500,000	\$4,800,000	\$6,300,000
S5	250	SW Snohomish	I-5 Swamp Creek	Surface		N/A	N/A	\$9,637,000
S6	100	SW Snohomish	Mukilteo Station	Surface		N/A	N/A	\$7,683,000
S7	870	SW Snohomish	Everett Station	Surface		N/A	N/A	\$15,506,000
S7A	746	SW Snohomish	Everett Station ****	Surface		N/A	N/A	\$2,978,800
S8	100	SW Snohomish	I-5 Edmonds Station	Surface		N/A	N/A	\$11,600
S9	300	SE Snohomish	SR 9 Lake Stevens	Surface		N/A	N/A	\$3,800,000
S10	150	North Snohomish	I-5 Marysville	Surface		N/A	N/A	\$1,700,000
S11A	200	North Snohomish	Marysville* **	Surface	N&E Urban	\$1,000,000	\$2,400,000	\$3,400,000
S13A	300	SE Snohomish	I-405/Canyon Park ***	Surface	Rural	\$2,500,000	\$2,100,000	\$4,600,000
Total	5,116					\$5,000,000	\$9,300,000	\$86,014,400
<i>Mid-Range 2007-2015</i>								
S11B	250	North Snohomish	Marysville * ** *****	Surface	N&E Urban	\$1,250,000	\$3,000,000	\$4,250,000
S12	350	SE Snohomish	SR 9/SR 2/Lake Stevens*	Surface	Rural	\$1,750,000	\$2,450,000	\$4,200,000
S13B	300	SE Snohomish ***	I-405/Canyon Park	Surface	Rural	\$1,500,000	\$2,100,000	\$3,600,000
Total	900					\$4,500,000	\$7,550,000	\$12,050,000
*assumes 50% of demand for SE and N is met by reserve capacity at SW								
**add and consolidate at Marysville								
***600 stalls for Canyon Park long-range moved to short and mid-range, 300 each, per CT request								
****200 from Marysville moved to short-term per CT request								
*****Everett Transit program, capacity not deducted from future programming								
ITS - Freeway Only								\$529,200
ITS - With Arterial Messaging								\$1,188,600
CCTV								\$444,000
ITS Sub-Total								\$1,632,600
Mid-Range Sub-Totals with Preferred ITS Components						\$4,500,000	\$7,550,000	\$13,682,600

Table 8.3 (cont.)

Snohomish County Proposed Project Program

Map #	Stalls	Corridor	Location	Facility	Type	ROW Cost Area	Estimated Construction Cost	Estimated ROW Cost	Estimated Total Cost
<i>Long-Range 2016-2020</i>									
S14	1,000	SW Snohomish	I-5 Mountlake Terrace/Edmonds	Structure	SW Urban		\$15,000,000	\$8,000,000	\$23,000,000
S15	500	SW Snohomish	US 99/Edmonds/Shoreline	Surface	SW Urban		\$2,500,000	\$8,000,000	\$10,500,000
S16	750	SW Snohomish	I-5 Corridor/Lynnwood	Structure	SW Urban		\$11,250,000	\$6,000,000	\$17,250,000
S17	300	N Snohomish	Marysville	Surface	N&E Urban		\$1,500,000	\$3,600,000	\$5,100,000
Total	2,550					Long-Range Sub-Totals	\$30,250,000	\$25,600,000	\$55,850,000
<i>MTP 2030 Horizon</i>									
S18	1,600	SW Snohomish	Central Everett	Structure	SW Urban		\$24,000,000	\$12,800,000	\$36,800,000
S19	1,000	SW Snohomish	Swamp Creek	Structure	SW Urban		\$15,000,000	\$8,000,000	\$23,000,000
S20	500	SE Snohomish	I-405/Canyon Park	Structure	Rural		\$7,500,000	\$1,750,000	\$9,250,000
S21	350	N Snohomish	Marysville	Structure	N&E Urban		\$5,250,000	\$2,100,000	\$7,350,000
Total	3,450					MTP Horizon Sub-Totals	\$51,750,000	\$24,650,000	\$76,400,000
SNOHOMISH COUNTY TOTALS							\$91,500,000	\$67,100,000	\$231,947,000

NOTES

1. Program plans are organized by county. The lead agency for a project will be determined at the time of implementation.
2. This program plan identifies the general location, time period, and type of park-and-ride facilities needed. Exact size, location, timing, and type of facility to be determined by local agencies and public process at the time of implementation.
3. Forecasts represent unconstrained transit corridor demand.
4. Cost estimates are in year 2000 dollars.
5. All costs are preliminary planning level capital estimates intended to serve as placeholders. They do not include operations or maintenance costs.
6. Funds have been programmed for lots in the short-term category only. No commitment has been made or is implied regarding funding or the ability to fund further projects.
7. Map numbers may not be sequential.

Source: Parsons Brinckerhoff