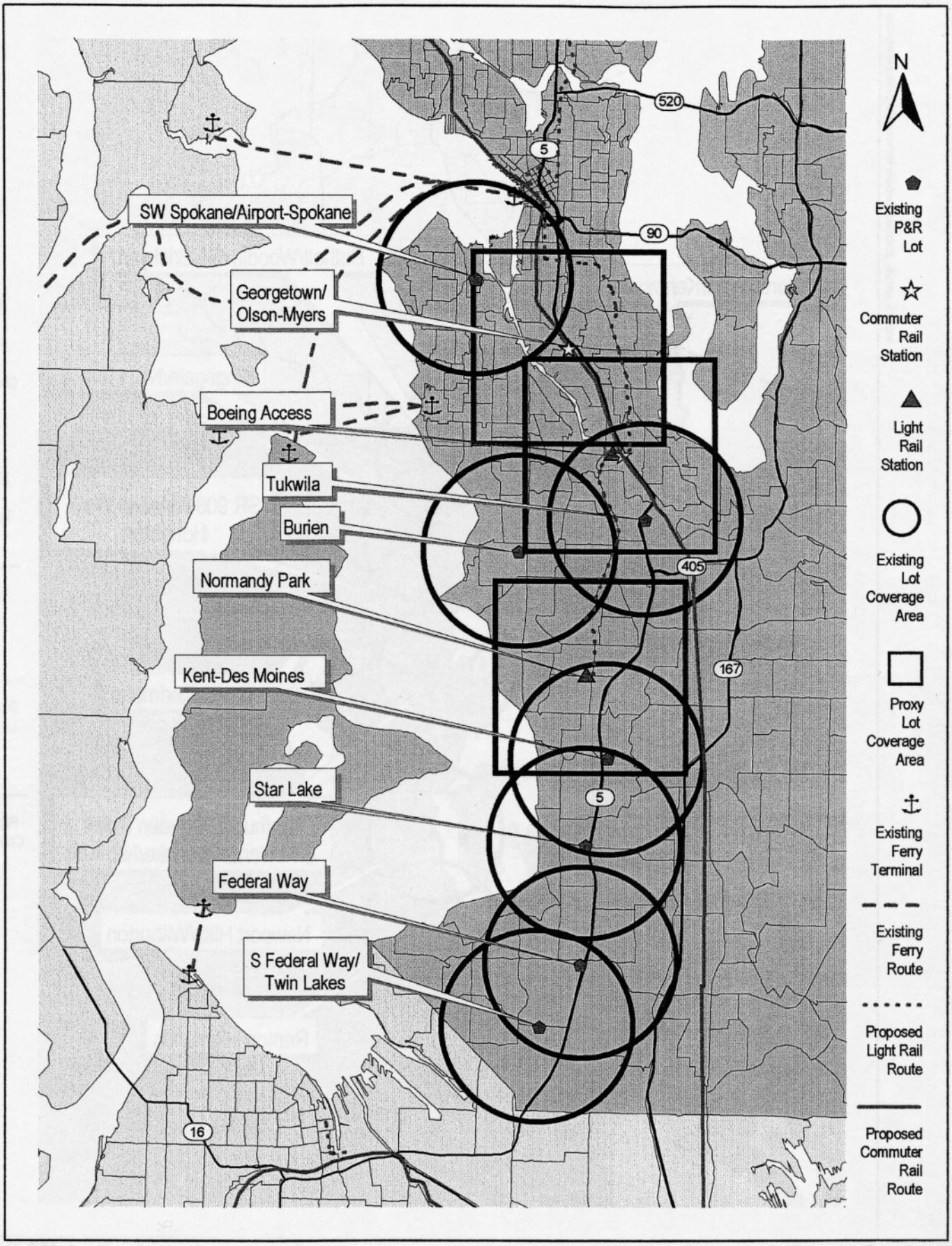

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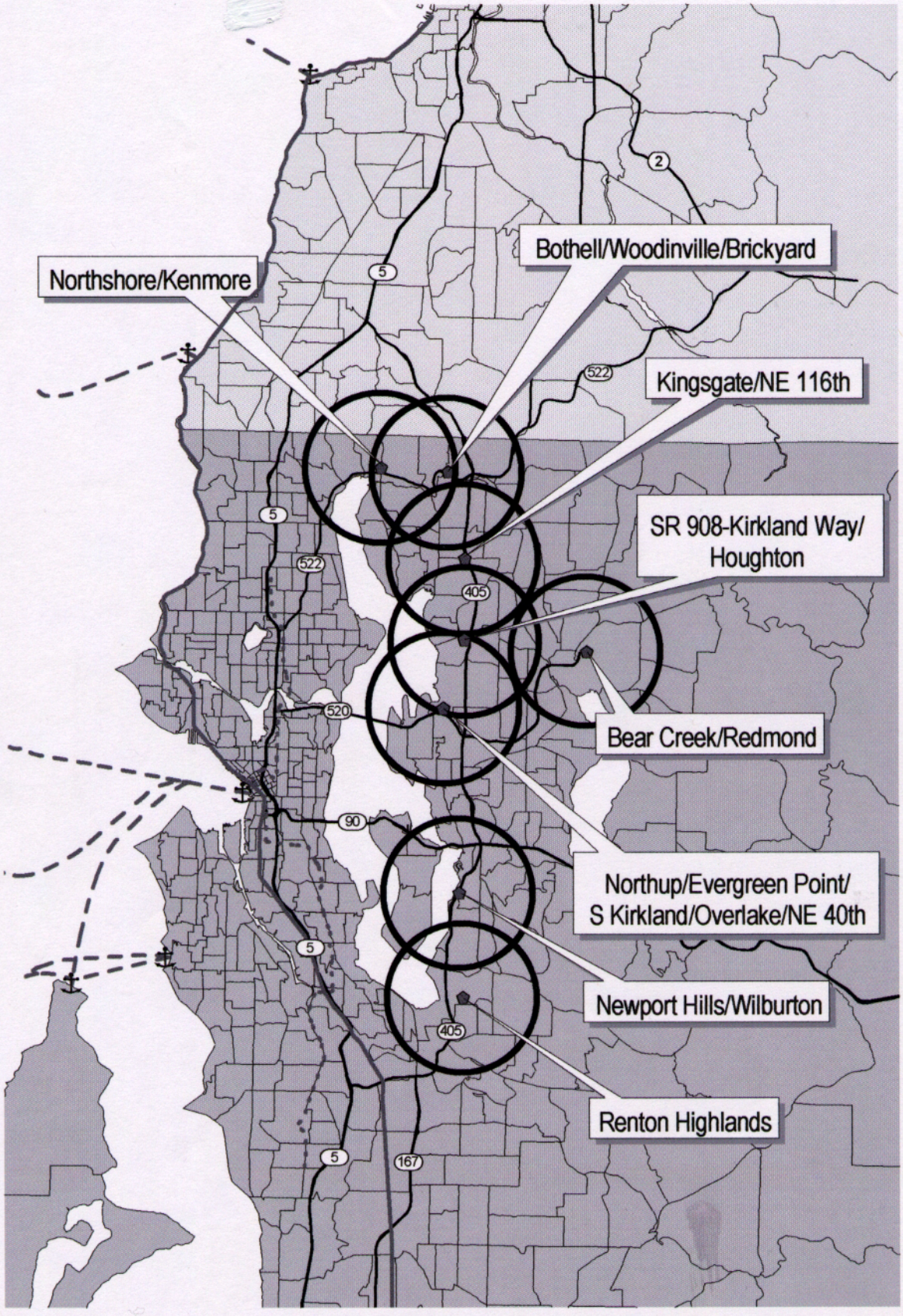
Coverage Areas for the I-5 (South) Corridor

Puget Sound Park-and-Ride System Update

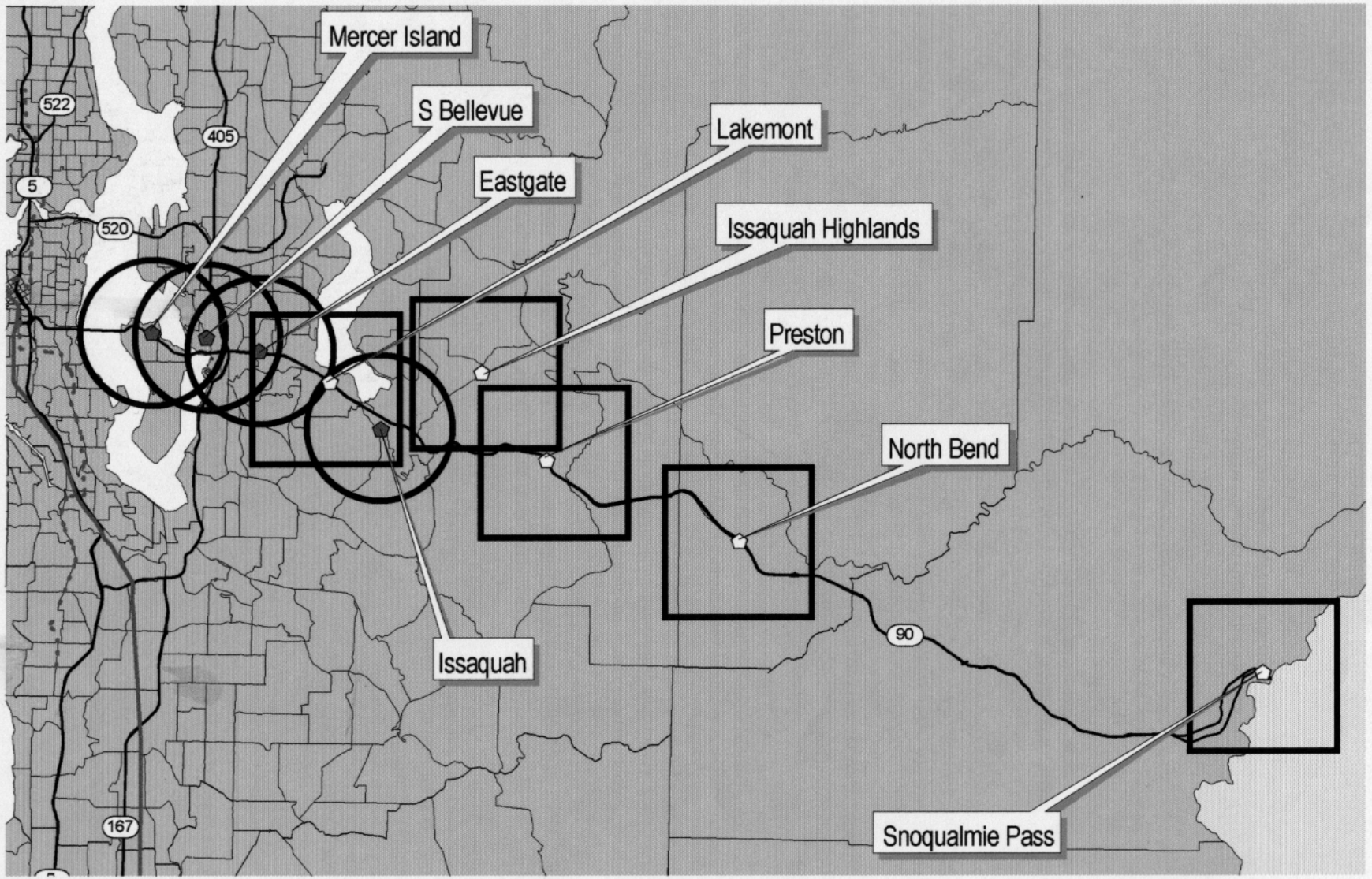
FIGURE 5.9



Coverage Areas for the I-405 Corridor

Puget Sound Park-and-Ride System Update

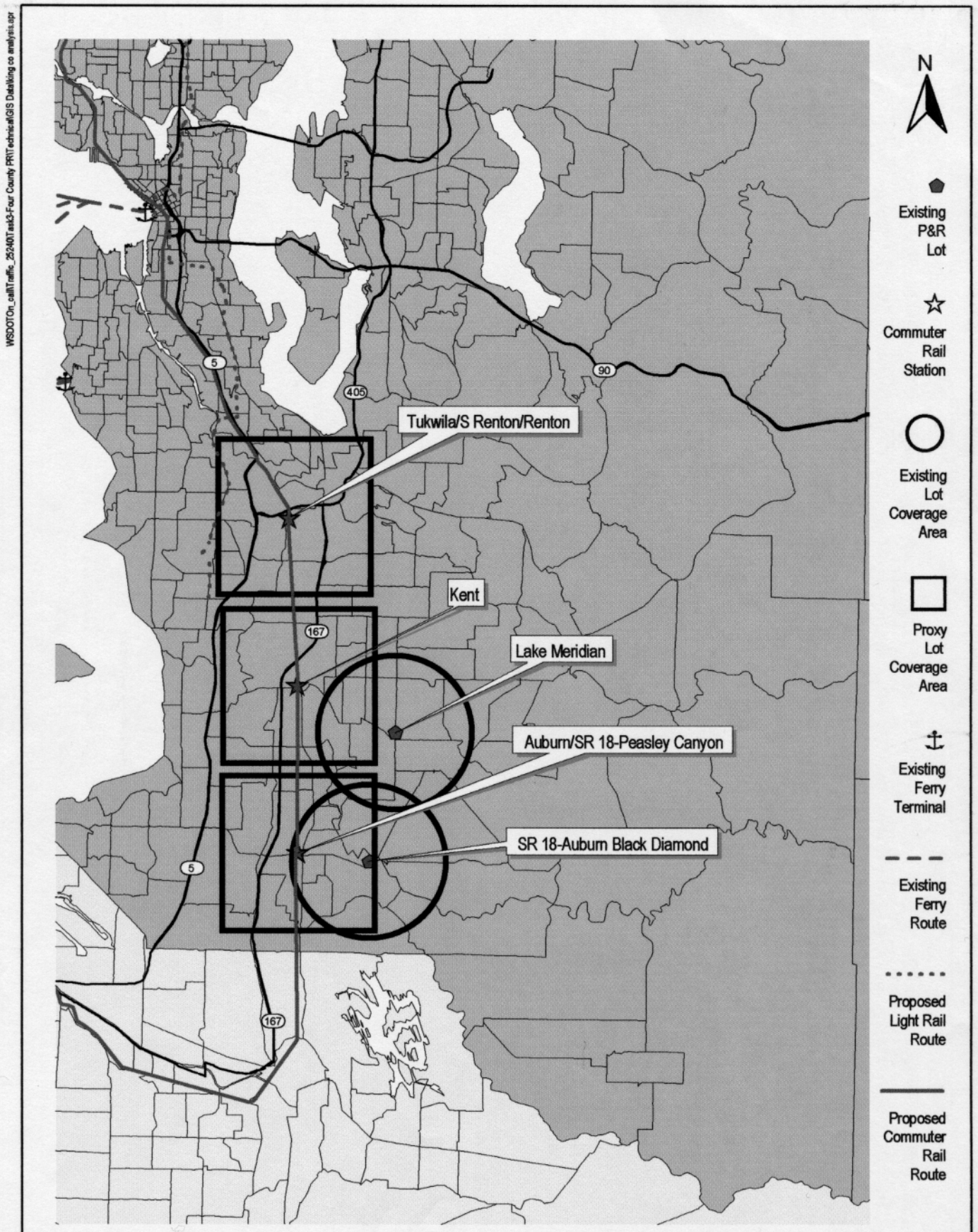
FIGURE 5.10



Coverage Areas for the I-90 Corridor

Puget Sound Park-and-Ride System Update

FIGURE 5.11



Coverage Areas for the SR 167 Corridor

Puget Sound Park-and-Ride System Update

FIGURE 5.12

Table 5.4

King County Metro Transit Assumptions for the I-5 (North) and I-405 Corridors																
	Best Scheduled Time to Sea CBD (in mins.)		Mid-Day Service (Y or N)		Best Scheduled Time to UW (in mins.)		Estimated Number of AM Peak Period (6-9) Express Bus Trips to:									
							Seattle CBD		UW		Bellevue CBD		Renton Boeing		Everett Boeing	
Lot	2010	2020	2010	2020	2010	2020	2010	2020	2010	2020	2010	2020	2010	2020	2010	2020
S Bellevue	24	28	1	1	90	90	24	28	1	1	18	22	6	6	1	1
Houghton	24	20*	Y	Y	13	10	20^/8	24^/10	20***/11**	24***/13**	24**	29**	6**	10**	10**	14**
Kingsgate	38	32*	Y	Y	28	32*	21**	25**	21***/11**	24***/13**	24**	29**	6**	10**	10**	14**
Northgate TC	20	20	1	1	7	7	18	18	18	18	6	6	1	1	1	1

* presumes new or expanded SR 520 bridge with HOV lanes and Express lanes connection from SR 520.
** some service would serve both Kingsgate and Houghton Freeway stations
*** serves Montlake Freeway Station
^ serves Houghton Freeway Station

#/#: 1st number goes into lot, 2nd stops at flyer stop.

Source: King County Metro
KC Fut Transit Assumptions-2.xls

Table 5.5

King County Metro Transit Assumptions for the I-5 (South) and SR 167 Corridors

Lot	Best Scheduled Time to Sea CBD (in mins.)			Mid-Day Service (Y or N)		Best Scheduled Time to UW (in		Estimated Number of AM Peak Period (6-9) Express Bus Trips to:									
								Seattle CBD		UW		Bellevue CBD		Renton Boeing		Everett Boeing	
	2010		2020	2010	2020	2010	2020	2010	2020	2010	2020	2010	2020	2010	2020	2010	2020
Airport/Spokane P&R	15		17	1	1	0	0	6	6	0	0	0	0	0	0	0	0
Auburn Station	28	sounder	28	1	1	0	0	6	9	0	0	6	6	6	6	4	4
Boeing Access Station	LINK		LINK	1	1	0	0	6	9	0	0	0	0	0	0	0	0
Burien P&R	28		32	1	1	0	0	17	18	0	0	0	0	0	0	0	0
Federal Way P&R	46		51	1	1	59	64	20	21	7	8	0	0	0	0	0	0
Federal Way TC Parking Structure	48		53	1	1	0	0	17	20	0	0	6	6	6	6	0	0
Kent Station	22	sounder	22	1	1	0	0	6	9	0	0	6	6	6	6	4	4
Kent/Des Moines P&R	31		35	1	1	45	50	12	14	7	8	0	0	0	0	1	1
Lake Meridian P&R	N/A		N/A	1	1	0	0	0	0	0	0	0	0	0	0	0	0
Maple Valley P&R	55		62	1	1	0	0	4	4	0	0	0	0	0	0	0	0
Olson/Myers P&R	25		28	1	1	0	0	6	6	0	0	0	0	0	0	0	0
South Federal Way P&R	52		59	1	1	71	77	14	16	7	8	0	0	0	0	1	1
SR 18/Auburn-Blk Diamond P&R	N/A		N/A	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SR 18/Peasley Canyon Road P&R	N/A		N/A	1	1	0	0	0	0	0	0	0	0	0	0	0	0
Star Lake P&R	40		45	1	1	51	56	17	18	7	8	0	0	0	0	0	0
SW Spokane Street P&R	15		18	1	1	0	0	24	24	0	0	0	0	0	0	0	0
Tukwila P&R (both lots)	28		32	1	1	0	0	12	12	0	0	0	0	0	0	0	0
Tukwila Station	14	sounder	14	1	1	0	0	6	9	0	0	0	0	0	0	0	0
Twin Lakes P&R	62		70	1	1	0	0	14	16	0	0	0	0	0	0	0	0

For New Lots:	Street-level address or cross-streets	Number of Stalls
Auburn Station	1st Ave SW/A St SW	580
Boeing Access Station	S Boeing Access Rd/Airport Wy S	300
Federal Way TC Parking Structure	23rd Ave S/S 316 th St	1200
Kent Station	Railroad Ave N/Pioneer St	810
Tukwila Station	S Longacres Wy/Nelson Pl	800
Twin Lakes P&R	21st Ave SW/SW 341st St	600

Notes:
N/A = Lot not served with direct express trips
(rt #) can reach P&R via local route only
# (Sounder) = Fastest travel time via Sounder
LINK = Fastest travel time via LINK
STEX (#) = # of STEX trips on rt 565
* - 1 AM trip before 6 AM
** - 4 AM trips before 6 AM

Source: King County Metro
KC Fut Transit Assumptions.xls

Table 5.6

King County Metro Transit Assumptions for the I-90 Corridor				
2010/2020 Bus Volumes: I-90 Park and Ride Lots (3-6 p.m. peak direction)				
Park & Ride	**Destination**	**Route**	**2010 Pk**	**2020 Pk**
Issaquah Highlands	Seattle	new	17	20
	Seattle	new (ST)	6	7
	best time to Seattle			32
	Overlake	new	10	12
	Bellevue	new	10	12
	University			0
	Renton Boeing			0
	Everett Boeing			0
	Midday Service?			Y
		Subtotal	**43**	**51**
Issaquah	Seattle	214	20	23
	Seattle	new (ST)	6	7
	best time to Seattle			28
	Overlake	new	10	12
	Bellevue	new	10	12
	University			0
	Renton Boeing			0
	Everett Boeing			0
	Midday Service?			Y
		Subtotal	**46**	**54**
Eastgate	Seattle	212	24	28
	Seattle	225	3	3
	Seattle	229	3	3
	Seattle	new (ST)	6	7
	best time to Seattle			21
	Renton/Kent	247	5	6
	Overlake	new	10	12
	Bellevue	new	10	12
	University			0
	Renton Boeing			6
	Everett Boeing			0
	Midday Service?			Y
		Subtotal	**61**	**71**
S. Bellevue	Seattle	550	24	28
	best time to Seattle			22
	1st Hill	942	5	6
	Bell/Renton/SeaTac	560	6	7
	University			0
	Renton Boeing			7
	Everett Boeing			0
	Midday Service?			Y
		Subtotal	**35**	**41**

Table 5.6 (cont.)

King County Metro Transit Assumptions for the I-90 Corridor (cont.)				
2010/2020 Bus Volumes: I-90 Park and Ride Lots (3-6 p.m. peak direction)				
Park & Ride	**Destination**	**Route**	**2010 Pk**	**2020 Pk**
Mercer Is	Seattle	550	24	28
	Seattle	new (ST)	6	7
	Seattle	202	7	8
	best time to Seattle			15
	U Dist	205	2	2
	1st Hill	942	5	6
	University (rt 205)			2
	best scheduled time			31
	Bellevue			0
	Renton Boeing			0
	Everett Boeing			0
	Midday Service?			Y
		Subtotal	**44**	**51**
Preston	Seattle	214	7	8
	best time to Seattle			55
	University			0
	Bellevue			0
	Renton Boeing			0
	Everett Boeing			0
	Midday Service?			Y
		Subtotal	**7**	**8**
North Bend	Seattle	new	3	4
	best time to Seattle			65
	University			0
	Bellevue			0
	Renton Boeing			0
	Everett Boeing			0
	Midday Service?			Y
		Subtotal	**3**	**4**

Source: King County Metro
I-90PR.xls

Table 5.7

I-90 Corridor Travel Times, P&R Lots to downtown Seattle, A.M. Peak 2010 and 2020

Assumptions: Peak directional HOV lanes on I-90; HOV center access ramps completed at Eastgate; downtown tunnel closed to buses, but I-90 buses connect directly with LRT at International District Station (IDS). Only fastest, most direct routes shown. Assume that all I-90 routes terminate at IDS and passengers walk to destination from that point or make common-platform connection with LRT, with average wait time 2.5 minutes (5 minute LRT headway). Add 4 min LRT travel time between IDS and University Street Station, 6 min travel time between IDS and Westlake Station.

North Bend P&R

Route 213: New express route starts at North Bend P&R, operates via SR-202, Snoqualmie Ridge Parkway, I-90 to International District Station, with stops at Eastgate P&R and Rainier Station. Estimated A.M. one-way travel time: 59 min from North Bend P&R to International District Station, downtown Seattle.

Issaquah Highlands P&R

Route 218: New express route starts at Issaquah Highlands P&R, operates via SPAR Rd, I-90 to IDS, stopping only at Rainier Station. Estimated A.M. one-way travel time: 26 min from Issaquah Highlands P&R to International District Station, downtown Seattle.

Issaquah P&R

Route 214: Existing express route starts at Issaquah P&R, operates via SR-900 and I-90 to downtown Seattle, stopping only at Rainier Station. Current and future A.M. one-way travel time: 22 min from Issaquah P&R to International District Station, downtown Seattle.

Eastgate P&R

Routes 212, 225, 229: Express routes operating between Eastgate P&R and downtown Seattle, stopping only at Rainier Station. Travel time will be reduced by 3 minutes starting in 2003 with the opening of Eastgate Center HOV Ramp Access. Future (2003 and later) estimated A.M. one-way travel time: 15 min from Eastgate P&R to International District Station, downtown Seattle.

South Bellevue P&R

Route 550: Express route operating between South Bellevue P&R and downtown Seattle, stopping at Mercer Island and Rainier Station. Current and future A.M. one-way travel time: 16 min from South Bellevue P&R to International District Station, downtown Seattle.

Mercer Island P&R

Route 550: Express route operating between Mercer Island and downtown Seattle, stopping only at Rainier Station. Current and future A.M. one-way travel time: 9 min from Mercer Island P&R to International District Station, downtown Seattle.

Source: King County Metro
Traveltime.doc

Table 5.8

Transit Assumptions for Sound Transit

Project Name	Location	Light Rail	Com. Rail	Reg. Bus	Local Bus	HOV Direct Access	2010 Pk. Hdways	2010 Off-Pk. Hdways	2010 Parking Spaces	2020 Peak	2020 Off-Peak	2020 Parking Spaces
Multi-Modal Park-and-Rides												
Everett Station	Everett	✓	●	●	●	✓	5	15	1200	5	10	1200
Federal Way Transit Center/Parking Structure	Federal Way	✓		●	●	●	5	15	1200	5	10	1200
Lynnwood Transit Center/Park-and-Ride	Lynnwood	✓		●	●	●	5	15	1210	5	10	1210
Northgate Transit Center/Park-and-Ride	Seattle	●		●	●	✓	5	10	1300-1800	5	5	2000
S. 154th Park-and-Ride	SeaTac	●		●	●		5	10	670	5	10	670
S. 200th Park-and-Ride	SeaTac	●		●	●		5	10	630	5	10	630
Tacoma Dome Station/Phase II	Tacoma	●	●	●	●	✓	5	15	2400	5	10	2400
Regional Transit Centers/Park-and-Rides												
Auburn Station	Auburn		●	●	●		30	60	132	15	30	580
Boeing Access Road Park-and-Ride	Tukwila	●	●	●	●		5	10	300	5	10	300
Kent Station	Kent		●	●	●		30	60	301	15	30	810
Mercer Island Transit Center/Park-and-Ride	Mercer Island	✓		●	●	●	5	10	474	5	10	474
Overlake Transit Center/Park-and-Ride	Redmond	✓		●	●		15	30	235	5	15	235
Puyallup Station	Puyallup		●	●	●		30	60	311	15	30	311
South Everett Park-and-Ride (I-5 @ 112th)	Everett			●	●	●	15	30	400	10	20	400
SR 512 Park-and-Ride	Lakewood		●	●	●		15	60	500	15	30	500
Sumner Station	Sumner		●	●	●		30	60	210	15	30	210
Tukwila Station	Tukwila	?	●	●	●		30	60	210	15	30	630
Commuter Park-and-Rides												
Ash Way Park-and-Ride	Lynnwood			●	●	●	15	30	1000	10	20	1000
Dupont Park-and-Ride	Dupont		✓	●	●		30	60	250	15	60	250
East Everett Park-and-Ride	Everett				●		30	60	1000	15	60	1000
Edmonds Station	Edmonds		●		●		30	60	120	15	30	120
Mukilteo Station	Mukilteo		●		●		30	60	120	15	30	120
Pacific Highway Park-and-Ride	Federal Way			●	●		15	60	600	10	30	600
South Hill Park-and-Ride	Puyallup			●	●		15	60	350	15	30	350
Swamp Creek Park-and-Ride/HOV Access	Lynnwood			●	●	●	15	60	675	15	30	675

● = 2010
✓ = 2020

Source: Sound Transit
STParkRides revised.xls

Local Methodological Adjustments

A uniform methodology was applied throughout the study in order to assure consistency of findings. The three step approach outlined in the Methodology chapter (Section III) of the report allowed for minor modifications to be made for each county. No substantial methodological adjustments were required for the King County analysis. Minor adjustments included:

- Fare inputs for the Georgetown and Boeing Access proxy lots reflected expected commuter rail fares.
- Five sets of growth rates were estimated for King County. These growth rates were taken from the Sound Transit and PSRC models, and applied to the lots by transit corridor as follows:

	Growth Rate		
Transit Corridor	**Transit-Based**	**Population-Based**	**Lots**
I-5 (North)	1.017	1.005	Aurora Village N Jackson Park Northgate TC NE 65th/Greenlake
I-5 (South)	1.020	1.011	SW Spokane Georgetown Boeing Access Tukwila P&R Burien, Normandy Park Kent/Des Moines Star Lake Federal Way South Federal Way
I-405	1.022	1.012	Northshore Bothell, Kingsgate SR 908/Kirkland Way Bear Creek Northup Newport Hills Renton Highlands
I-90	1.018	1.015 (avg.)	Eastgate Issaquah Highlands Issaquah, Lakemont Mercer Island North Bend Preston Snoqualmie Pass South Bellevue
SR 167	1.021	1.015	SR 18/Auburn-Blk Diamond Auburn CR Lake Meridian Kent CR Tukwila CR