

3.15 PUBLIC SERVICES

This section describes existing public service agencies that serve the site, including fire protection, emergency medical services, law enforcement, and public schools. Potential impacts to these services under the Proposed Actions and alternatives are evaluated.

3.15.1 Affected Environment

The portion of the Tukwila South site within the City of Tukwila limits is served by the Tukwila Fire and Police Departments. The portion of the site currently within unincorporated King County lies within King County Fire District No. 24 and Precinct Four (District K9) of the King County Sheriff's Office (KCSO). King County Fire District No. 24 contracts with the SeaTac Fire Department for service to the unincorporated portion of the site at present. Police protection to District K9 is provided by both the King County Sheriff's Office and the SeaTac Police Department.

Under Alternatives 1, 2, and 3 considered in this EIS, it is assumed that the portion of the Tukwila South site within unincorporated King County would be annexed to the City of Tukwila (refer to Chapter 2, Description of the Proposed Action), consistent with the City's vision and policies for the Tukwila South area. As such, this chapter assumes that police and fire protection for the site would become the primary responsibility of the Tukwila Police and Fire Departments following annexation.

Fire Protection and Emergency Medical Service

Tukwila Fire Department

The City of Tukwila Fire Department provides fire protection and basic life support (BLS) emergency medical service (EMS) to a service area that corresponds to the City of Tukwila's jurisdictional boundaries. The Tukwila Fire Department has mutual aid agreements with the cities of SeaTac, Kent, Renton and Auburn, King County Fire District's #2, #11, and #20, and the Port of Seattle, among others.

The Tukwila Fire Department has a total of four fire stations. Fire suppression crews include three shift battalion chiefs, 12 shift lieutenants, and 39 Full Time Equivalent (FTE) firefighters. The Department has a total of 61 uniformed staff members, including fire prevention and training staff. All responding personnel are emergency medical technicians (EMTs) and provide basic life support (BLS) service. The crews work three rotating 24-hour shifts, with 18 personnel assigned to each shift (vacation scheduling results in as few as 14 personnel actually available for a typical shift). The Department also includes 4 civilian personnel.

Fire Station 51 is the Department headquarters and is located at 444 Andover Park East, approximately three-quarters of a mile north of the site. The primary response area for Fire Station 51 is bounded by I-405 on the north and I-5 on the west and includes Westfield Shoppingtown Southcenter and the industrial and retail areas located south and east of the Mall. Fire Station 51 staffing includes one shift battalion chief, one lieutenant, and two firefighters. Equipment at Fire Station 51 includes: one 1,500 gallons per minute (gpm) pumper, one heavy rescue truck, one hazardous materials trailer and tow vehicle, and a shift commander

vehicle. Fire Station 51 is a 33,000 square-foot facility with 3.5 apparatus bays, located on 1.86 acres.

Fire Station 52 is the primary backup to the City's other three stations and is located at 5900 S 147th Street, approximately 3.2 miles north of the site, in a residential area north of I-405 and east of I-5. Fire Station 52 is staffed by one lieutenant and a minimum of two firefighters. Equipment at Fire Station 52 includes: one 2,000 gpm pumper and one reserve 1,500 gpm pumper. Fire Station 52 is a 3,600 square-foot facility with 2 apparatus bays, located (with the Tukwila Library) on 1.16 acres.

The City's other two stations are located in the Allentown neighborhood near the Duwamish River (Fire Station 53), and in the Foster neighborhood (Fire Station 54), north of I-405 and one block east of International Boulevard (Highway 99). Fire Station 53 is equipped with a 2,000 gpm pumper and a backup 1,500 gpm pumper. Fire Station 54 is equipped with a ladder truck that responds to all commercial and residential structure fires, and an aid unit which supports the other three stations when staff are available (shifts are generally staffed with 18 personnel citywide; however, vacation schedules typically result in minimum staffing of 14, which means not all equipment can be staffed). Fire Station 53 is a 7,800 square-foot facility with 2 apparatus bays, located on 2.55 acres. Fire Station 54 is a 5,850 square-foot facility with 1.5 apparatus bays, located on 0.89 acres.

The Tukwila Fire Department's Special Operations Division includes a Hazardous Materials Team and a Rescue Team. The Hazardous Materials Team responds to, and mitigates, incidents such as chemical releases and fuel spills. The Rescue Team responds to incidents that require specialized high angle and vertical rescue, confined space rescue, trench rescue, and water rescue.

The Washington Surveying and Rating Bureau evaluates fire departments on factors including fire suppression capability, water supply, and fire prevention standards (among others) as part of the process of calculating fire insurance rates. The Tukwila Fire Department currently has a rating of 3, indicating low insurance rates.

The Tukwila Fire Department meets annually with the Mayor's office to determine staffing levels and equipment needs. Fire Department operations and maintenance expenditures are funded through the City's general fund. In the *City of Tukwila 2004-2009 Financial Planning Model and Capital Improvement Program (CIP)*. It is assumed that departments will experience budget increases of four percent per year between 2005 and 2009. No capital equipment purchases or new facilities are currently identified in the CIP. Anticipated background growth (not including development under Alternatives 1 and 2) in the City is expected to be served by the four existing stations for the foreseeable future (Fire Chief Olivas, February 2005).

Incident History

The average response time for the Tukwila Fire Department is four minutes for all incidents, including both fire protection calls and emergency medical service (Tukwila Fire Department, 2004). Table 3.15-1 summarizes the number and type of calls for service by Fire Station 51, Fire Station 52 and the Tukwila Fire Department on an overall basis, in 2002 and 2003 (calls responded to by Stations 51 and 52 are shown because these two stations currently provide primary response to the site the majority of the time; some calls may have been responded to by more than one station).

Total number of calls to the Fire Department increased by about five percent between 2002 and 2003 and are estimated to have increased by another approximately five percent in 2004 (Tukwila Fire Department, 2004). Calls for emergency medical service represented 64 percent of the total calls in both 2002 and 2003. Calls to Fire Stations 51 represented approximately 29 and 24 percent, respectively, of the total calls to the Tukwila Fire Department in 2002 and 2003 (some calls may have been responded to by more than one station). Based on the limited amount of existing development onsite, calls for fire protection and emergency medical service are relatively low. Total annual calls to the Segale Business Park were 16 in 2002 and 20 in 2003.

**Table 3.15-1
CALLS FOR SERVICE, TUKWILA FIRE DEPARTMENT**

Type of Call	Fire Station 51		Fire Station 52		Tukwila Fire Department	
	2002	2003	2002	2003	2002	2003
Fire Protection	502	500	246	302	1,446	1,533
Emergency Medical	685	511	573	510	2,620	2,745
Total Calls	1,187	1,011	819	812	4,066	4,278

Source: City of Tukwila Fire Department, 2004.

Note: These two stations are shown because they currently provide primary response to the site the majority of the time; some calls may be responded to by more than one station.

Response Times

As indicated above, the Tukwila Fire Department has an overall response time goal of an average of four minutes; however, the department has no adopted standard. The Department estimates that current response times to the site are approximately 3.2 to 4.2 minutes or less to the north end of the site (depending on traffic congestion and time of day) and would be approximately 6.2 to 7.5 minutes to the south end of the site (service is not currently provided by the Department to the unincorporated portion of the site and the condition of the existing Frager Road limits the ability to respond quickly) (Fire Chief Olivas, February 2005).

King County Medic One

Advanced life support (ALS) service for the City of Tukwila is provided by King County Medic One. The nearest ALS unit is located at S 208th Street and 72nd Avenue S in the City of Kent, approximately three miles from the Tukwila South site. Patients are transported to various hospitals in the Puget Sound region, depending on the type of problem. Valley Medical Center is the closest hospital to the site and is located approximately 2.5 miles from the Tukwila South site.

Law Enforcement

Tukwila Police Department

The Tukwila Police Department divides the approximately nine square miles of the City into five patrol districts. The T-3 patrol district covers the portion of Tukwila located south of I-405 and east of I-5. The Police Department Headquarters is located at 6200 Southcenter Boulevard. The Tukwila Police Department employs 68 commissioned police officers and 17 non-

commissioned staff. In addition, citizen volunteers participate in community policing activities and programs.

The Department is organized into two main divisions – Patrol Services and Investigative Services. Patrol officers work 12-hour shifts; staffing includes a minimum of five patrol officers and one supervisor, with up to eight patrol officers and one sergeant that may be scheduled. A traffic unit (two officers and one sergeant) supplements the patrol staffing Monday through Friday, during daytime hours.

The Investigative Services Division includes the Major Crimes Unit, Tukwila Anti-Crime Team, and the Crime Prevention Unit. Staffing includes eight detectives which, in addition to several officers, are assigned to the different units. Community policing and crime prevention services are provided by the Tukwila Police Community Resource Center at Westfield Shoppingtown Southcenter and the Neighborhood Resource Center, located along Highway 99.

The Tukwila Police department determines personnel requirements based on the number of calls for service and level of crime versus a ratio of officers to population. The Tukwila Police Department meets annually with the Mayor's office to determine staffing levels and equipment needs. As described above for the Fire Department, Police Department operations and maintenance expenditures are funded through the City's general fund and are assumed, for planning purposes, to increase by four percent per year between 2005 and 2009. No capital equipment purchases are currently identified in the CIP.

Incident History

Total annual calls for police service for the past five years are listed in Table 3.15-2. Total Part I crimes (representing the more serious offenses of violent crimes and major property crimes) are shown in Table 3.15-3. Annual call volumes and total Part 1 crimes decreased each year between 1999 and 2002. Annual calls increased in 2003 slightly over 2002 levels. Total Part I crimes increased in 2003 to levels above those experienced in 2000 - 2002. Overall, total Part I crimes have averaged approximately 10 percent of the overall calls for service each year. Crime data provided by the City of Tukwila for the Segale Business Park indicate an average of approximately 11 Part 1 crimes per year over the last five years. From 2001 to 2003, the Department responded to an annual average of between 430 and 446 calls for service per officer (City of Tukwila Police Department 2003 Annual Report).

**Table 3.15-2
TOTAL NUMBER OF CALLS FOR POLICE SERVICE, CITY OF TUKWILA, 1999 TO 2003**

Year	Total Number of Calls	Percent Change
1999	32,683	
2000	31,189	-4.57%
2001	30,671	-1.66%
2002	30,106	-1.84%
2003	30,337	0.76%

Source: City of Tukwila Police Department 2003 Annual Report.

**Table 3.15-3
TOTAL PART I CRIMES, CITY OF TUKWILA, 1999 TO 2003**

Year	Property Crimes	Violent Crimes	Total Part I Crimes
1999	3,140	140	3,280
2000	2,967	129	3,096
2001	2,814	147	2,961
2002	2,597	151	2,748
2003	2,954	200	3,154

Source: City of Tukwila Police Department 2003 Annual Report.

The response time for emergency police calls (those that require an immediate response) ranged from between 3.0 and 3.6 minutes for Priority 1 calls (where a threat to life exists), and from between 8.9 and 10 minutes for Priority 2 calls (where a substantial risk of major property loss or damage exists) during the 2001-2003 time period. Response times for non-emergency calls ranged between 17.2 and 20.4 minutes for the 2001-2003 time period (Tukwila Police Department, 2003).

Schools

The Tukwila South site lies mostly within the Renton and Kent School Districts (the southern boundary for the Tukwila School District is S 180th Street). School District boundaries are not subject to change based on annexations of property by jurisdictions. As such, this chapter assumes that the portions of the site within the Renton and Kent School Districts would remain as is and the site would continue to be served by the respective Districts in the future.

The portion of the site located between S 180th Street and S 192nd Street is located within the Renton School District #403. The remainder of the site south of S 192nd Street is located within the Kent School District #415. Figure 3.15-1 shows the boundaries of the school districts relative to the site.

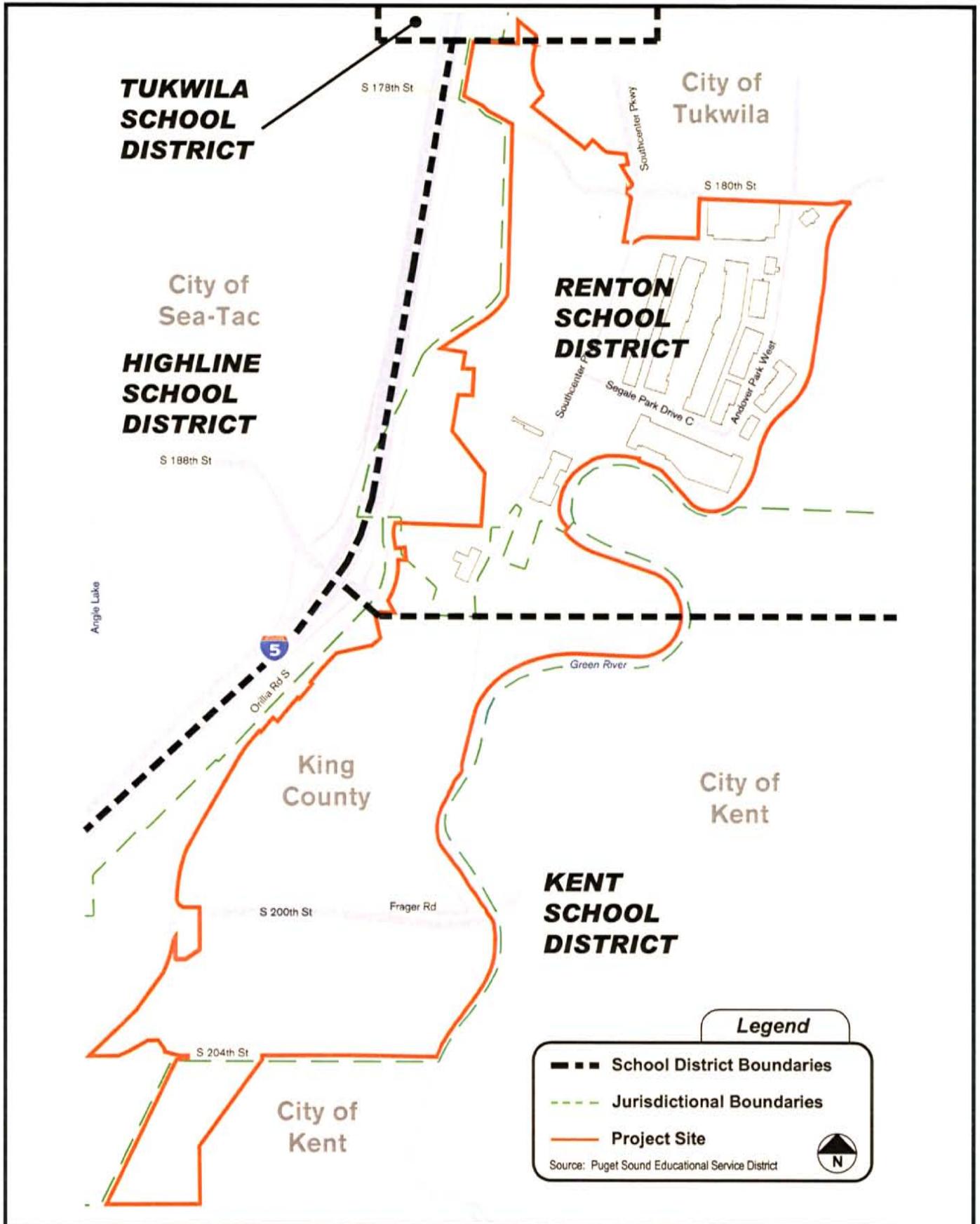
Renton School District

The Renton School District #403 covers an area of 32.5 square miles and serves approximately 13,000 students. The District operates 13 elementary schools, three middle schools, three high schools, two alternative high schools, and one early childhood center for pre-school and kindergarten students.

School service areas determine which schools children attend. The site lies within the Talbot Hill Elementary School service area and the service area for Dimmitt Middle and Renton High Schools. Talbot Hill Elementary is located approximately two miles northeast the site. Dimmitt Middle School and Renton High School are located approximately 3.5 miles and three miles, north the site, respectively.

Enrollment Projections

District projections are based on a number of factors, including, in part, enrollment data, household size, birth rates, and residential construction rates and are developed to assist in



capital facilities planning efforts related to identifying future capacity constraints and forecasting the need for new or upgraded school facilities. Actual enrollment in a given year typically varies some from the projected enrollment. Table 3.15-4 shows the latest available district-wide six-year enrollment projections for the 2003 to 2008 time periods. Enrollment is projected to increase by about seven percent between 2005 and 2006 and then stay relatively stable through 2008.

**Table 3.15-4
RENTON SCHOOL DISTRICT ENROLLMENT PROJECTIONS, 2003-2008**

Year	October Projected Enrollment
2003	12,920
2004	12,933
2005	12,946
2006	13,826
2007	13,661
2008	13,689

Source: Renton School District, 2004.

The Renton School District also develops enrollment projections for individual schools that are consistent with its district-wide projections. Table 3.15-5 shows six-year enrollment projections for schools that serve the Tukwila South site.

**Table 3.15-5
ENROLLMENT PROJECTIONS FOR RENTON SCHOOLS SERVING THE SITE, 2003-2008**

School	October Projected Enrollment					
	2003	2004	2005	2006	2007	2008
Talbot Hill Elementary	547	559	575	587	617	639
Dimmit Middle School	902	888	896	903	895	896
Renton High School	890	865	859	870	859	833

Source: Renton School District, 2004.

Enrollment at Talbot Hill Elementary is projected to increase by an average of 15 students per year over the 2003-2008 time period. Enrollment at Dimmit Middle School and Renton High School is projected to decrease slightly over the 2003-2008 time period. In response to changing enrollment, the School District modifies the configuration of school service areas to make use of existing capacity. The School District is currently in the process of a comprehensive boundary review to evaluate the capacity of specific schools relative to existing school service areas. Assuming that increases in enrollment continue at current projected levels, the District anticipates having adequate capacity through its capital facilities planning period (2003-2008) (Fantasia, 2004).

Capital Facilities Planning

The Renton School District funds capital improvements primarily through bond measures, which are voted on by residents in the District, and paid off through an addition to the property tax of

property owners in the District. Individual school construction projects that meet state criteria are potentially eligible for state match funds. In 1992, the District passed a Capital Facilities Bond (Phase 1) to begin upgrading all of its facilities including replacement or renovation of all school buildings in three phases over 20 years. Additional bond measures were passed in 2001 and 2003. School District operations are financed by the state based on enrollment (76 percent), local levies (18 percent), and federal funds for special uses. The District puts forth a levy every two years for operating funds. The Renton School District does not collect impact fees on new residential development.

Transportation Services

Transportation services to District schools include busing for eligible students. The State reimburses the District for transportation costs for elementary, middle, and high school students who live more than 1 mile, 1.5 miles, and 2 miles, respectively, from the schools they attend. The District also receives reimbursement for transportation for students whose walk entails crossing a major roadway.

Kent School District

The Kent School District #415 covers an area of 72 square miles and serves approximately 25,300 students; it is the fourth largest school district in the State. The District operates 28 elementary schools, seven junior high schools, four high schools, and one K-12 school offering transition, choice and home schooling programs.

The site lies within the Neely-O'Brian Elementary School service area and the service area for Kent Junior High and Kent Meridian High Schools. Neely-O'Brien Elementary is located approximately 4.5 miles south of the site. Kent Junior High School is located approximately five miles southeast of the site. Kent Meridian High School is located approximately seven miles southeast of the site.

The Kent School District is currently in the process of moving to a two-year middle school and four-year high school system which will be implemented starting in the 2004-2005 school year. Additions to three high schools (described below) will add capacity to accommodate students in the 9th grade. Kent Junior High School is being remodeled and will re-open as a middle school in 2005.

Enrollment Projections

Table 3.15-6 shows six-year district-wide enrollment projections for the six-year 2004 to 2009 time period. Enrollment is projected to increase by an average of one percent annually.

For capital facilities planning purposes, the Kent School District develops six-year projections by grade level consistent with its district-wide forecasts; the District does not project enrollment for individual schools. Table 3.15-7 shows projected enrollment for elementary, middle and high school grade levels for the 2004 to 2009 time period.

**Table 3.15-6
KENT SCHOOL DISTRICT ENROLLMENT, 2003-2008**

Year	October Projected Enrollment
2004	25,546
2005	25,947
2006	26,341
2007	26,632
2008	26,830
2009	27,041

Source: Kent School District Capital Facilities Plan, 2004-2005 – 2009-2010.

**Table 3.15-7
ENROLLMENT PROJECTIONS FOR GRADE LEVELS, 2004-2009**

Grade Levels	October Projected Enrollment					
	2004	2005	2006	2007	2008	2009
Elementary (Grades K-6) ¹	12,942	13,054	13,201	13,371	13,480	13,642
Middle School (Grades 7-8)	4,446	4,468	4,469	4,480	4,527	4,559
High School (Grades 9-12)	8,158	8,425	8,671	8,781	8,823	8,840

Source: Kent School District Capital Facilities Plan, 2004-2005 – 2009-2010.

¹ Includes Early Childhood Education students (Pre-school, Special Ed).

Enrollment in the elementary grades (K-6, combined) is projected to increase by 5.4 percent over the 2004-2009 time period, equating to an annual average of 117 students per year. Enrollment in the middle school grades (7-8) is projected to increase by 2.5 percent over the 2004-2009 time period, equating to an annual average of 19 students per year. Enrollment in the high school grades (9-12) is projected to increase by 8.4 percent over the same time period, equating to an annual average of 113 students per year. Based on current enrollment projections, the District anticipates having sufficient capacity to house students over the next six years (Kent School District, 2004).

Capital Facilities Planning

The Kent School District funds capital improvements through state funding, bonds, and impact fees. Individual school construction projects that meet state criteria are potentially eligible for state match funds. Bond measures are voted on by residents in the District and paid off through an addition to the property tax. School District operations are financed by federal and state funds as well as local levies. The District puts forth a levy every four years for operating funds.

In 1990, 1994 and 2002, voters approved bond issues of \$105.4 million, \$130 million, and \$69.5 million, respectively, for capital improvements. Planned capital improvements included additions to three high schools to accommodate the 9th grade and the remodel of Kent Junior High School. The district owns sites for four future elementary schools, two future junior high schools, and one site for uses that have not been determined (Kent School District, 2004).

Impact Mitigation Fees. The Kent School District has established impact fees for all new single and multifamily residential development within its district in its Capital Facilities Plan (CFP). Kent School District impact fees are currently set at \$1,762 per new multifamily dwelling (Kent School District, 2004).

Student generation from residential development is one of the factors used in the Kent School District's formula for determining impact fees. Student generation factors are based on district records of the "average actual students generated" within developments completed in the last five years. The Kent School District's student generation factors for multifamily dwelling units are shown in Table 3.15-8.

**Table 3.15-8
KENT SCHOOL DISTRICT STUDENT GENERATION FACTORS**

School	Estimated Students per Multifamily Dwelling
Elementary (K-6)	0.293
Middle School (7-8)	0.069
Senior High (9-12)	0.114
Total	0.476

Source: Kent School District Capital Facilities Plan, 2004-2005 – 2009-2010.

Collection of impact fees is dependent on jurisdictions within the District adopting the Kent School District's CFP and a fee-implementing ordinance. The City of Tukwila has not adopted the CFP and an implementing ordinance (no portion of the Kent School District currently lies within the city limits).

Transportation Services

Transportation services to Kent District schools are the same as described for the Renton School District. The State reimburses the District for transportation costs for elementary, middle, and high school students who live more than 1 mile, 1.5 miles, and 2 miles, respectively, from the schools they attend. The District also receives reimbursement for transportation for students whose walk entails crossing a major roadway.

Maintenance of Public Facilities

The City of Tukwila Public Works Department provides maintenance of public facilities within the City, including: roads, traffic signals, street lighting, sewer and stormwater lines and stormwater detention ponds. Public roadways through the site include Southcenter Parkway, S 178th Street, S 180th Street and S 200th Street. The City provides maintenance of those portions of Southcenter Parkway, S 178th Street and S 180th Street within the city limits. A minimal amount of public street lighting associated with these roadways exists on or adjacent to the site. Existing water, sewer and stormwater facilities that serve the site are described in Section 3.16, Utilities and 3.2, Water Resources. Maintenance responsibilities for facilities in the unincorporated portions of the site (i.e. Frager Road) fall to King County.

3.15.2 Impacts

This section discusses potential impacts to public service agencies related to infrastructure construction and development of future land uses assumed under Alternatives 1 and 2 and the No Action Alternative. Implementation of the Tukwila South Master Plan, consistent with the vision and policies identified in the City's Comprehensive Plan, would result in the opportunity for a range of uses on the site, including campus research and office, retail, and residential uses. Future development of the site over the buildout period would result in gradual increases in employees and residents and, an associated increase in demand for public services.

Goals for the area identified in the City's Comprehensive Plan include improved connections to the airport, Tukwila Urban Center, and area transportation facilities. The Comprehensive Plan also identifies the expectation that the area will be annexed to the City. (It is anticipated that the site would be annexed to the City of Tukwila subsequent to the approval of the proposed Master Plan and a Development Agreement; refer to Chapter 2 of this Draft EIS for further discussion.) Upon annexation, the Tukwila Fire and Police Departments would assume primary responsibility for providing fire protection, basic life support (BLS) and law enforcement services to the site. The Tukwila Public Works Department would assume responsibility for streets and surface water facilities in the newly annexed area.

Alternatives 1 and 2

Infrastructure Development Phase

Fire Protection, Emergency Medical, and Law Enforcement

Under Alternatives 1 and 2, major utility infrastructure on the site would be constructed during the initial infrastructure development phase, which is estimated to occur over a three year time period (2006-2008). This would include the Southcenter Parkway extension, utility relocations/extensions, relocated flood protection barrier dike, stormwater facilities, and features of the Off-Channel Habitat Restoration Area. Refer to Chapter 2, Description of the Proposed Actions and Alternatives, for additional detail on the proposed sequence of construction activities.

Construction-related impacts on fire protection, emergency medical, and law enforcement service providers would include the potential for increases in calls for service related to injury, fire incidences, construction site theft and vandalism. In general, installation of the infrastructure system would be expected to generate a lower volume of police calls than would be associated with a building construction site (building construction on the site would not occur during the infrastructure development phase), where the number of required building inspections and potential for materials theft would be higher. Onsite security measures, including fencing and securing areas where equipment is stored, would be implemented to reduce the potential for construction-related incidents. Construction worker safety procedures would also be employed (see Section 3.15.3, below, for further discussion of mitigation measures). The Fire Department estimates that one additional inspector would be needed during the infrastructure development phase (Fire Chief Olivas, February 2005). Potential increases in call volumes over the duration of the infrastructure development phase would be expected to fall within the response capacity of the City's service providers.

Additional construction-related impacts on the Tukwila Fire and Police Departments would occur as the site is developed over the buildout period. Construction of between 10.3 and 14 million square feet of new development is assumed under the Proposed Actions (refer to Chapter 2 of this Draft EIS). The actual increases in call volumes would depend, in part, on the specific size (square footage) and type of development proposed, the duration of construction, and the security and safety measures implemented at the construction site. In addition, building inspections by the Tukwila Fire Department would be required on a regular basis over the life of the project.

Schools

No impacts to the Kent and Renton School Districts would be anticipated as a result of construction activities associated with Alternatives 1 and 2. Alternatives 1 and 2 would not be expected to generate significant construction-related population in-migration during the infrastructure development phase, based on the ability of the regional labor force to provide necessary construction skills (refer to Section 3.8, Socioeconomics for further discussion of potential population in-migration).

Maintenance of Public Facilities

Maintenance of new roads, traffic signals, street lighting, sewer and stormwater mains, and stormwater detention ponds related to Tukwila South development would become the responsibility of the City of Tukwila Public Works Department as construction of these facilities is completed (see Chapter 2 for a description of infrastructure to be constructed on the site). Maintenance of certain facilities would become the responsibility of the City during the infrastructure construction phase; therefore, an estimate of staffing needed to maintain such facilities is included in the analysis of this phase.

Estimated staff needs are based on information compiled by the City of Renton in April 2004, for a financial analysis of potential annexation areas (City of Renton, 2004 Potential Annexation Area and West Hill Fiscal Analysis, 2004). Estimated staffing to perform annual maintenance activities are shown in Table 3.15-9. The staff needs are shown per unit of each type of new infrastructure required by development at Tukwila South. As shown in Table 3.15-9, the total number of full time equivalent (FTE) staff to perform annual maintenance on new infrastructure under Alternatives 1 and 2, after all infrastructure is completed and dedicated to the City, is estimated at between 0.277 to 0.341 FTE, assuming new traffic signals would be required under Alternatives 1 and 2. The analysis presented herein describes maintenance needs for facilities that would be needed to serve development under Alternatives 1 and 2, and does not account for facilities that would be needed to serve background growth (see Section 3.12, Transportation, including Tables 3.12-10 and 3.12-11, for discussion of traffic signals needed to serve background growth). A signal at the Southcenter Parkway/Segale Park Drive C intersection would be required at 2015 under Alternatives 1 and 2. A signal could be required at the intersection of a site access roadway into Planning Area F (see Figure 2-3) and at the possible future new arterial access from Southcenter Parkway to Orillia Road.

It should be noted that maintenance of street and stormwater facilities would be required once improvements to Southcenter Parkway and S 178th Street are completed (during the infrastructure phase). Maintenance responsibilities related to new traffic signals and sewer facilities would be tied to installation of signals over buildout of the project and as development occurs (sewer flows are generated by new development).

**Table 3.15-9
ESTIMATED STAFF TO PERFORM ANNUAL INFRASTRUCTURE MAINTENANCE –
ALTERNATIVES 1 AND 2**

Staff Type	Estimated Staff to Perform Maintenance/Unit (Full Time Equivalent) ¹	Estimated Amount of New Infrastructure under Alternatives 1 and 2	Estimated Total Staff to Perform Annual Infrastructure Maintenance under Alternatives 1 and 2 (Full Time Equivalent)
Street maintenance worker	0.077/mile of street	1.63 miles ²	0.126
Traffic signal technician	0.032/signal	1 to 3 signals	0.032 to 0.096
Street signs/centerline technician	0.018/mile of street	1.63 miles ²	0.029
Sewer worker	0.032/mile of sewer pipe	1.5 miles	0.048
Stormwater worker	0.021/mile of stormwater line	2 miles	0.042
Estimated Total Maintenance Staffing to Maintain New Infrastructure			0.277 to 0.341 FTEs

Source: City of Renton 2004; Blumen Consulting Group 2005.

¹ Estimates represent the average for similar facility types across the entire City of Renton (City of Renton, 2004 Potential Annexation Area and West Hill Fiscal Analysis, 2004).

² Includes approximately 1.5 miles of new Southcenter Parkway and an increase in the length of S 178th Street of approximately 700 linear feet.

Full Buildout

Under Alternatives 1 and 2 at full buildout, a substantial amount of the assumed land use would be developed in research and office campus uses. Alternatives 1 and 2 would feature approximately 8.7 million square feet and 6.5 million square feet, respectively, in these uses, corresponding under both alternatives to approximately 60 percent of the total square footage under each alternative. Office and retail, restaurant, and hotel uses would encompass an additional 5.3 million square feet under Alternative 1 and 3.8 million square feet under Alternative 2. The balance of assumed square footage would be permanent multifamily residential use (1,900 and 700 units, respectively, under Alternatives 1 and 2). Refer to Chapter 2 of this Draft EIS for a description of the assumed land uses under each alternative.

Future development of the site over the buildout period would be incremental in nature; market forces, together with zoning regulations and development standards would ultimately determine the specific timing, level of development, and mix of uses over the long term. Development of assumed land uses would result in gradual increases in employees and residents and, an associated increase in demand for public services.

Fire Protection and Emergency Medical Service

New development assumed under Alternatives 1 and 2 would generate additional calls for fire protection and emergency services to the Tukwila South site. Based on the assumed land uses (described above), it is anticipated that the majority of calls would be generated from research/lab and retail space. Research/lab space for biotech/bioscience uses could result in added demands for emergency services due to the potential for handling of and exposure to sensitive materials (see Section 3.5, Hazardous Materials). It is impossible to accurately predict specific increases in the number of calls for service that would occur over the 22-year buildout period. The magnitude of calls for service to fire protection and emergency medical service (including King County Medic One) would depend on factors related to actual types, quantities, location, and design of different land uses and demographic characteristics. Campus-type development at this site, at the scale assumed, would represent a new type of land use not previously served by the City of Tukwila departments.

Campus-Type Development

There are few examples within the region of large-scale, urban campus-type development similar to that assumed at full buildout under Alternatives 1 and 2. The most comparable examples (for which data on calls for fire service was available) are the Microsoft campus within the City of Redmond and the Fred Hutchinson Cancer Research Center (FHCR) in Seattle. The Redmond Fire Department estimates calls for service at the Microsoft campus (which currently comprises approximately 6 million square feet) at about 1.5 calls per day (Ashmore, 2004). The majority of calls are related to provision of emergency medical service. Information from the City of Seattle Fire Department for FHCR (currently approximately 1.25 million square feet) identifies an average of 46 annual calls for service between the years 2000 and 2003. This information indicates that there is a wide range of call volumes from such comparable campus developments; however, it should be noted that each jurisdiction has different regulations regarding fire protection systems (i.e., fines for false alarms), which can affect call volumes.

Fire Station Needs

The City of Tukwila Fire Department (Station 51) would respond to calls for service to the site with additional assistance from other city stations and mutual aid districts as needed. Based on a survey of certain jurisdictions in the Puget Sound area conducted by Blumen Consulting Group in 2004, jurisdictions typically gauge the need for fire and emergency aid staffing, facilities, and apparatus on their ability to meet response time goals. The Tukwila Fire Department's response time goal is an average of four minutes; however, this is not an adopted standard. The Department estimates that response times at buildout under Alternatives 1 and 2 to the north end of the site from the existing Station 51 would be approximately 3.2 to 4.2 minutes (depending on traffic congestion and the time of day). This is the same response time as under existing conditions; however, actual response times could be longer due to background growth in the area over the next 20+ years. The Department estimates that response times to the south end of the site from the existing Station 51 would be approximately 6.2 to 7.5 minutes or longer.

In order to maintain its response time goal of four minutes, and effectively serve the site over the long term, the Fire Department has indicated that it would seek to relocate Station 51 to a site closer to S 180th Street at some point during the buildout period. The Department has also

indicated that the addition of a new fifth station would not be warranted (Fire Chief Olivas, September 2004 and February 2005). The specific timing of the relocation of Station 51, as well as the specific site, would be determined by the City based on future operational considerations, and actual growth at the Tukwila South site and in other parts of the service area. It is possible that the assumed level of development under Alternatives 1 and 2 over the long term would also require expanded personnel levels and fire and emergency response equipment to ensure adequate response levels to the site, depending upon the same considerations mentioned above.

If a relocated Station 51 continues to have the same level of equipment and staffing as under existing conditions, a facility of approximately 33,000 square feet with 3.5 apparatus bays would be required (the existing Station 51 houses all Department day staff and training functions, rescue equipment, etc.). If additional equipment is necessary, the station would need to include more apparatus bays. Based on research conducted by Blumen Consulting Group (including data provided by the Tukwila Fire Department and the Lacey, Washington Fire Department which recently constructed 3 new fire stations), stations could range from approximately 3,500 to 10,000 square feet for a 2-bay station, to up to 33,000 square feet for an 8-bay Headquarters station (as in Lacey), with specific square footage based on the number of apparatus bays, and whether dormitory facilities and other spaces, such as meeting rooms, are included.

A site near or within Tukwila South would be required for the Station 51 relocation, in order to meet the department's response time goal of 4 minutes to all portions of the site. Site sizes for fire stations vary significantly depending on the availability and cost of land in a specific area, configuration of a site, amount of developable area and the density of surrounding development, and typically range from less than one acre to over two acres. Large stations within dense urban areas may be located on smaller sites than smaller stations in low-density areas. The Department has indicated, however, that a site of up to 4 to 6 acres could be needed to serve existing and future Department needs and anticipated growth, at the Tukwila South site, as well as other development in the area (this figure assumes that future fire protection standards would necessitate development of the station in a one-story configuration) (Fire Chief Olivas, March 2005).

Other Potential Staffing Needs

The Department has further indicated that a relocated Station 51 would likely be expanded to accommodate additional equipment and staffing in the future. The Department indicated that a ladder truck could be required, depending on the number of high-rise buildings (above 4 stories) on the Tukwila South site and in other parts of the service area. If additional equipment is purchased for an expanded Station 51, staffing requirements would also increase. The addition of a ladder truck, for example, would require a minimum of 16 to 20 additional staff in the Department. The addition of an engine would require a minimum of 12 to 15 additional staff in the Department (Fire Chief Olivas, February 2005). Construction of a relocated station would require a funding mechanism that would allow a large lump sum expenditure, and addition of new fire equipment to the Department, if needed in the future, would necessitate new staff for such equipment that would be added at one time rather than incrementally.

All new buildings on the site would be constructed in compliance with the City of Tukwila International Building Code and Fire Code regulations (see Mitigation Measures, below). Adequate fireflow for new development would be required (refer to Section 3.16, Utilities, for additional information).

At full buildout, it is estimated that two to three additional fire inspectors would be needed to handle the added workload of inspecting development under Alternatives 1 and 2. The need for these inspectors would transition incrementally as buildings are developed. One inspector would likely be needed during the initial part of development, and the need for two to three would develop over full buildout of the site for periodic compliance checks (Fire Chief Olivas, February 2005).

New development assumed under Alternatives 1 and 2 would add to the City of Tukwila's tax base, which could help offset incremental increases in demand for public services. Construction sales tax, retail sales tax, and property tax revenues, would all be sources of revenue for the City and King County. Portions of tax revenues could potentially be available to fund City capital projects. Development assumed under the alternatives would also add to the tax base for the City's General Fund (for operations) through fees, licenses and permits, utility taxes, etc.

Law Enforcement

New development assumed under Alternatives 1 and 2 would generate additional calls for police services to the Tukwila South site. As described above under Affected Environment, the City is divided into five patrol districts. The site is located in the T-3 Patrol District, which covers the area east of I-5 and south of I-405. Initially, the T-3 Patrol District would be expanded to include the site; over the long-term, if warranted, this Patrol District could be separated and a sixth district within the City could be formed (Police Chief Haines, September 2004). It is possible that the site could be divided into two patrol districts, depending on the actual density of development that would result in the future (Officer R.W. Abbott, February 2005). Shifts in patrol patterns could be warranted to ensure adequate response times throughout the City.

Officer Staffing

The demand for police service is typically gauged either in terms of number of officers per capita population or annual calls for service. The Tukwila Police Department determines personnel requirements based on the number of calls for service and level of crime, as opposed to using a ratio of officers to population.

The City's ratio of police officers to population is one of the highest in the region at approximately four officers per 1,000 population. This is substantially higher than other cities in the region, based on data collected by the Washington Association of Sheriffs and Police Chiefs (WASPC; 2003). Washington State cities ranging from 10,000 to 25,000 in population had an average of 1.58 commissioned officers per 1,000 population in 2003. The Police Department attributes this high ratio to two primary factors: the unique geographic characteristics of the City (its north to south linear configuration) and the high daytime population associated with the City's significant employment base (Haines, 2004). The City is bisected by two major freeways (I-5 and I-405) that act as functional barriers and serve to increase response time between areas.

For similar reasons as described above under Fire Protection, it is not possible to accurately predict specific increases in the number of calls for service that would occur over the 22-year buildout period, and to equate this with a specific number of additional officers that would be needed in 2030. However, for this EIS analysis, possible future officer staffing needs were projected based on two methods: 1) the number of officers to serve the site was projected based on future residential population and the existing level of officers to population in the City

of Tukwila (this method accounts for demand for non-residential uses, if the proportion of residential to commercial uses remains constant in the City in the future; and, 2) projections of calls for service from future land uses under Alternatives 1 and 2 (research/office, retail, hotel, and residential) based on research of comparable developments in the City/region, and application of Tukwila's existing ratio of officers to annual call volume to the total projected number of annual calls under the alternatives.

Estimate of Officers Based on Existing Ratio of Officers to Population. Under the first method, the City's existing ratio of police officers to population, (which assumes that the proportion of commercial space relative to population remains relatively constant), was used to determine a range of additional officers that could be required in the future, based on Alternatives 1 and 2. The ratio of officers to population in 2001-2003 was four officers per 1,000 population, based on data provided in the Tukwila Police Department 2003 Annual Report. At full buildout (2030), the permanent resident population capacity on the site is estimated to range from approximately 1,500 (Alternative 2) to 4,100 (Alternative 1) (refer to Section 3.8, Socioeconomics). Using the City's existing ratio of four officers per 1,000 population, between 6 and 17 additional officers could be necessary at full buildout of the site.

Estimate of Officers Based on Call Volumes to Specific Land Uses. For the second method, data was collected on the demand for police services (annual call volumes) from other campus-style research and office developments, retail developments, hotels and residential developments in the City/region. The available data are summarized in Table 3.15-10. Based on the available data from campus-style research and office developments, between 57 and 139 calls annually per 1,000,000 square feet of research and office uses is assumed. Based on the available data from retail developments, between 391 and 2,290 calls annually per 1,000,000 square feet of retail uses is assumed. Data on the demand for police services (call volumes) from hotel uses was provided by the Tukwila Police Department for five hotels generally located in the vicinity of the site within the City of Tukwila. Based on the data collected for hotels, an average of 0.37 calls annually per guest room is assumed. Data on the demand for police services (call volumes) from residential uses was provided by the City of Tukwila based on Police Department Reporting Districts 40, 250 and 280, which contain primarily residential uses, including a significant amount of multi-family residential uses. Based on the available data for residential uses, an average of 1.7 calls annually per residential unit is assumed. These assumptions provide the basis for the estimated range of future annual calls for service from the site at buildout under Alternatives 1 and 2.

Table 3.15-10 summarizes the available data on annual calls for service from campus-style office and retail uses in the Puget Sound region and from hotel and residential uses in specific portions of Tukwila, as described above. Call volumes vary considerably among the developments and areas for which data was available. It should be emphasized that the projection of calls and associated police officers is based on available data from a limited set of developments/areas. Actual demands from Tukwila South could be similar to, or markedly different from, that indicated herein. This data is presented as an "order of magnitude" analysis of possible impacts from a proposed project in which the specific mix and types of use could vary substantially over the 25-year buildout period.

Based on the data summarized in Table 3.15-10 and the assumed uses under Alternatives 1 and 2, Alternative 1 could generate a total between 4,782 and 8,582 annual calls for police service at full buildout, as shown in Table 3.15-11. Alternative 2 could generate a total of between 2,332 and 4,943 annual calls for police service at full buildout. Based on the City of

Tukwila's existing average of 440 calls handled per officer annually (from 2001-2003 as shown in the Tukwila Police Department 2003 Annual Report), between 10.9 and 19.5 officers could be required to serve Alternative 1 at full buildout, and between 5.3 and 11.2 officers could be required to serve Alternative 2 at full buildout.

**Table 3.15-10
ANNUAL CALLS FOR POLICE SERVICE FROM LAND USE CATEGORIES**

Use or Existing Development	Annual Calls for Service per 1,000,000 Square Feet or Unit
Research/Office	
Microsoft Campus ¹	57 calls per million square foot
Bellefield Office Park ²	139 calls per million square foot
Retail	
Redmond Town Center ³	412 calls per million square foot
Bellevue Square ⁴	391 calls per million square foot
Westfield Shoppingtown Southcenter ⁵	2290 calls per million square foot
Auburn Supermall ⁶	769 calls per million square foot
Hotel	
Southcenter and Tukwila South area hotels ⁷	0.37 calls per room
Residential	
Tukwila Police Reporting Districts 40, 250 and 280 ⁸	1.7 calls per residential unit

Source: Blumen Consulting Group, 2005

- ¹ Microsoft Campus calls are for 2003, provided by Redmond Police Department; the Microsoft campus is assumed to contain 6 million square feet, per the Redmond Planning Department.
- ² Bellefield Office Park calls are an average of 2003 and 2004 calls, provided by the Bellevue Police Department; call data represents demand from a total of 295,596 square feet of office park uses.
- ³ Redmond Town Center calls are for 2003, provided by the Redmond Police Department; the center is assumed to contain 1.7 million square feet per the Redmond Planning Department; the call volume and square footage include some office uses.
- ⁴ Bellevue Square calls are an average of 2003 and 2004 calls, provided by the Bellevue Police Department; Bellevue Square includes 1.3 million square feet.
- ⁵ Westfield Shoppingtown Southcenter calls shown are as stated in the Westfield Shoppingtown Southcenter Expansion EIS and represent November 2002 to November 2003 calls. Approximately 16 percent of calls from Southcenter are 911 hangup calls; typically, mall security responds to these rather than the Tukwila Police Department.
- ⁶ Auburn Supermall calls are an average of 2003 and 2004 calls, provided by the Auburn Police Department; the Supermall includes 925,795 square feet.
- ⁷ Hotel data was provided by the Tukwila Police Department and represents 2003 and 2004 call volumes to hotels in the Southcenter and Tukwila South vicinity.
- ⁸ Residential calls are an average of 2002-2004 calls for Tukwila Police Reporting Districts 40, 240 and 280 provided by the Tukwila Police Department; these districts include primarily residential uses with a substantial amount of multifamily uses. The number of housing units in these districts was calculated based on Census Block data from the 2000 U.S. Census.

In summary, at full buildout in 2030, development of Tukwila South under Alternatives 1 and 2 could result in a need for an additional 5.3 to 19.5 police officers, according to the above estimates. It is assumed that this need for additional police officers would be realized incrementally over the 25-year buildout period.

The Tukwila South Master Plan is intended to accommodate the needs of national and international emerging technology industries and institutions (refer to Section 2.2, Purpose and Need, of this Draft EIS for additional discussion). Based on the specific types of research and development and/or other activities that are typically associated with these uses, adequate onsite security would likely be a critical component at the Tukwila South site. Therefore, it is

**Table 3.15-11
ESTIMATED ANNUAL CALLS FOR POLICE SERVICE UNDER ALTERNATIVES 1 AND 2**

Use	Square Feet (Units)		Estimated Calls ¹	
	Alternative 1	Alternative 2	Alternative 1	Alternative 2
Research/Office/Lab/Flex-Tech	9,611,000	7,811,000	548 to 1,330	445 to 1,083
Retail/Restaurant	1,589,000	1,039,000	621 to 3,639	406 to 2,379
Hotel	880 rooms	730 rooms	326	270
Residential	1900 units	700 units	3,287	1,211
Total Estimated Annual Calls for Service			4,782 to 8,582	2,332 to 4,943
Estimated Number of Officers Needed²			10.9 to 19.5	5.3 to 11.2

Source: Blumen Consulting Group, 2005

¹ Estimated calls are based on averages for each use category in Table 3.15-10

Alternative 2 includes 500,000 square feet of flex-tech uses; for purposes of this analysis, the office rate of calls per square foot shown in Table 3.15-10 was applied to this use (this is likely a conservative assumption).

² Based on an average of 440 calls handled per officer annually as calculated from 2001-2003 data shown in the Tukwila Police Department 2003 Annual Report.

likely that an onsite security force(s) would be employed which could reduce some demands on the City of Tukwila departments. In particular, onsite security could reduce the demand for preventative patrols.

In addition, certain research and development uses at the site could result in the need for specialized training for the Police Department relative to hazardous material handling. Further, depending upon specific uses, homeland security issues could arise, also requiring specialized training and equipment.

In general, site design for campus environments typically would include features intended to help reduce potential criminal activity onsite. Such features could include design elements that promote visibility, orient buildings towards sidewalks, streets, and/or public spaces to enhance the safety of focal points for social gathering, provide convenient pedestrian connections between buildings, minimize "blind" areas, and provide lighting. In addition, open spaces between buildings could be designed to be visible and centrally located.

Support Staff

An increase in the number of non-commissioned Police Department support staff would also be required to serve development under Alternatives 1 and 2. The Tukwila Police Department indicates that the amount of retail uses provides an effective means for estimating the need for detectives. One and a half detectives currently serve the existing approximately 1.44 million gross square feet of retail uses (including mall common areas and service areas, prior to the mall's planned expansion) at Westfield Shoppingtown Southcenter. Based on the approximately 1.04 to 1.59 million square feet of assumed retail uses at Tukwila South under

Alternatives 1 and 2, 1.5 detectives could be needed to serve development under Alternatives 1 and 2 at buildout (Officer R.W. Abbott, February 2005). Experience at Westfield Shoppingtown Southcenter was used to estimate other potential staffing needs, as described below.

The Department currently has four traffic enforcement officers which serve the overall City. Based on the Police Department's calculation of the future daytime population of Tukwila South (including retail customers), one additional traffic enforcement officer could be needed to serve the site at buildout (Officer R.W. Abbott, February 2005).

The Department currently has two service transport officers which serve the overall City. Based on the estimated number of calls for service to retail uses and the types of crimes expected to occur at retail uses (such as shoplifting), one additional service transport officer could be needed to serve development under Alternatives 1 and 2 at buildout (Officer R.W. Abbott, February 2005).

The Department currently has eight support staff which serve the overall City. Based on the estimated number of calls and officer staffing needs, an additional three support staff members could be required to serve development under Alternatives 1 and 2 at buildout (Officer R.W. Abbott, February 2005).

If retail uses on the site do not ultimately generate as many calls as Westfield Shoppingtown Southcenter, fewer support staff would likely be required. As with the need for officers, it is assumed that the need for additional support staff would be realized incrementally over the 25-year buildout period.

Police Facilities

The Department has indicated that, based on response time goals and operational requirements, development on the site under Alternatives 1 and 2 could be more efficiently served with the location of a second, outlying police facility on or near the site. Such a facility would allow officers to file reports and return to the field to respond to calls without driving to Police Headquarters at City Hall. Such a facility would require approximately 850 square feet or could be combined with another facility, such as a fire station or within retail development.

As discussed above for Fire Protection, new development assumed under Alternatives 1 and 2 would add to the City of Tukwila's tax base, which could help offset increases in demands for service.

Schools

As described above under Affected Environment, the Kent School District impact fee formula includes a student generation factor for single and multifamily residential development. Multifamily student generation rates are based on the District's survey of 18 multifamily developments within the District. The Renton School District does not have an impact fee program in place and has not calculated student generation rates for residential development. For purposes of this analysis, Kent School District student generation rates are used to project potential total enrollment impacts to the two school districts combined, from assumed residential development under Alternatives 1 and 2. Table 3.15-12 shows the projected number of students at the elementary, middle, and high school grade levels at full buildout under Alternatives 1 and 2.

Residential development assumed under Alternatives 1 and 2 would generate additional student enrollment within the Kent and Renton School Districts on an incremental basis over the 22-year buildout period. At full buildout, the total number of students residing onsite could range from 333 to 904 using the Kent School District student generation factor. Future residential use under Alternatives 1 and 2 is assumed to occur in Planning Area B (Alternative 1 only), D, F, G, and H and would be spread fairly evenly across the site. The boundary line between the Renton and Kent School Districts bisects the site east to west through Planning Area F at about S 192nd Street (refer to Figure 3.15-1). For purposes of this analysis, it is assumed that such enrollment would likely be spread evenly between the two districts as well. Based on the distance of existing schools in the Renton and/or Kent School Districts from the site, students would need to be bused to all school facilities.

**Table 3.15-12
PROJECTED K-12 STUDENT GENERATION, ALTERNATIVES 1 AND 2**

Grade Level	Student Generation Rate	Alternative 1 1900 Multifamily Units	Alternative 2 700 Multifamily Units
Elementary (K-6)	0.293	557	205
Middle (7-8)	0.069	131	48
High School (9-12)	0.114	217	80
Total	0.476	904	333

Source: Kent School District Capital Facilities Plan, 2004-2005 – 2009-2010.

As indicated under Affected Environment, the Renton and Kent School Districts anticipate adequate capacity to house forecasted enrollment through 2008 and 2009, respectively. The school districts review enrollment vs. capacity on an annual basis. Alternatives 1 and 2 would not generate a substantial number of students through 2009 (the infrastructure development phase would occur over a three-year period, concluding in 2008). Given the assumed 22-year buildout of Tukwila South, it is not feasible to assess enrollment versus capacity issues over the long-term for the Renton and Kent School Districts. It is assumed that enrollment in future years would be adequately planned for by both districts through their capital facilities planning efforts, such that capacity would be provided to meet future needs.

Over the long term, adjustments in specific school service boundaries may be warranted, as well as future bond issues and levies, to serve general growth in both districts over the next 22 years. New development and associated funds from property taxes and/or impact fees (City of Kent) would help offset increases in demands for school services.

Maintenance of Public Facilities

Staffing needs associated with maintenance of new public roads and utilities is outlined above under infrastructure development phase. Such staffing needs would be assumed to continue at full buildout. As discussed above and shown in Table 3.15-9, the total number of full time equivalent (FTE) staff that could be required to perform maintenance on new infrastructure under Alternatives 1 and 2 is estimated at between 0.277 to 0.341 FTEs, assuming one to three new traffic signals would be required in the future to serve Alternatives 1 and 2.

Indirect/Cumulative

Fire Protection, Emergency Service and Law Enforcement

As described above under Affected Environment, the SeaTac Fire Department currently provides service to the portion of the Tukwila South site located in unincorporated King County (Fire District #24). The Tukwila Fire Department would assume jurisdiction over the site upon annexation. The City of Tukwila Fire Department has mutual aid agreements in place with surrounding jurisdictions, including the Cities of SeaTac and Kent. Response from the fire departments of surrounding jurisdictions is dependent primarily on the specific location and severity of the call for service. Over time, as the site builds out, calls requiring mutual aid response could increase, based on the assumed levels of development. Firefighters from the Cities of Kent and SeaTac could be called upon to respond to calls for fire and emergency services.

Police protection to the portion of the Tukwila South site currently located in unincorporated King County is provided by both the King County Sheriff's Office and the SeaTac Police Department. The Tukwila Police Department would assume jurisdiction over the site upon annexation. The City of Tukwila Police Department also has mutual aid agreements in place with surrounding jurisdictions; however, calls for mutual aid occur on a limited basis (Baskin, October 2004) and in general, are substantially fewer than those associated with fire protection. Requests for mutual aid typically depend on the type and location of the call for service. Over time, as the site builds out, the potential for calls requiring mutual aid response could increase based on the assumed levels of development. For example, given the proximity of the site to SeaTac and Kent, police from those cities could be called on to respond to traffic accidents. The Tukwila Police Department would provide all follow-up to any situation that utilizes mutual aid.

In general, public service providers that do not have primary jurisdiction over the Tukwila South site would not be expected to experience significant increases in demand for services from assumed development over the long term. No significant indirect or cumulative impacts to fire protection, emergency service, and law enforcement public service providers would be expected under Alternatives 1 and 2.

Schools

Under Alternatives 1 and 2, new permanent employment and residential capacity within the site would be generated by long-term development of the Tukwila South area. New employment such could also act as a potential draw for relocating or in-migrant employees. It is anticipated that such employees would choose to reside in neighborhoods located throughout the Puget Sound area, including within the City of Tukwila and surrounding jurisdictions (e.g., SeaTac, Kent, and Renton). Refer to Section 3.8, Socioeconomics, for additional discussion of potential in-migration.

The City of SeaTac lies within the Highline School District. The eastern boundary of the Highline School District generally follows I-5; areas west of the site and west of I-5 and Orillia Road within the City of SeaTac lie within the Highline School District. There are four elementary schools, one middle school, and one high school within approximately two miles of the site, west of I-5. Highline School District's Capital Facilities Improvement Plan (2002) calls for replacement, renovation, and/or expansion of each of these schools between 2004 and 2009.

The Highline School District could experience some additional enrollment as a result of potential in-migrant population (associated with new employment capacity) choosing to locate in the City of SeaTac. In addition, families residing onsite within the Renton or Kent School Districts could also choose to apply for enrollment in the Highline School District in the future. The potential for such enrollment requests would not be considered significant, given the total number of students that could be generated from the site and the anticipated distribution of in-migrant population throughout the region. Students from other districts are evaluated by the Highline School District for placement on a space-available basis; no busing for out-of-district students is provided. In the 2003-2004 school year, out of district students represented approximately 1.5 percent of the total District enrollment.

Development of the site is anticipated to occur on an incremental basis over the 22-year buildout period; as such, new onsite residential and employee-generated in-migrant population would also occur gradually. Further, the location of the Highline District schools west of I-5, a major transportation corridor that could be perceived as a functional barrier between the site and the City of SeaTac, could also act to limit the interest of onsite families to apply for relocation to the Highline District. No significant indirect or cumulative enrollment impacts to the Highline School District or other districts in the area would be anticipated.

Maintenance

Development under Alternatives 1 and 2 would add employment and residential population to the site, and would also result in indirect increases in employment and potentially residential population that would likely be distributed across the area. Such increases could result in an increase in the need for maintenance of public facilities (i.e., roads, utilities, etc.) within the City of Tukwila and other jurisdictions in the region. Indirect increases in demands for maintenance would likely be distributed among a number of cities and would not be expected to be significant.

No Action Alternative

Construction

Under the No Action Alternative, the major infrastructure development phase at the outset of the project (as described in Chapter 2, Description of the Proposed Actions and Alternatives, of this EIS) would not occur. It is assumed that extension of Southcenter Parkway to S 200th Street and installation and upgrade of utilities would occur. Construction activities onsite would correlate more directly with specific development projects. Similar to Alternatives 1 and 2, the types of construction-related impacts on fire protection, emergency service, and law enforcement service providers would include the potential for calls related to construction site theft, vandalism, injury and fire incidences. Construction-related calls for service would likely be less than under Alternatives 1 and 2, based on the significantly lower amount of new development assumed.

Full Buildout

Under the No Action Alternative, it is assumed that the existing Segale Business Park would remain. Approximately 1.5 million square feet (of the 2.0 million new square footage assumed) onsite would be developed in warehouse/office and industrial land uses. The remaining 500,000 square feet, developed over the 22-year buildout period, is assumed as retail big box

and retail service uses. The No Action Alternative does not assume new residential development; all calls associated with new development would be generated, therefore, from assumed warehouse, industrial and big-box retail uses. It is assumed that annexation of the portion of the site in unincorporated King County would occur at some point in the future; therefore, the City of Tukwila would assume full responsibility for fire protection and police service to the site.

Fire Protection and Emergency Service

There would be a significantly lower level of onsite activity under the No Action Alternative as compared to Alternatives 1 and 2; subsequently, it would be expected that there would be substantially fewer additional calls for fire protection and emergency service. In order to characterize the existing call volumes generated by a lower density type of office/warehouse development, the City of Tukwila Fire Department provided call data for fire and emergency aid services to the existing Segale Business Park for 2002 and 2003. Total annual calls to the Segale Business Park were 16 in 2002 and 20 in 2003. The amount of square footage in the office/warehouse land use category would approximately double at full buildout under the No Action Alternative (as compared to existing square footage), resulting in an increase in calls for service. Retail development at the site would also result in increases in calls for service. It would be expected that incremental increases in overall calls for service to the Tukwila Fire Department and King County Medic One from development under the No Action Alternative would be within an adequate response capacity of these agencies. However, response times could be an issue in the future. Depending upon the actual amount of development that results in the future (as well as other growth in the service area) relocation of Station 51 could be required under the No Action Alternative.

Law Enforcement

Development of the site under the No Action Alternative would generate some additional calls for service; however, such call volumes would not be expected to be significant. In general, areas that are characterized by mixed-use development and a lot of human activity typically generate more calls for service than areas characterized by lower density office and warehouse uses and lower human activity. Crime data for Part 1 crimes (more serious crimes) was provided by the City of Tukwila for the Segale Business Park and two big-box retail stores (Costco and Home Depot) located in the City from 1999 to 2003. For the Segale Business Park, Part 1 crimes averaged approximately 11 per year over the five year period. For Costco and Home Depot, Part 1 crimes averaged 31 per year. These crime levels represented approximately 0.3 percent and 0.9 percent of total Part 1 crimes in the City on an overall basis in 2003 (refer to Table 3.15-3).

The No Action Alternative is assumed to include 527,000 square feet of retail uses and 1,480,000 square feet of new industrial and warehouse uses. Based on the available data for retail uses (as described above under Alternatives 1 and 2), from 206 to 1,206 annual calls for service could be generated from new onsite retail uses. Rates for office uses (as described above under Alternatives 1 and 2) were used to estimate calls from industrial and warehouse uses (this is likely a conservative assumption). Based on the available data for office uses, from 84 to 205 annual calls for service could be generated from new onsite industrial and warehouse uses. Therefore, at buildout of the No Action Alternative, total call volumes for police services from new uses would range from 290 to 1,411 annual calls. Based on the Tukwila Police Department's existing calls per officer ratio of 440 calls, from 0.7 to 3.2 officers could be

required to handle the estimated volume of calls at buildout. The need for support staff would be lower than under Alternatives 1 and 2. It is assumed that a police substation on the site would not likely be required in the future under this Alternative.

Schools

No significant impacts to the Renton or Kent School Districts would likely occur under the No Action Alternative as no new residential land use is assumed. Any employment-related population in-migration or relocation to areas within these Districts or other surrounding districts would likely be minor (refer to Section 3.8, Socioeconomics).

Maintenance of Public Facilities

Under the No Action Alternative, it is assumed that the portion of the site in unincorporated King County would be annexed to the City at some point in the future. Therefore, as under Alternatives 1 and 2, maintenance of new roads, traffic signals, street lighting, sewer and stormwater mains, and possibly stormwater detention ponds would become the responsibility of the City of Tukwila Public Works Department as these facilities are constructed. The No Action Alternative assumes that a similar length of improvement to Southcenter Parkway would occur as under Alternatives 1 and 2; however, the S 178th Street realignment would not occur, and that street would not increase in length. The overall length of stormwater and sewer pipes under this alternative is assumed to be similar to Alternatives 1 and 2. No traffic signals are assumed to be needed beyond those that would be needed to serve background growth in the area (see Section 3.12, Transportation, including Tables 3.12-10 and 3.12-11, for discussion of traffic signals needed to serve background growth).

Estimated annual maintenance staffing needs per unit of various facilities (based on information compiled by the City of Renton for its 2004 Potential Annexation Area and West Hill Fiscal Analysis, 2004) are shown in Table 3.15-13, along with the estimated annual staffing needs under the No Action Alternative. As shown in Table 3.15-13, the total number of full time equivalent (FTE) staff to perform maintenance on new infrastructure under the No Action Alternatives is estimated at 0.233 FTE, as compared to 0.277 to 0.341 FTE estimated for Alternatives 1 and 2.

Indirect/Cumulative

Under the No Action Alternative, public service providers that do not have primary jurisdiction over the Tukwila South site would not be expected to experience significant increases in demand for services, for reasons similar to those discussed under Full Buildout, above. No significant indirect or cumulative impacts to fire protection, emergency service, law enforcement, schools or maintenance would occur under the No Action Alternative.

3.15.3 Mitigation Measures

Future increases in employment and population over the next 22 years would be incremental and would be accompanied by increases in demands on public service agencies. As discussed above under Impacts, a portion of the tax revenues and fees generated from development of the site—including construction sales tax, retail sales tax, property tax, utilities tax, real estate

excise tax, and fees, licenses, and permits—would accrue to the City of Tukwila and King County to help offset demands for public services.

**Table 3.15-13
ESTIMATED STAFF TO PERFORM INFRASTRUCTURE MAINTENANCE**

Staff Type	Estimated Staff to Perform Maintenance/Unit (Full Time Equivalent)¹	Estimated Amount of New Infrastructure under Alternative 3	Estimated Total Staff to Perform Infrastructure Maintenance under Alternatives 1 and 2 (Full Time Equivalent)
Street maintenance worker	0.077/mile of street	1.5 miles	0.116
Street signs/centerline technician	0.018/mile of street	1.5 miles	0.027
Sewer worker	0.032/mile of sewer	1.5 miles	0.048
Stormwater worker	0.021/mile of stormwater line	2 miles	0.042
Estimated Total Maintenance Staffing to Maintain New Infrastructure			0.233 FTEs

Source: City of Renton 2004; Blumen Consulting Group 2005.

¹ Estimates represent average for similar facility types across the entire City of Renton (City of Renton, 2004 Potential Annexation Area and West Hill Fiscal Analysis, 2004).

- All new buildings would be constructed in compliance with the City of Tukwila’s International Building Code and Fire Code regulations pertaining to emergency egress routes and installation of fire extinguishing and smoke detection systems.
- Construction worker safety measures would be implemented in accordance with Occupational Safety and Health Administration (OSHA) standards.
- Adequate fireflow for all development projects would be required (see Mitigation for Section 3.16, Utilities).
- Onsite security measures would be implemented during construction activities and would include fencing and signage to prevent public access, securing areas where equipment is stored, and onsite security surveillance (if determined to be needed).
- To serve Tukwila South and other growth in the area, Fire Station 51 could be relocated to a site within Tukwila South or within the site vicinity.
- A police facility could be co-located with a relocated Fire Station 51 or located within another building onsite.
- An impact-fee ordinance could be adopted by the City of Tukwila to allow collection of impact fees from new residential and commercial development in the City to provide funding for additional capital needs of the Tukwila Fire Department.
- The adopted Tukwila South Master Plan could include design guidelines to encourage crime prevention through certain design techniques (environmental design). Campus-style development could be designed to promote public safety. Such design features could include promoting visibility, orienting buildings towards sidewalks, streets, and/or public spaces to enhance the safety of focal points for social gathering, providing convenient pedestrian connections between buildings, minimizing “blind” areas, and providing lighting. Open spaces between buildings could be centrally located.

- An onsite campus security force(s) could be employed at Tukwila South, to meet the needs of emerging technology companies and institutions and could reduce the demand for preventative police patrols.
- An impact-fee ordinance could be adopted by the City of Tukwila to allow collection of impact fees from new residential development in the City that is located within the portion of the site located within the Kent School District.

3.14.4 Significant Unavoidable Adverse Impacts

Development levels assumed under Alternatives 1 and 2 would create substantial new employment and population capacity that would generate additional demands on public service agencies. With implementation of appropriate mitigation measures, no significant unavoidable adverse impacts to public services from the Proposed Actions or future development under any of the alternatives, would be expected.