

3.18 Public Services

3.18.1 Cost of Public Services in General

AFFECTED ENVIRONMENT

The residents and businesses of an area require governmental services ranging from animal control to the implementation of zoning codes. Requested services include “basic” services such as police and fire protection; emergency medical aid; education; the provision of clean, potable water; and garbage collection. The local community also demands other services that are not as visible to the average resident, such as land use planning; utility billing; investment of public funds; capital facilities planning and maintenance; parks and recreation; street maintenance; and the collection, treatment, and reuse/discharge of sewage.

Two primary tenants of the Growth Management Act are that good planning can reduce the cost of providing expected public services and that growth should “pay for itself.”

There are a number of entities that provide public services within the Yelm area, including the City of Yelm itself, Southeast Thurston Fire and Emergency Medical Services (EMS), Timberland Regional Library, Thurston County, Medic One, the Port of Olympia, the Public Utility District (PUD), and a local cemetery district. While the impact of Thurston Highlands Master Planned Community development on certain public services such as fire/EMS, police, schools, and parks are analyzed separately in the following subsections of this Draft EIS, the impacts to general services have also been reviewed as part of the *Fiscal Impact of Development Alternatives* (Property Counselors, April 2008).

The City of Yelm provides both basic and general government services within the City limits. These services include: police protection; a municipal court; the maintenance and extension of the street network; a municipal water system; a sewage treatment and reclaimed water system; a park system; development permitting services; long-range planning; financial services; and community programs and projects.

The Timberland Regional Library provides library services to Thurston, Grays Harbor, Lewis, Mason, and Pacific Counties. Timberland Regional Library maintains a full-service community library in Yelm, located in the Prairie Park development downtown. Operation and maintenance of the Timberland Regional Library is funded primarily through property taxes.

Thurston County provides general government services in the unincorporated portion of the Yelm Urban Growth Area. The County also provides many regional services within the City limits, including: health services; environmental health inspections (such as restaurant inspections); elections; and property assessment and property tax collection.

POTENTIAL IMPACTS DURING CONSTRUCTION

During the planning, permitting, infrastructure construction, and building of proposed uses within the Thurston Highlands Master Planned Community, the City of Yelm Community Development and Public Works Departments will be most impacted, as these departments provide direct development support services in the form of permit processing, plan review, utility inspections, and building inspection services.

POTENTIAL DEVELOPED CONDITION IMPACTS

Full build-out of the Thurston Highlands Master Planned Community over a 10- to 30-year period would increase the number of dwelling units within the City by approximately 5,000, and would introduce a resident population ranging from approximately 10,998 persons to 13,859 persons, depending on the conceptual land use alternative selected for implementation. This level of development and resident population would significantly increase the demand for services from the identified in the Affected Environment section, above.

The City of Yelm would experience the most increase in demand for services and associated impacts, as the City is the primary service provider within the City limits. Each City Department would be impacted by serving the Thurston Highlands Master Planned Community in some way, as each Department provides direct services to the citizens of Yelm.

The Administrative and Financial Services Department would have thousands of additional utility accounts to maintain and utility customers to serve.

The Public Works Department would be responsible for the maintenance of several miles of new streets, potentially thousands of street signs and street lights, miles of planter strips, additional neighborhood parks, miles of sewer mains and service lines, expanded sewage treatment and discharge/reuse facilities, new potable water wells and storage facilities, miles of water mains and service lines, thousands of fire hydrants, and additional stormwater treatment and disposal systems. In addition, Public Works staff would be required to inspect cross-connection control devices, and to respond to animal control calls.

There would be a higher case loads in Municipal Court attributable to a larger population base in Yelm, as well as a higher transient population in the form of students attending new schools located within the City limits.

MITIGATION MEASURES

Incorporated Plan Features. Careful consideration of operational costs during design and construction is the primary mitigation measure to minimize impacts to general governmental services. This concept is beginning to be acknowledged, and known as “smart growth,” which encourages development policies that create a range of housing opportunities and choices; create walkable neighborhoods; encourage community and stakeholder collaboration (public participation); foster distinctive, attractive communities with a strong sense of place; make development decisions predictable, fair, and cost-effective; mix land uses; provide a variety of transportation choices; strengthen and direct development toward existing communities; and take advantage of compact building design. Developers of the proposed Thurston Highlands Master Planned Community propose to implement the Sustainable Development principles adopted by the City of Yelm in September 2006, attached as Appendix A to this Draft EIS. The Urban Village Alternative would achieve the highest degree of consistency with these principles.

The smart growth design policies embodied in the City’s Sustainable Development Principles would mitigate impacts to general government services by concentrating residential populations in compact neighborhoods with a variety of housing types (single-family and multi-family), close to local commercial services, thus reducing the cost of maintaining infrastructure by eliminating the need for longer streets or longer lengths of utility mains, and providing opportunities to walk to local services rather than drive. Smart growth policies recognize the cost efficiencies of providing services to urban centers.

Applicable Regulations. The City has a fee structure in-place that will require the applicant to pay for development review and inspection services.

3.18.2 Fire Protection and Emergency Medical Aid Services

The description of Fire Protection and Emergency Medical Aid services within the project action area, the projected impacts of the proposed Thurston Highlands Master Planned Community, and mitigation measures to be required are derived from numerous meetings and communications with Chief Rita Hutcheson and Chief Mark King, Southeast Thurston Fire and Emergency Medical Services, and from the 2007 update to the Yelm Fire District *Capital Facilities Plan*.

AFFECTED ENVIRONMENT

Southeast Thurston Fire/EMS provides first response for fire suppression, emergency medical aid, rescue and hazardous materials incidents within a 110 square mile service area (see Figure 3.18-1): within the boundaries of Yelm Fire District No. 2, the City of Yelm, and Thurston County Fire District No. 4 (Rainier). There are presently five stations and one BMA (maintenance) station within the District, of which 1.5 stations are staffed. The Yelm Station (Station No. 21) is staffed 24 hours per day, 7 days per week. The Lake Lawrence and Rainier Stations (Stations No. 22 and No. 4) are staffed 24 hours part-time. The planning process for the purpose of evaluating the impacts and service requirements of the Thurston Highlands Master Planned Community focus specifically within the Yelm Fire District, which includes the incorporated area of the City and its Urban Growth Area.

The population of the City of Yelm at the time of this writing was approximately 4,500 persons. Fire District No. 2 currently responds to an average of approximately 900 calls annually, or 230 calls per 1,000 people, for fire protection and emergency medical aid. Call volume is very population-driven. This level of demand has remained relatively consistent for the past 5 years (i.e., from 2001–2006; personal communication with Chief Rita Hutcheson, February 6, 2007). The proportion of fire protection calls to emergency medical calls is approximately 30 percent/70 percent, with calls for medical aid being the higher of the two. This difference is relatively inconsequential to the Fire District, as a fire engine is dispatched on all calls, accompanied by a private ambulance or the Medic One unit. The largest number of medical aid calls originate from local retirement home and assisted living facilities.

The City of Yelm currently has a Washington State Rating Bureau Class 7 rating. Ratings range from 1 to 10, with one being the highest, and are based on water supply, equipment, communications, and fire safety control features.

Insert Figure 3.18-1. Yelm Fire District No. 2 and Rainier Fire District No. 4.

Current Fiscal Situation. The City of Yelm contracts for fire protection and emergency medical aid services with Southeast Thurston Fire/EMS. Southeast Thurston Fire/EMS is a joint operation of Yelm Fire District No. 2 and Rainier Fire District 4. The budget for the combined districts is shown in Table 3.18.2-1. Property taxes collected by the two districts are shown as contract payments to the combined operating entity. The contract payment from the City of Yelm makes up 14 percent of the combined budget. Payments from Districts 2 and District 4 represent 57 percent and 23 percent, respectively, of operating revenues. Expenditures for fire suppression make up approximately 59 percent of the budget, and administration represents approximately 26 percent.

District voters passed a measure in August 2007 to allow the District's tax levy to remain at \$1.50 per \$1,000 of assessed valuation for 2008, with annual increases of up to 6 percent in each of the five subsequent years, subject to a limit of \$1.50 per \$1,000.

Table 3.18.2-1. Southeast Thurston Fire/EMS revenue and expense budget – 2008.

% of Total		
Revenue		
Property Tax	-	0.0%
Other Local Taxes	-	0.0%
Charges and Fees for Service	\$48,000	1.5%
Interest and Investment Earnings	3,000	0.1%
Fines and Forfeits	-	0.0%
Rents, Premiums etc.	-	0.0%
Intergovernmental	-	0.0%
Yelm Contract	445,990	13.8%
City of Yelm Impact Fees	145,574	4.5%
Rainier Fire District 4	740,012	22.9%
Yelm Fire District 2	1,846,967	57.2%
Other Intergovernmental	1,000	0.0%
Subtotal	3,179,543	98.4%
Miscellaneous	-	0.0%
Other	-	0.0%
Total	\$3,230,543	100.0%
Expenditures		
Legislative and Finance	\$85,403	2.6%
Fire Control-Administration	861,447	26.4%
Fire Control Fire Suppression	1,934,290	59.3%
Fire Control Prevention	17,375	0.5%
Fire Control Training	44,636	1.4%
Fire Control Facilities	79,127	2.4%
Emergency Medical Services	2,793	0.1%
Capital Expenditures	239,524	7.3%
Total	\$3,264,595	100.0%

Source: Southeast Thurston Fire EMS 2008 budget.

POTENTIAL IMPACTS DURING CONSTRUCTION

Full Build-Out Conceptual Land Use Alternatives

Construction within the Thurston Highlands Master Planned Community would likely be constant during the expected 10 to 30-year build-out of the proposed development. Southeast Thurston Fire/EMS can expect to experience calls from the site during construction, due to safety hazards associated with construction practices, and changing conditions that result in uncertainty for workers on-site and persons traveling through construction areas. Given the long period of time over which there would be construction conditions on the property, there may be some degree of acclimation to these conditions that would heighten the awareness of people using the site to expect changing conditions and a need to exercise caution.

Construction materials can be expected to change over the 10 to 30-year build-out of the Master Planned Community, as they have in the past 30 years. It is likely that not all construction material changes would constitute improvements for fire prevention or fire suppression.

Phase 1 Development Concept

Potential demands for fire protection and emergency medical aid services on the Thurston Highlands site during Phase 1 development would be similar to those described above for full build-out of the project. Given that the Phase 1 development area is adjacent to Tahoma Terra, and that master planned community has been under construction for several years, residents and workers within or passing through this area may be more accustomed to construction conditions, and may therefore exercise a higher degree of caution around construction sites.

No Action Alternative

If the Thurston Highlands site were to remain undeveloped in the near-term, there would be no construction activity on the property, and thus no change in demand for fire protection or emergency medical aid services. Given that there is no resident population on the property at the present time, and it is not a public access site, there is presently a low risk of calls to Southeast Thurston Fire/EMS.

POTENTIAL DEVELOPED-CONDITION IMPACTS

In anticipation of immediate and future growth associated with the Thurston Highlands Master Planned Community and other known development proposals within the Yelm Fire District, Southeast Thurston Fire/EMS conducted a station location and needs analysis (March 2007). They examined criteria used by other Fire Departments, and nationally-recognized standards to determine when to add new stations, personnel, fire engines, and aid units.

New Fire Station. The following criteria are typical of what other Fire Departments use for adding new stations:

- The community expands either in population or in service area.
- The community's land uses are in a process of change; i.e., from residential to commercial, from vacant to residential, from single-family to multi-family, etc.
- A fire station becomes too old or obsolete to house modern fire equipment.

- The number of calls to an area increases.
- Response times or service level goals are not being met.

Nearly every fire department reviewed demonstrated a relationship between their established criteria and national standards. Those that chose national standards used the National Fire Protection Association (NFPA) and/or the Insurance Services Organization (ISO) as their source. The ISO rates individual properties based on several sets of criteria with distance to a recognized fire station as a primary factor. The ISO's typical distance thresholds are 2.5 miles and 5 driving miles from a fire station for commercial and residential occupancies. The NFPA recommends that the first-arriving engine be located within 2 miles of residential areas, within 1.5 miles of commercial areas, and within one mile of buildings requiring a 5,000 gallons-per-minute fire flow.

Based on national standards and criteria used by other agencies, Southeast Thurston Fire/EMS (March 2007) chose to use call volume, response time, community development, and risk for determining when and where to build a new station. Selected criteria are as follows:

- *Response Time:* When response times exceed the established service level goals more than 50 percent of the time.
- *Call Volume:* More than 400 calls for service annually to a given area, within a 2.5-mile radius of a given station.
- *Substantial Development within a Given Area:* More than 500 residential dwellings within a 2.5-mile radius of a given station, or more than 4 million square feet of commercial development within a 5-mile radius of a given station.
- *Risk:* Relative risk analysis of a given area shows the need for additional coverage.

Personnel. Each staff position at a fire station requires four firefighters to ensure coverage 24 hours per day, 7 days per week while accommodating vacation time, sick leave, and other scheduled or unscheduled absences. For example, in order to meet minimum staffing standards for one engine company and three firefighters, a minimum of 12 firefighters are required.

Criteria previously identified for determining the need for a new fire engine and aid vehicle are as follows: (Southeast Thurston Fire/EMS, May 18, 2006):

New Fire Engine. The need for a new fire engine ("pumper") meeting the requirements of NFPA 1901 is based on two criteria:

- Washington State Rating Bureau (WSRB) threshold value: A fire department pumper must be located within five driving miles of residential development to maintain a Class 8 rating, and within 2.5 miles for a lower class rating.
- The National Fire Protection Association (NFPA) recommends that the first-due fire engine pumper be located within 2 miles of the residential area to be served.

New Aid Unit. Approximately 75 percent of all emergency responses are medical in nature. It is more efficient to operate an aid unit than it is to operate a fire engine. If staffing is available, an aid unit could be placed into service in addition to a fire engine, thereby minimizing fuel costs while maintaining an in-service fire engine for emergency incidents that require a fire engine.

Southeast Thurston Fire/EMS (May 18, 2006) identified a need during Scoping for this EIS to update the current City of Yelm Fire Impact Fee document in order to address capital needs

such as those identified above. This action occurred on January 17, 2008, and is discussed below in the *Fiscal Analysis* subsections.

Full Build-Out Conceptual Land Use Alternatives

The Thurston Highlands Master Planned Community is projected to develop with approximately 5,000 dwelling units at full build-out under any of the conceptual land use alternatives, with a resident population ranging from approximately 10,998 persons with the Urban Village Alternative, to approximately 13,859 persons with the Traditional Development Alternative (see Table 3.11-4 in Draft EIS Section 3.11). The projected resident population of the Preferred Alternative is 12,548 persons based on the number and type of dwelling units, using Thurston Regional Planning Council (TRPC) population per household factors by dwelling unit type. At full build-out (10 to 30 years), Thurston Highlands would approximately triple the existing population of the City, requiring a significant increase in manpower, equipment, and operating budgets to maintain the existing level of fire protection and emergency medical aid service.

At the current demand of approximately 230 calls per 1,000 people, an additional 2,300 to 3,000 emergency calls for service could be generated. This increased demand for service will exceed the capacity of the existing fire station located at 709 Mill Road in Yelm. "Capacity" is defined as the engine company's availability to respond to emergency calls, to complete required training, and to perform inspections. Recommended fire service practice is to establish an additional engine company in a given area when that area exceeds 400 calls for service annually. Once an engine company exceeds 2,000 calls annually, a second engine company is needed (Southeast Thurston Fire/EMS, March 2007).

Based on the fire station, manpower and apparatus criteria described above, SE Thurston Fire/EMS anticipates that full build-out of the Thurston Highlands Master Planned Community can be served by one new fire station approximately centrally-located on the site, additional firefighters, two or more fire engines, and two or more aid units.

Fiscal Analysis: Full Build-Out Operating Impacts. The cost of fire protection and emergency medical aid services provided by Southeast Thurston Fire/EMS is estimated based on full staffing at build-out of a new station. The cost of operating a station is based on a crew of three or four shifts over the course of a week. The cost for fire suppression activities is estimated at a rate of \$75,000 per full-time equivalent officer, and \$65,000 per full-time equivalent firefighter. Additional facility costs are estimated at 6 percent of suppression costs based on the current budget.

The projected operating impact to Southeast Thurston Fire/EMS is shown in Table 3.18.2-2. The increased revenue is assumed at the level of expenditures by the City presented in Draft EIS Section 3.20. The increased expenditures are based on the incremental resources needed to operate a new station. As shown in Table 3.20-16 (in Draft EIS Section 3.20), the incremental costs of operating a new station would be comparable to the estimated current City of Yelm contract payment, with an increase to more closely match other cities' expenditures for fire protection and emergency medical aid services. This confirms that a new station sized to serve the Thurston Highlands Master Planned Community could be operated at a level of cost similar to other cities.

Table 3.18.2-2. Potential operating impacts of Thurston Highlands conceptual land use alternatives on Southeast Thurston Fire/EMS (in 2006 \$) (Property Counselors, April 2008).

	Preferred Alternative	Urban Village	Traditional Development
Resource Assumptions			
Staffing-FTE's			
Officers	4.0	4.0	4.0
Firefighters	8.0	8.0	8.0
Suppression Operating Cost per FTE			
Officers	\$75,000	\$75,000	\$75,000
Firefighters	\$65,000	\$65,000	\$65,000
Facilities Expenditures (% of Op.)	6.1%	6.1%	6.1%
Projected Revenue			
Contract Revenue-City of Yelm	\$877,507	\$986,091	\$758,927
Operating Expense			
Suppression Operating Costs	\$820,000	\$820,000	\$820,000
Facilities Costs	49,610	49,610	49,610
Total	\$869,610	\$869,610	\$869,610
Estimated Net Annual Surplus	\$7,897	\$116,481	(\$110,683)

Fiscal Analysis: Full Build-Out Capital Impact. Table 3.18.2-3 summarizes the estimated capital impacts to Southeast Thurston Fire/EMS of the Thurston Highlands conceptual land use alternatives. At build-out, the volume of calls would vary from approximately 2,500 calls with the Urban Village Alternative to approximately 3,200 calls with the Traditional Development Alternative. These volumes would exceed the 2006 volume of calls served by Station No. 21 in Yelm.

Table 3.18.2-3. Comparison of the potential capital facility impacts of Thurston Highlands conceptual land use alternatives on Southeast Thurston Fire/EMS (2006 \$) (Property Counselors, April 2008).

	Preferred Alternative	Urban Village	Traditional Development
Description			
Residential Units			
Single Family	3,546	2,240	4,400
Multifamily	1,454	2,760	600
Total	5,000	5,000	5,000
Commercial			
Retail (sq. ft.)	785,000	810,000	440,000
Professional Office (sq. ft.)	135,000	650,000	150,000
Lodging (rooms)	100	100	100
Total Square Feet			
Residential	6,191,400	5,016,000	6,960,000
Commercial	920,000	1,460,000	590,000
Lodging	40,000	40,000	40,000
Total	7,151,400	6,516,000	7,590,000
Population	12,548	10,998	13,859
Calls @ 230 calls per 1000 pop.	2,886	2,530	3,188
Standard Engines	2.0	2.0	2.0
% of Capacity @ 2000 calls per company	72%	63%	80%
Cost Factors			
Site	\$150,000	\$150,000	\$150,000
Facility	2,500,000	2,500,000	2,500,000
Standard Engines	900,000	900,000	900,000
Aerial Device	1,000,000	1,000,000	1,000,000
Communications Safety	184,500	184,500	184,500
Total	\$4,734,500	\$4,734,500	\$4,734,500
Proportionate Share	\$3,415,989	\$2,994,027	\$3,772,888
Impact Fees (/sq. ft. of building)	\$0.32	\$0.32	\$0.32
Funding Sources			
Site Donation	\$150,000	\$150,000	\$150,000
Impact Fees	2,288,448	2,085,120	2,428,800
Total	\$2,438,448	\$2,235,120	\$2,578,800
Surplus/(Deficit) Full Cost	(\$2,296,052)	(\$2,499,380)	(\$2,155,700)

The City is authorized to impose an impact fee for new fire protection facilities. An impact fee of \$0.32 per square foot of building area was approved by the City of Yelm on January 17, 2008. The financial implications of this fee are shown in Table 3.18.2-3. A fee of this magnitude would generate capital funds that would fall short of the Master Planned Community's full cost for fire protection and emergency medical aid facilities, and that would fall short of the Master Planned Community's proportionate share of the cost for the impacts of any of the three

conceptual land use alternatives at full build-out, as well. A fee ranging from \$0.60 with the Traditional Development Alternative to \$0.70 for the Urban Village Alternative would fund the full cost of one new station at build-out. A smaller fee of \$0.40 to \$0.43 would fund the Master Planned Community's proportionate share of the cost of a new station.

The proposal to complete the extension of Tahoma Boulevard between SR 510 and SR 507 during Thurston Highlands Phase 2 development (between approximately 2012 and 2015 would have a beneficial effect on fire protection and emergency medical aid services by improving transportation efficiency and minimizing response time within the Yelm service area as a whole, in addition to serving residents and structures within Thurston Highlands.

Phase 1 Development Concept

The Thurston Highlands Phase 1 development concept includes approximately 1,008 dwelling units at a traditional suburban residential density. The population projection for this concept is approximately 2,527 persons (based on TRPC population factors per household for the type and number of dwelling units estimated in this phase of the project). At the current rate of approximately 230 calls per 1,000 population for fire protection and medical aid, the Thurston Highlands conceptual Phase 1 population could be expected to generate approximately 580 calls for service per year at full build-out and occupancy, projected to occur by approximately 2012.

Given that Yelm Station No. 21 is currently operating at capacity, Southeast Thurston Fire/EMS will require a new station capable of housing two engines and a crew of 4 to 6 firefighters/emergency medical technicians at the time of full build-out and occupancy of Thurston Highlands Phase 1. When calls within the Thurston Highlands Master Planned Community reach 1,000 to 1,500 annually, the new fire station will need to be upgraded to accommodate additional personnel and apparatus, and the addition of firefighters will need to be considered (Southeast Thurston Fire/EMS, March 2007).

Fiscal Analysis: Phase 1 Operating Impacts. The impact of Thurston Highlands conceptual Phase 1 development on Southeast Thurston Fire/EMS is shown in Table 3.18.2-4. The increased revenue is assumed at the level of expenditures described in Draft EIS Section 3.20 for the City. The increased expenditures are based on the incremental resources needed to operate a new station.

Table 3.18.2-4. Estimated operating impact of Thurston Highlands conceptual Phase 1 development on Southeast Thurston Fire and Emergency Medical Services (in 2006 \$) (Property Counselors, April 2008).

Resource Assumptions	
Staffing-FTE's	
Officers	1.0
Firefighters	2.0
Suppression Operating Cost per FTE	
Officers	\$75,000
Firefighters	\$65,000
Facilities Expenditures (% of Op.)	6.1%
Projected Revenue	
Contract Revenue-City of Yelm	\$90,746
Operating Expense	
Suppression Operating Costs	\$205,000
Facilities Costs	12,403
Total	\$217,403
Estimated Net Annual Surplus	(\$126,656)

There would be a shortfall for Phase 1, even without 24-hour staffing. This level of development could not support the cost of operating a new station on its own. Provision of services during this phase would require a different mode of service delivery or operations funding by the developer or City at higher levels than those assumed in this analysis.

Fiscal Analysis: Phase 1 Capital Impact. Table 3.18.2-5 summarizes the estimated capital impacts to Southeast Thurston Fire/EMS of conceptual Phase 1 development within Thurston Highlands. The District proposes to serve Thurston Highlands from a new station. The station would be built in two phases. The first phase would accommodate one engine company. Over time, the station would be expanded to accommodate a second engine and an aerial device, as well as additional administrative and support functions. The entire facility would require a 2.5-acre site (Southeast Thurston Fire EMS, Impact Fee Rate Study for Fire Protection Facilities, March 2007).

The City is authorized to impose an impact fee for new fire protection facilities. Southeast Thurston Fire/EMS proposed and the City approved in January 2008 an impact fee of \$0.32 per square foot of building area. The financial implications of this fee are shown in Table 3.18.2-5. A fee of this magnitude would not generate enough funds to cover the full cost of a new fire station in Phase 1; however, it would cover the proportionate share of station capacity based on demand for service.

Table 3.18.2-5. Estimated capital impact of Thurston Highlands conceptual Phase 1 development on Southeast Thurston Fire and Emergency Medical Services (in 2006 \$) (Property Counselors, April 2008).

Description	
Residential Units	
Single Family	691
Multifamily	317
Total	1,008
Commercial	
Retail (sq. ft.)	-
Professional Office (sq. ft.)	-
Lodging (rooms)	-
Total Square Feet	
Residential	1,226,700
Commercial	-
Lodging	-
Total	1,226,700
Population	2,527
Calls @ 230 calls per 1000 pop.	581
Standard Engines	1.0
% of Capacity @ 2000 calls	29%
per company	
Cost Factors	
Site	150,000
Facility	1,000,000
Standard Engines	450,000
Aerial Device	
Communications Safety	184,500
Total	1,784,500
Proportionate Share	518,585
Impact Fees (/sq. ft. of building)	0.32
Funding Sources	
Site Donation	150,000
Impact Fees	392,544
Total	542,544
Surplus/(Deficit) Full Cost	(1,241,956)

No Action Alternative

There would be no developed-condition scenario for the No Action Alternative; therefore, the low-if-any demand for Southeast Fire/EMS described above under Potential Impacts During Construction, would be the same in contrast to the developed condition of the Master Planned Community.

MITIGATION MEASURES

Incorporated Plan Features. The Master Planned Community would provide a site for construction of a new fire station under any conceptual land use alternative. A station location on the curve of Tahoma Boulevard, south of the Regional Sports Complex, and opposite (west of) the proposed Village Center would be close to the highest anticipated call volume (personal communication with Chief Rita Hutcheson and Chief Mark King, SE Thurston Fire/EMS, April 14, 2008). The station is envisioned to have quarters, a day room and office area, a fire engine and aid unit, and one additional bay for future equipment. Consideration will be given to possibly co-locating a fire station with a satellite police station within the Master Planned Community.

In order to serve the projected demand of the Thurston Highlands Phase 1 resident population and structures, Southeast Thurston Fire/EMS has made the following construction, equipment, and manpower recommendations for completion by the second year of occupancy within the Phase 1 development area:

- Begin construction of a centrally-located fire station capable of housing two engines and a crew of 4 to 6 firefighters.
- Design the station in a manner that will facilitate expansion to serve anticipated growth to serve all phases of the Thurston Highlands Master Planned Community.

Applicable Regulations. Southeast Thurston Fire and EMS proposed and the City of Yelm approved in January 2008 an increase in the impact fee to fund the fire protection and emergency medical aid needs of new development. The *Thurston Highlands Fiscal Analysis of Development Alternatives* (Property Counselors, April 2008), however, shows that the January 2008 fee would not cover the capital cost to Thurston Highlands of a new fire station at full build-out under any of the conceptual land use alternatives. While the value of the land donated for construction of a new station would be taken into consideration, it is likely that higher-than-present or additional impact fees may be imposed, as well.

Residential, commercial, office, and recreational development within Thurston Highlands would comply with all applicable Building Codes and the International Fire Code to minimize the risk of fire and maximize measures for fire suppression. These measures would include (but not necessarily be limited to): a looped water system, hydrant spacing adequate to serve proposed structures, spacing between buildings to provide adequate separation and emergency vehicle access, and an all-weather surface adjacent to commercial buildings. At the time Building Permits are sought for individual structures, building floor plans, type of construction, separation walls, and fire suppression measures (e.g., sprinkler systems) would be reviewed by the Fire Marshal.

Other Possible Mitigation Measures. During discussions with SE Thurston Fire/EMS Fire Chiefs, they were asked to think long-range in the context of the projected 10- to 30-year full build-out of Thurston Highlands and other growth that can be expected to occur within the Yelm service area during the same period of time. The Chiefs were asked to identify measures that would be most effective at minimizing the demand for staff time, and/or improving the efficiency of the services they are required to provide. They identified a need for an urgent care facility within the Yelm service area to minimize their transport time associated with emergency medical aid calls.

Education and physical barriers are primary ways to minimize fire and other safety hazards during construction. Pre-construction meetings and periodic on-going meetings once

construction is underway could be held with Southeast Thurston Fire/EMS to familiarize Fire Department representatives with activities such as materials being transported to/from the site, areas on the site where construction activity is taking place, and the nature of construction activities underway at any given time. Meetings of this nature and frequent communications with the contractor would increase the Fire Department's awareness of where to go on the site in the event of an emergency, and approximately what to expect. It is likely that relationships would develop with preferred contractors over the 10- to 30-year construction period, with the result that these workers would have increased familiarity with the site and conditions, and construction practices may be implemented with a higher degree of similarity, with the resultant potential to minimize conditions that typically result in an elevated number of fire and aid calls.

If there is a condition during construction that precedes the availability of fire flow to an area, the Fire District recommends that the developer arrange to have a tanker truck on-site equipped with Fire District fittings to facilitate fire suppression.

A mechanism to address fiscal short-falls prior to full build-out would be an important part of any mitigation plan to be required of the Master Site Plan approval. From the service provider side, it may be possible to provide services at an interim level to reduce the overall cost. For example, staff could be added to Yelm Station No. 21, Rainier Station No. 41, and Lake Lawrence Station No. 22 (in that order) during the interim while a new fire station is under construction within Thurston Highlands. Another transitional measure would be to staff the new fire station less than 24 hours per day in the early period of operation.

SIGNIFICANT UNAVOIDABLE ADVERSE IMPACTS

No significant unavoidable adverse impacts to fire protection and emergency medical services is expected. The applicant and the City have initiated early coordination with the Fire District to initiate their planning for the development. Given that it is known at this time that a new fire station within the Highlands will be needed to serve full-occupancy of Phase 1 of the development, requirements to implement this capital improvement could be initiated immediately upon Master Plan approval. Fiscal short-falls in the early years, before new construction generates tax revenues, is potentially the greatest risk, and measures to address this have been identified as a required element of the Development Agreement (or similar instrument) to be executed by the City and the applicant if the Master Planned Community is approved.

3.18.3 Police Protection Services

AFFECTED ENVIRONMENT

The City of Yelm Police Department provides 24-hour police protection, criminal investigation, crime prevention education, emergency management planning, and emergency management preparation within the incorporated area of the City of Yelm, including the site of the proposed Thurston Highlands Master Planned Community.

The stated mission of the Department is to “uphold the law fairly and firmly; to prevent crime; to pursue and bring to justice those who break the law; to keep peace; and to provide quality police service to the community by promoting a safe environment through police and citizen interaction, with emphasis on fairness, respect, empathy, dignity, and professionalism.”

The Department also cooperates with the Thurston County Sheriff’s Office through mutual aid agreements for law enforcement services in the Yelm Urban Growth Area and surrounding areas, is involved in regional emergency management planning activities, and participates in regional special law enforcement functions such as participation with Thurston County S.W.A.T. and Drug Task Force. The Department contracts with CAPCOM for dispatch services. Figure 3.18-2 shows the boundaries of law enforcement service areas.

In 2007, the Yelm Police Department was comprised of a Chief, two Sergeants, nine patrol officers, one Detective, a School Resource Officer, a Community Services Officer, and two civilian office support staff.

In the past, staffing needs in the Yelm Police Department have been driven by the desire for 24-hour patrol coverage. This goal was achieved in 2005 with the addition of two officers within the Department. As 24-hour coverage has now been achieved, the Department will focus on maintaining levels of service through the addition of staff as calls for service increase with population growth.

In 2008, the Police Department and Yelm Municipal Court moved into a new 12,000 square foot Public Safety Building designed to accommodate the Department’s needs for the next 20 years based on expected growth within the City of Yelm.

POTENTIAL IMPACTS DURING CONSTRUCTION

Full Build-Out Conceptual Land Use Alternatives

Construction sites are often the target of theft due to the high value of equipment and materials and the relatively low security when compared to existing businesses and residences. Construction sites are often unattended at night with equipment and materials either unsecured or in construction trailers.

Investigation of theft at construction sites generally comprises less than 5 percent of all criminal investigation calls for service from the Yelm Police Department (personal communication with Todd Stancil, Chief of Police, May 20, 2008).

Insert Figure 3.18-2. Police Protection Service Area.

Construction within the Thurston Highlands Master Planned Community would likely be constant during the expected 10- to 30-year build-out of the proposed development. On-site construction offices, equipment storage and material staging areas would be at risk of burglary, theft and vandalism.

Phase 1 Development Concept

The demand for police protection services during construction associated with the Phase 1 development area would be similar in nature to that described above for full build-out.

No Action Alternative

Under the No Action Alternative, the property would remain temporarily undeveloped; therefore, there would be no construction period and no increased demand for police protection services.

POTENTIAL DEVELOPED-CONDITION IMPACTS

Full Build-Out Conceptual Land Use Alternatives

Police protection in a developed area includes responding to calls for service, traffic patrol, and community policing activities.

Once developed, the Thurston Highlands Master Planned Community would be patrolled by the Yelm Police Department regardless of crime rates or incidents within this portion of the City of Yelm. As the 1,240-acre Master Planned Community is a significant patrol area, it is expected that patrol demands will be as much as 35 percent of the total patrol duties of the Police Department, based on the area of the project site compared to the area within the existing City limits as a whole (personal communication with Todd Stancil, Chief of Police, May 20, 2008).

Tahoma Boulevard will become a major thoroughfare, connecting the SR 510 Yelm Loop and Yelm Avenue with SR 507 leading to Rainier, Tenino, and Interstate 5. Traffic control along this new roadway, as well as within the neighborhoods and commercial areas of the Thurston Highlands Master Planned Community, could be expected to require a significant percentage of the total patrol efforts of the Yelm Police Department.

Phase 1 Development Concept

The demand for police protection services in the developed condition of the Phase 1 area would be similar in nature to that described above for full build-out of the Master Planned Community.

No Action Alternative

Because the Thurston Highlands property would temporarily remain undeveloped with the No Action Alternative, there would be no increased demand for police protection services.

MITIGATION MEASURES

Incorporated Plan Features. The most important mitigation measure to minimize potential impacts to police protection services would be to ensure that funding is in-place to maintain a

level of service that provides for both response to calls and community policing. As noted in the *Fiscal Analysis* technical report, the Thurston Highlands Master Planned Community is expected to generate revenue to the City of Yelm to pay for the services it receives, including police protection services. A significant portion of the revenue would be generated by the commercial component of the development. Tax revenue generated from established residential development typically does not cover the cost of providing police protection services to residential development; i.e., business generates more revenue than it demands for services, while residential development generates more demand for services than it produces in tax revenue.

The proposed mixed-use development plan that links commercial and residential growth within the Thurston Highlands Master Planned Community would mitigate the potential funding gap if residential development preceded and exceeded the commercial components of the development.

Other Possible Mitigation Measures. A satellite police substation within the Thurston Highlands Master Planned Community would create efficiencies for the Police Department by reducing the amount of time in-transit to the Public Safety Building, and providing a space for officers patrolling the project site to accomplish office duties without leaving the patrol district.

If one of the planned public service (or community space) sites within the Thurston Highlands Master Planned Community were dedicated to the City for development of a firearms training facility, this would significantly increase the efficiency of the Yelm Police Department. By providing a training facility inside the City of Yelm, officers would not have to travel to increasingly difficult-to-find facilities, during which time these officers are unavailable to provide police protection services to the citizens of Yelm.

Thoughtful neighborhood planning can reduce the cost of providing police services. Applying Crime Prevention through Environmental Design (CPTED) principles during planning for structures and landscaping could reduce opportunities for crime to occur by creating a physical environment that would minimize visual obstacles, maintain visual surveillance corridors, and eliminate places of concealment. Sufficient street lighting, good access and visibility within neighborhoods and commercial zones, and consideration of the placement of various land uses in relation to each can minimize the cost of policing a community. Creating a vibrant community that is active 24 hours a day, with both residential and business components, also tends to minimize the occurrence of incidents, and thus the demand for police protection services.

SIGNIFICANT UNAVOIDABLE ADVERSE IMPACTS

No significant unavoidable adverse impacts to police protection services have been identified that could not be mitigated.

3.18.4 Schools

AFFECTED ENVIRONMENT

The boundary between two school districts approximately bisects the Thurston Highlands site: Yelm Community Schools District No. 2 to the east, and Rainier School District No. 307 to the west (see Figure 3.18.4-1). Existing facilities and student populations in each District are described in this section, derived from the Yelm Community Schools *Capital Facilities Plan* (May 2007), and personal communication with the Rainier School District Superintendent (Dennis Friedrich, November 13, 2006).

Yelm Community Schools District No. 2. The inventory of existing permanent facilities within the Yelm Community Schools District includes six elementary schools, two middle schools, one high school, and one extension high school. The total District-wide student capacity of these schools is 5,147.¹ Elementary school capacities range from a low of 69 students at Lackamas Elementary to a high of 605 students at Mill Pond Elementary. Middle school capacities range from 664 to 750. The high school has classroom capacity for 1,265 students. The extension high school can accommodate up to 150 students. For planning purposes, the District estimates 450 elementary students, 750 middle school students, and 1,300 high school students per school.

Projected enrollment for the 2007/2008 school year was 5,432 students.² Actual Fall 2007 enrollment in Yelm Community Schools was 5,345 (head count), 5,119 full-time equivalents (FTEs). The District currently has a shortfall in elementary school capacity (23 percent more students than classroom capacity) in the 2007/2008 school year. This shortfall is projected to increase to 43 percent by 2012/2013, requiring approximately 1,029 students to be housed in portable classrooms unless a new elementary school is constructed. Existing middle school capacity within the District is projected to be adequate until the 2010/2011 school year, at which time a 3 percent shortfall is forecast. The middle school shortfall in classroom capacity is forecast to increase to 23 percent (approximately 239 students) by the 2012/2013 school year. The high school is forecast to maintain adequate classroom capacity through the 2012/2013 school year (the latest planning period in the current *Capital Facilities Plan* (YCS, May 2007, Tables F, G and H; and personal communication with E. Birkland, YCS Facilities Director, January 24, 2008).

¹ The total capacity of each school building is determined by multiplying the number of classrooms for each grade level by the maximum class size standard for the District, plus a square footage factor for the rest of the building established by the Superintendent of Public Instruction. The capacity of each school does not take into account portable classrooms (YCS, May 2007, page 1 and Table A).

² Source: Table E, Yelm Community Schools *Capital Facilities Plan* (May 2007). Student enrollment projections reported here include the Superintendent of Public Instruction's Cohort Survival figures plus unforecast student enrollment from large subdivisions that have been identified through recent or on-going environmental review processes in the City of Yelm, Thurston County, and Pierce County (projects that would generate students who would attend Yelm Community Schools).

Insert Figure 3.18.4-1. School Districts in which the Thurston Highlands Site is Located.

Portable classrooms are used to accommodate students in excess of existing classroom capacity. Yelm Community Schools currently owns and utilizes 59 portable classrooms: 39 at elementary schools, 13 at Yelm Middle School, and 7 at Yelm High School (YCS, May 2007, Appendix B).

Yelm Community Schools District No. 2 has experienced an up-swing in student enrollment since 2003 that is projected to continue for the next 15 to 20 years, due to a surge in housing development and increased personnel deployment at Fort Lewis. The forecast of enrollment projections and future needs is based on two primary methods of calculation: 1) the Superintendent of Public Instruction's Cohort Survival Method (based on statistical data gathered over a number of years in the State), and 2) an additional projection methodology using data gathered from Thurston County, Pierce County, and the City of Yelm based on actual building permits issued, Environmental Impact Statements or State Environmental Policy Act (SEPA) determinations issued for proposed annexations, subdivisions, or other requests for development approval. The District forecasts a 24 percent increase in student enrollment between 2007 and 2013, from approximately 5,318 to 6,617 total K-12 enrollments (YCS, May 2007, Table C). When unforecast student enrollment from large subdivisions is added to these projections, the total number of students is forecast to increase from 5,432 in 2007/2008 to approximately 6,515 in 2012/2013 – a 20 percent increase in six years (YCS, May 2007, Table E).

The actual number of students that enrolled in Yelm Community Schools during the 2007–2008 school year reflected the second largest student population increase in the District since 1976 (personal communication with Erling Birkland, Director of Facilities, Yelm Community Schools, April 22, 2008). If this trend continues, student population projections in the current 6-year Capital Facilities Plan may be understated.

Rainier School District No. 307. The Rainier School District has three existing school buildings: one elementary, one middle school, and one high school. Kindergarten through 3rd grade students attend Rainier Primary school; about 200 4th through 6th grade students are presently housed with approximately 180 middle school students (7th and 8th graders), and grades 9 through 12 attend the high school. The high school is presently “over-housed,” with available capacity for up to 500 additional students. A bond measure approved in May 2007 will provide funding to complete the elementary school, redesign the middle school for grades 6 through 8, complete the high school, and generate funds for land acquisition for one or more new school sites. With these building modifications, 4th and 5th graders will be moved to the primary school, freeing-up approximately 10 classrooms in the middle school to increase capacity for these students.

The Rainier School District is in communication with the Washington Department of Natural Resources regarding an 80-acre site for possible acquisition. This site is located south of Thurston Highlands (south of SR 507), and could be used for new school construction to serve the demand for whichever grade levels require additional building capacity within the District, with or without development of the Thurston Highlands Master Planned Community.

The Rainier School District budget projection for 2007/2008 enrollment was 885 students. The actual head-count in December 2007 was 937.4 students (905.52 full-time equivalents). The District experienced an increase in total enrollment of 16 new students between the 2006/2007 and 2007/2008 school years. This is nearly twice the annual growth rate the District had experienced in prior years – up from 8 to 10 new students per year (personal

communication with Dennis Friedrich, January 24, 2008). Similar to Yelm Community Schools, the Rainier School District tracks new residential building permits issued by the Town of Rainier and Thurston County for advance notice of growth within the District.

School Bus Transportation. The primary criteria for determining whether students will walk to school or require school bus transportation are: distance from school and safe walking conditions (e.g., sidewalks). The Revised Code of Washington establishes that it is the responsibility of each local school district's board of directors to determine which students shall be transported and which routes shall be most efficiently utilized (RCW 28A.160.010). The RCW also sets forth criteria established by the State Legislature for the purpose of funding school bus transportation services, including the use of buses, funding of crossing guards, and matching funds for local and state transportation projects intended to mitigate hazardous walking conditions (RCW 28A.160.160[4]).

Both Yelm Community Schools (YCS) and the Rainier School District currently operate school bus fleets. Information provided in this section was derived from communications with the YCS Co-Director of Transportation (Rhonda Morton, January 28, 2008), and the Rainier School District Superintendent (Dennis Friedrich, January 24 and 28, 2008).

YCS had 60 buses (including spares), and 49 drivers at the time of this writing. The fleet is presently housed at the Coates Road bus barn in Yelm, which is at capacity. School buses transport 52 middle school/high school students, sixty 4th through 6th graders, or 78 kindergarten through 3rd grade students. YCS presently operates 49 school bus routes, ranging from 3.0 to 7.75 hours in length.

The Rainier School District operates 12 buses, and had 12 drivers at the time of this writing. The fleet is presently housed at the 3rd Street West bus barn in the Town of Rainier. The District operates 9 school bus routes, ranging from 0.75 to 1.5 hours in length. Students of all grade levels are transported together on these routes.

Current Fiscal Situation. The budgeted enrollment for the 2006/07 school year when the *Fiscal Analysis* was performed was 4,862 students enrolled in Yelm Community Schools, and 878 full-time equivalent students in the the Rainier School District. The key revenue and expense factors for the two districts are summarized in Table 3.18.4-1 below:

Table 3.18.4-1. Key revenue and expense factors for Yelm Community Schools and the Rainier School District (Property Counselors, April 2008).

	Yelm Community Schools	Rainier School District
Expenditures per student: 2006/2007	\$ 8,447	\$ 8,239
Local revenues per student: 2006/2007	\$ 1,611	\$ 1,555
Operating Levy: \$/\$1,000 valuation	\$2.930976	\$2.664377
Bond Levy: \$/\$1,000 valuation	\$1.760000	\$1.140000

A substantial component of the bond issue passed in the Rainier School District in May 2007 will be used to improve existing facilities. The additional capital levy will be approximately \$0.83 per \$1,000 valuation beginning in 2008 and continuing for 20 years.

POTENTIAL CONSTRUCTION IMPACTS

Full Build-Out Conceptual Land Use Alternatives

Any of the conceptual land use alternatives would make sites available for new school construction. Depending on the relative timing between school construction and neighborhood development around these sites, there may or may not be construction-related impacts to the occupants of these schools. It is more likely that recently-established residential neighborhoods would experience short-term impacts associated with new school construction, in the form of noise, dust, construction trips, and dirt tracked onto roadways.

No Action Alternative

Under the No Action Alternative, the Thurston Highlands site would temporarily remain undeveloped; therefore, no construction impacts would be anticipated if this alternative were selected.

POTENTIAL DEVELOPED-CONDITION IMPACTS

Thurston Highlands student population projections by District have been developed based on land use and population projections by Traffic Analysis Zone (TAZs – see Figure 3.18-4). Tables provided in Appendix B show these projections for each conceptual land use alternative being evaluated in the EIS. The estimated timeline for full build-out of Thurston Highlands is 10 to 30 years. Given this broad range of time, and the number of unknown factors at the time of this writing that will influence the rate at which development would progress, it is not possible to forecast student population by year. However, to assist public service providers with near-term and long-term capital facilities planning and staffing requirements, the EIS evaluates a conceptual Phase 1 development scenario, and full build-out. Full build-out effects are analyzed for the three conceptual land use alternatives below, following the Phase 1 discussion.

Phase 1 Development Concept

The Phase 1 development concept is described in Chapter 2, Section 2.5.3. It is anticipated that approximately 1,008 homes could be constructed in the northeast quadrant of the Thurston Highlands site between approximately 2008 and 2011, and that these homes could be occupied between approximately 2009 and 2012. In keeping with the overall concept for the Master Planned Community, these homes would include a mix of dwelling unit types: single-family detached homes, duplexes, three- to four-family dwelling units, and multi-family dwellings. The Phase 1 development area would be entirely within the service area of Yelm Community Schools (compare Figures 2.5-6 and 3.18-3).

The Phase 1 student population projection based on this concept was developed using the McCormick Student Generation Rates (SGRs) prepared for the Yelm School District (McCormick, March 27, 2006). These SGRs distinguish only single-family detached homes and all other types of dwelling units as multi-family. The mix of dwelling unit types included in the Phase 1 development concept would generate a total of approximately 534 students: 298 elementary, 101 middle school, and 135 high school students. The Yelm Community Schools *Capital Facilities Plan* (May 2007) includes an estimate of approximately 964 students from

Thurston Highlands within the current 6-year planning period; i.e., through the 2012-2013 school year (YCS, May 2007, Executive Summary). This is a conservatively high estimate – nearly twice the number of students projected to reside within Thurston Highlands during that period of time. For this reason, shortfalls in school capacity may not be as high or occur as soon as forecast in the District's 2007 *Capital Facilities Plan*. On the other hand, if the higher-than-anticipated student population enrolled in Yelm Community Schools in the 2007–2008 school year is reflective of a higher trend, the District could be vastly over-populated by the time the resident population of Thurston Highlands introduces additional students (personal communication with Erling Birkland, Director of Facilities, Yelm Community Schools, April 22, 2008).

Fiscal Analysis: Phase 1 Operating Impacts. Yelm Community Schools District expenditures are assumed at the current rate of \$8,447 per student. The operating impact to the District is estimated at current costs per student rates, with offsetting payments from the State at current average rates per student (see Table 3.18.4-2).

Insert Figure 3.18.4-2.
Traffic Analysis Zones Used as a Basis for Student Population Projections.

Table 3.18.4-2. Thurston Highlands conceptual Phase 1 estimated operating impact to Yelm Community Schools (in 2006 \$) (Property Counselors, April 2008).

Assumptions	
Student Population	534
Operating Cost per Student 06/07	8,447
Non-Local Funding per Student	6,836
Assessed Valuation	231,850,000
Levy Rate-Operating	2.930976
Levy Rate-Bond	1.760000
Projected Operating Revenue	
Property Tax Revenue	679,547
Non-Local Funding	3,651,345
Total	4,330,892
Operating Expense	4,511,793
Estimated Net Annual Surplus	(180,901)
Annual Contribution to Bond	408,056

Table 3.18.4-2 shows that Thurston Highlands Phase 1 conceptual development would result in a shortfall for Yelm Community Schools in the amount of approximately \$180,000 annually.

Fiscal Analysis: Phase 1 Capital Impact. Increased student enrollment in Yelm Community Schools would require additional school facilities. The new facilities would be funded from a combination of State matching funds, impact fees/mitigation fees, capital levies from existing bond issues, and future new bond issues. State matching funds are provided to districts based on match percentages and allowable cost factors assigned by the Washington State Office of the Superintendent of Public Instruction (OSPI). The match factor assigned to Yelm Community Schools is 68.9 percent³ (Yelm Community Schools, *Capital Facilities Plan*, May 2007). The allowable cost factor is calculated as \$154 per square foot, with the square footage per student estimated at 90, 121, and 124 square feet for elementary, middle and high school facilities, respectively. The resultant cost estimates per school are significantly lower than the actual cost of developing schools, as shown in Table 3.18.4-3 (below). The actual cost factors shown in Table 3.18.4-3 are derived from the cost per student factors in the Yelm Community Schools *Capital Facilities Plan* (May 2007). These factors are consistent with analysis of construction costs for elementary schools from data provided by the OSPI. The average cost per square foot for elementary schools increased by 31 percent between 2005 and 2006 to a level of \$253 per square foot (Greg Stack, Seattle Daily Journal of Commerce, August 31, 2006).

³ The OSPI match factor assigned to Yelm Community Schools is also applied to the Rainier School District in the Capital Impact Analysis of Thurston Highlands full build-out alternatives (below).

Table 3.18.4-3. Capital cost factors derived from cost per student factors, in 2006 \$ (Yelm Community Schools, May 2007).

Cost Factors	
Elementary	
Site	\$600,000
Temporary Facilities	\$95,000
Construction	\$15,000,000
Middle	
Site	\$1,200,000
Temporary Facilities	\$190,000
Construction	\$23,000,000
High	
Site	\$2,400,000
Temporary Facilities	\$380,000
Construction	\$60,000,000
State Match	
Cost Base	
Elementary	\$6,245,910
Middle	\$10,409,850
High	\$24,058,320

Existing capital levies will generate revenues from new development. The formula for school facility impact fees allows for a credit of 10 years capital levy at current rates in determining impact fees. In the case of Yelm Community Schools, this is the remaining term of outstanding bonds.

Developers currently contribute toward the cost of school facilities through impact fees or mitigation fees. Impact fees are authorized pursuant to the Growth Management Act to fund system improvements for certain capital facilities such as schools, fire protection, parks, and transportation. Fees must be based on an approved Capital Facilities Plan, and reflect the impact of the development on the system. Impact fees are typically collected at the time of building permit issuance, and are updated on a regular basis, usually annually along with the six-year Capital Facilities Plan. Impact fees are not 'fixed' (i.e., established in amount) at the time of subdivision or land use approval, so if it takes 15 years for a subdivision to build out, the last house will pay the most current impact fee. In short, impact fees are collected at the time the impact occurs, and are based on the most current Capital Facilities Plan.

Mitigation fees are established through SEPA at the time of the land use or subdivision approval. These fees are typically 'fixed' at the time of the subdivision/land use approval, and are either paid at that time or at the time of building permit issuance. In Yelm, the School District comments on all SEPA threshold determinations and requests that the City impose a requirement for a mitigation agreement. The District then negotiates a contract with the developer to establish the mitigation fee, which is 'fixed' at that time with no provision for inflation.

Pierce County collects impact fees for development in unincorporated portions of the County in the amount of \$2,780 per single-family unit and \$1,220 per multi-family unit (Yelm Community

Schools, May 2007). These fees apply to a portion of the two school districts. Similar amounts can be negotiated in the form of mitigation fees in the Thurston County portions of both districts. As noted above, even if mitigation fees are negotiated at the same level as adopted impact fees, the fees would be 'fixed' and not adjusted over the build-out of the project.

The estimated capital impact to Yelm Community Schools that could result from Thurston Highlands conceptual Phase 1 development is summarized in Table 3.18.4-4.

Table 3.18.4-4. Thurston Highlands conceptual Phase 1 estimated capital impact to Yelm Community Schools (in 2006 \$) (Property Counselors, April 2008).

Schools	
Elementary	0.66
Middle	0.14
High	0.10
Cost Factors	
Elementary	
Site	\$600,000
Temporary Facilities	\$95,000
Construction	\$15,000,000
Middle	
Site	\$1,200,000
Temporary Facilities	\$190,000
Construction	\$23,000,000
High	
Site	\$2,400,000
Temporary Facilities	\$380,000
Construction	\$60,000,000
State Match	
Cost Base	
Elementary	\$6,245,910
Middle	\$10,409,850
High	\$24,058,320
Match Percentage	68.9%
Mitigation or Impact Fee Assumption	
Single Family Units	\$2,780
Multifamily Units	\$1,220
Estimated Cost	
Site	\$808,398
Temporary Facilities	127,996
Construction	19,262,550
Total	\$20,198,945
Sources of Funding	
Site Donation	\$808,398
State Match	5,537,072
Mitigation/Impact Fees Potential	2,307,720
Bond Contribution	3,216,169
Total	\$11,869,360
Surplus/(Deficit)	(\$8,329,585)

Table 3.18.4-4 shows that there would be a capital shortfall to Yelm Community Schools under Phase 1. The need for middle school and high school facilities would ultimately be met with expansion of existing facilities. Such expansions could be funded by future bond issues, as any expansion project will provide upgraded facilities and also serve District growth from projects other than Thurston Highlands. Phase 1 development would require construction of a new elementary school. Such a facility would be directly related to the Thurston Highlands Master Planned Community.

Full Build-Out Conceptual Land Use Alternatives

Preferred Alternative. Based on student generation rates identified in the Yelm Community Schools 2007 *Capital Facilities Plan*, the Preferred Alternative would generate approximately 2,661 students overall: about 946 students north and east of Tahoma Boulevard within Thurston Highlands (i.e., within the Yelm School District), and approximately 1,715 students west of the Boulevard (i.e., within the Rainier School District). The estimated breakdown by grade level is as shown in Table 3.18.4-5, below.

Table 3.18.4-5. Projected student population with the Preferred Alternative.⁴

	School-Aged Children			Total
	Elementary	Middle School	High School	
Yelm School District	504	157	285	946
Rainier School District	982	351	382	1,715
<i>Total:</i>	<i>1,486</i>	<i>508</i>	<i>667</i>	<i>2,661</i>

If segregated by District, this number of students would require one new elementary school in the Yelm School District, 21 percent of the capacity of one middle school, and approximately 22 percent of the capacity of Yelm high school; 2+ elementary schools in the Rainier School District, 47 percent of the capacity of one middle school, and approximately 29 percent of the capacity of the Rainier District high school.⁵ Overall, the facilities required to serve the number of students forecast to reside within the Preferred Alternative of Thurston Highlands (if not segregated by District) would consist of approximately 3.5 elementary schools, 68 percent of the capacity of one middle school, and 51 percent of the capacity of one high school (see Table B-1 in Appendix B).

Traditional Neighborhood Alternative. Based on student generation rates identified in the Yelm Community Schools 2007 *Capital Facilities Plan*, the Traditional Neighborhood Alternative would generate the largest student population: approximately 2,958 students overall, due to the largest number of single-family homes in the mix of dwelling unit types. About 1,273 of these students would reside within the Yelm School District, and approximately 1,685 students would originate from homes in the Rainier School District. The estimated breakdown by grade level is as shown in Table 3.18.4-6, below.

⁴ Student population per household, by dwelling unit type, based on Yelm Community Schools *Capital Facilities Plan* (May 2007): Appendix D, Calculations, acknowledged by the Rainier School District Superintendent to be the same factors used by the Rainier School District.

⁵ The number of schools required to serve elementary, middle school, and high school students is based on Yelm Community Schools *Capital Facilities Plan* (May 2007), Appendix D: Calculations.

Table 3.18.4-6. Projected student population with the Traditional Neighborhood Alternative.

	School-Aged Children			Total
	Elementary	Middle School	High School	
Yelm School District	746	277	250	1,273
Rainier School District	967	347	371	1,685
<i>Total:</i>	<i>1,713</i>	<i>624</i>	<i>621</i>	2,958

If segregated by District, this number of students would require the capacity of one and two-thirds new elementary schools in Yelm, approximately 37 percent of the capacity of a middle school, and approximately 19 percent of the capacity of Yelm High School; 2+ elementary schools in the Rainier School District, 46 percent of the capacity of a middle school, and approximately 29 percent of the capacity of the high school. Overall, the facilities required to serve the number of students forecast to reside within the Traditional Neighborhood Alternative (if not segregated by District) would consist of approximately 4 elementary schools, one middle school, and 48 percent of the capacity of one high school (see Table B-2 in Appendix B).

Urban Village Alternative. Based on student generation rates identified in the Yelm Community Schools 2007 *Capital Facilities Plan*, the Urban Village Alternative would generate the least number of students: approximately 2,067 overall, due to a larger number of duplex and multi-family units compared to single-family homes. Of these, approximately 898 students would reside within the Yelm School District, and about 1,169 students would reside in homes within the Rainier School District. The estimated breakdown by grade level is as shown in Table 3.18.4-7 below.

Table 3.18.4-7. Projected student population with the Urban Village Alternative.

School District	School-Aged Children			Total
	Elementary	Middle School	High School	
Yelm Community Schools	445	117	336	898
Rainier School District	587	159	423	1,169
<i>Total:</i>	<i>1,032</i>	<i>276</i>	<i>759</i>	2,067

If segregated by District, this number of students would require the capacity of one elementary school in the Yelm School District, approximately 16 percent of the capacity of one middle school, and 26 percent of the capacity of the high school; and the capacity of approximately one and one-third new elementary schools in the Rainier School District, 21 percent of the capacity of one middle school, and 33 percent of the capacity of the high school. Overall, the facilities required to serve the number of students forecast to reside within the Urban Village Alternative (if not segregated by District) would consist of approximately two and one-third elementary schools, 37 percent of the capacity of one middle school, and 58 percent of the capacity of one high school (see Table B-3 in Appendix B).

Development of the Master Planned Community is anticipated to progress westerly from Tahoma Terra, then southward along Tahoma Boulevard, and lastly into the southwest sector of the project area. The *Traffic Impact Analysis* prepared for the project (Transportation Engineering Northwest 2008) recommends that the Boulevard connection to SR 507 be constructed during Phase 2 development – by 2015. Utilities and infrastructure would be extended southward with construction of Tahoma Boulevard, making this area of the site available for development at that time; however, it is not presently anticipated that residential

development within the westerly portion of the site (within the Rainier School District) would occur until sometime after 2015.⁶

No Action Alternative

Under the No Action Alternative, the Thurston Highlands site would temporarily remain undeveloped; therefore, there would be no student population associated with the site until a later time.

School Bus Transportation. Based on the enrollment projections indicated above in Tables 3.18.4-5 through 3.18.4-7, Thurston Highlands middle school and high school students would require school bus transportation to existing schools. If it were necessary for Thurston Highlands elementary students to temporarily attend existing schools while new elementary schools are being constructed on sites within Thurston Highlands, these students would also require school bus transportation. Based on Thurston Highlands Phase 1 student population projections reported above, Yelm Community Schools estimates that 5 to 6 buses would be required to transport middle school and high school students, and 4 to 5 buses would be required to temporarily transport elementary students (personal communication with Rhonda Morton, Co-Director of Transportation, YCS, January 28, 2008). No students would be generated within the Rainier School District during Phase 1 development within Thurston Highlands. Longer-range planning will occur at a time when actual development proposals are submitted for future phases of the Master Planned Community.

Due to capacity constraints at the existing Yelm Community Schools bus barn, this District plans to address alternative transportation facilities in 2008/2009 (personal communication with Rhonda Morton, Co-Director of Transportation, YCS, January 24, 2008). One possibility for which preliminary discussions have occurred with the Rainier School District is a possible cooperative bus barn located near the shared boundary between the two Districts, in the vicinity of SR 507 (personal communication with Dennis Friedrich, Superintendent, Rainier School District, January 24, 2008). Even without developing a cooperative facility such as this, YCS has indicated that they would be able to adjust for the increased transportation requirements associated with Thurston Highlands (personal communication with Rhonda Morton, January 24, 2008).

Fiscal Analysis: Full Build-out Operating Impacts. The Tables 3.18.4-8 and 3.18.4-9 summarize the operating impact of Thurston Highlands full build-out conceptual land use alternatives on Yelm Community Schools and the Rainier School District, respectively.

Yelm Community Schools would experience small shortfalls under the Preferred Alternative or Traditional Development Alternative, but could experience a surplus under the Urban Village Alternative. In the latter case, the enrollment impact would be relatively low compared to the increased tax base contributed by the commercial uses. The Rainier School District would experience an annual shortfall equivalent to approximately 3 percent to 5 percent of its incremental annual expenditures, depending on the alternative selected for implementation.

⁶ The initial Boulevard connection to SR 507 will likely be a two-lane road constructed in one-half of the right-of-way. Only those utilities planned for that side of the road would be constructed with the first phase of the Boulevard. For this reason and due to several other factors unknown at this time that will affect the rate and progression of development, it cannot be predicted with certainty when the first residential development will occur within the portion of the site that presently lies within the Rainier School District.

Table 3.18.4-8. Thurston Highlands full build-out estimated operating impact on Yelm Community Schools (in 2006 \$) (Property Counselors, April 2008).

	Preferred Alternative	Urban Village	Traditional Development
Assumptions			
Student Population	946	898	1,295
Operating Cost per Student 06/07	\$8,447	\$8,447	\$8,447
Non-Local Funding per Student	\$6,836	\$6,836	\$6,836
Assessed Valuation	\$513,035,000	\$602,970,000	\$621,500,000
Levy Rate-Operating	\$2.930976	\$2.930976	\$2.930976
Levy Rate-Bond	\$1.760000	\$1.760000	\$1.760000
Projected Operating Revenue			
Property Tax Revenue	\$1,503,693	\$1,767,291	\$1,821,602
Non-Local Funding	6,464,046	6,135,922	8,851,901
Total	\$7,967,739	\$7,903,212	\$10,673,503
Operating Expense	\$7,987,313	\$7,581,866	\$10,937,872
Estimated Net Annual Surplus	(\$19,574)	\$321,347	(\$264,369)
Annual Contribution to Bond	\$902,942	\$1,061,227	\$1,093,840

Table 3.18.4-9. Thurston Highlands full build-out estimated operating impact on the Rainier School District (in 2006 \$) (Property Counselors, April 2008).

	Preferred Alternative	Urban Village	Traditional Development
Assumptions			
Student Population	1,715	1,169	1,713
Operating Cost per Student 06/07	\$8,239	\$8,239	\$8,239
Non-Local Funding per Student	\$6,684	\$6,684	\$6,684
Assessed Valuation	\$752,600,000	\$572,100,000	\$738,200,000
Levy Rate-Operating (\$/\$1000)	\$3	\$3	\$3
Levy Rate-Bond (\$/\$1000)	\$2	\$2	\$2
Projected Revenue			
Property Tax Revenue	\$2,005,210	\$1,524,290	\$1,966,843
Non-Local Funding	11,465,528	7,816,129	11,450,088
Total	\$13,470,738	\$9,340,420	\$13,416,931
Operating Expense	\$14,132,717	\$9,634,371	\$14,113,686
Estimated Net Annual Surplus	(\$661,979)	(\$293,951)	(\$696,755)
Annual Contribution to Bond	\$1,482,622	\$1,127,037	\$1,454,254

Fiscal Analysis: Full Build-out Capital Impact. Table 3.18.4-10 (below) summarizes estimates of the capital facilities requirements for Yelm Community Schools to serve full build-out of the Thurston Highlands Master Planned Community. The District would need to develop a new elementary school in the case of the Preferred Alternative or the Urban Village Alternative. If the Traditional Development Alternative were selected for implementation, 1.7 elementary schools would be required to serve the Thurston Highlands student population. The need for middle and high school facilities within the Yelm Community Schools District would be met by expanding existing schools under any of the conceptual land use alternatives for full build-out of the Thurston Highlands Master Planned Community (personal communication with Dr. Alan Burke and Erling Birkland, May 24, 2007).

Table 3.18.4-11 summarizes estimates of the capital facilities requirements for the Rainier School District to serve full build-out of the Thurston Highlands Master Planned Community. This District would need to develop 2.2 new elementary schools in the case of the Preferred Alternative or the Traditional Development Alternative, or 1.3 elementary schools to serve the Urban Village Alternative student population. The need for middle and high school facilities would be met by expanding existing schools (personal communication with Dr. Dennis Friedrich, May 24, 2007). There would be a capital shortfall under any of the full build-out alternatives.

Table 3.18.4-10. Yelm Community Schools capital facility requirements to serve Thurston Highlands full build-out (in 2006 \$) (Property Counselors, April 2008).

	Preferred Alternative	Urban Village	Traditional Development
Schools			
Elementary	1.12	0.99	1.71
Middle	0.21	0.16	0.37
High	0.22	0.26	0.19
Cost Factors			
Elementary			
Site	\$600,000	\$600,000	\$600,000
Temporary Facilities	\$95,000	\$95,000	\$95,000
Construction	\$15,000,000	\$15,000,000	\$15,000,000
Middle			
Site	\$1,200,000	\$1,200,000	\$1,200,000
Temporary Facilities	\$190,000	\$190,000	\$190,000
Construction	\$23,000,000	\$23,000,000	\$23,000,000
High			
Site	\$2,400,000	\$2,400,000	\$2,400,000
Temporary Facilities	\$380,000	\$380,000	\$380,000
Construction	\$60,000,000	\$60,000,000	\$60,000,000
State Match			
Cost Base			
Elementary	\$6,245,910	\$6,245,910	\$6,245,910
Middle	\$10,409,850	\$10,409,850	\$10,409,850
High	\$24,058,320	\$24,058,320	\$24,058,320
Match Percentage	68.9%	68.9%	68.9%
Mitigation/Impact Fees (Potential) based on Pierce Co portion of the District			
Single Family Units	\$2,780	\$2,780	\$2,780
Multifamily Units	\$1,220	\$1,220	\$1,220
Estimated Cost			
Site	\$1,448,870	\$1,400,152	\$1,928,484
Temporary Facilities	229,404	221,691	305,343
Construction	34,758,277	33,913,662	45,623,399
Total	\$36,436,551	\$35,535,504	\$47,857,226
Sources of Funding			
Site Donation	\$1,448,870	\$1,400,152	\$1,928,484
State Match	9,950,641	9,652,950	13,177,045
Mitigation/Impact Fees Potential	4,071,760	3,994,400	5,520,600
Bond Contribution	7,116,702	8,364,259	8,621,303
Total	\$22,587,972	\$23,411,761	\$29,247,432
Surplus/(Deficit)	(\$13,848,579)	(\$12,123,743)	(\$18,609,794)

Table 3.18.4-11. Rainier School District capital facility requirements to serve Thurston Highlands full build-out (in 2006 \$) (Property Counselors, April 2008).

	Preferred Alternative	Urban Village	Traditional Development
Schools			
Elementary	2.18	1.30	2.21
Middle	0.47	0.21	0.46
High	0.29	0.33	0.29
Cost Factors			
Elementary			
Site	\$600,000	\$600,000	\$600,000
Temporary Facilities	\$95,000	\$95,000	\$95,000
Construction	\$15,000,000	\$15,000,000	\$15,000,000
Middle			
Site	\$1,200,000	\$1,200,000	\$1,200,000
Temporary Facilities	\$190,000	\$190,000	\$190,000
Construction	\$23,000,000	\$23,000,000	\$23,000,000
High			
Site	\$2,400,000	\$2,400,000	\$2,400,000
Temporary Facilities	\$380,000	\$380,000	\$380,000
Construction	\$60,000,000	\$60,000,000	\$60,000,000
State Match (Not available until Rainier schools are at capacity.)			
Cost Base			
Elementary	\$6,245,910	\$6,245,910	\$6,245,910
Middle	\$10,409,850	\$10,409,850	\$10,409,850
High	\$24,058,320	\$24,058,320	\$24,058,320
Match Percentage (Potential)	68.9%	68.9%	68.9%
Mitigation/Impact Fees (Potential)			
Single Family Units	\$2,675	\$2,675	\$2,675
Multifamily Units	\$1,140	\$1,140	\$1,140
Estimated Cost			
Site	\$2,576,648	\$1,818,679	\$2,567,045
Temporary Facilities	407,969	287,958	406,449
Construction	61,138,338	43,981,108	60,940,806
Total	\$64,122,956	\$46,087,744	\$63,914,299
Sources of Funding			
Site Donation	\$2,576,648	\$1,818,679	\$2,567,045
State Match	17,619,199	12,530,413	17,564,124
Impact Fees (Potential)	7,257,500	5,341,000	7,147,000
Bond Contribution	14,821,824	11,267,028	14,538,228
Total	\$42,275,172	\$30,957,120	\$41,816,396
Surplus/(Deficit)	(\$21,847,784)	(\$15,130,624)	(\$22,097,903)

The capital shortfalls for each District would have to be funded by either a future bond issue or by increases in impact fees or mitigation fees. Future bond issues for expanded middle and high schools would be a logical response, as any expansion project will provide upgraded facilities and also serve District growth from projects other than Thurston Highlands. The shortfall for elementary facilities would be directly related to the Thurston Highlands Master Planned Community.

MITIGATION MEASURES

Incorporated Plan Features. Any of the conceptual land use alternatives would include four to five Public Service sites, three or four of which would be donated to the school district(s) to help offset the capital costs of providing educational services to Thurston Highlands students. The applicant would work with the school district(s) to accomplish land transfers in a timely way to enable new school construction as expeditiously as possible in relation to the need to serve Thurston Highlands students.

Conditions imposed by the City on site plan approvals, and Covenants, Conditions and Restrictions (CC&Rs) of the development would impose measures to minimize construction impacts to existing homes and/or schools within the development.

Applicable Regulations and Commitments. The City of Yelm presently requires mitigation fees for schools as a SEPA condition of development approval.

School districts are authorized to impose impact fees on new development. There is no school impact fee at this time, although Yelm Community Schools receives impact fees from unincorporated areas of Pierce County. Fees would have to be greater than the fees in Pierce County to fund the capital facility needs identified for the Thurston Highlands Master Planned Community.

The Yelm Community Schools *Capital Facilities Plan* (May 2007) states that:

“Due to the unusually large influx of students from this project, mitigation fees alone will not provide the necessary infrastructure or facilities. Real estate and construction funding methods will need to be addressed in addition to mitigation fees from building permits.”⁷

As reported above, the applicant proposes to donate land within the Master Planned Community for the construction of schools. If measures other than mitigation fees and real estate are required, this determination will be made during the development approval process, and required measures will be included in a mitigation agreement between the applicant and the school district(s).

The applicant also proposes to work with the school district(s) to locate school bus waiting, pick-up, and drop-off areas within the Master Planned Community. These areas need to be large enough to accommodate several students and keep them off the road, away from unsafe conditions (personal communication with Rhonda Morton, Co-Director of Transportation, YCS, January 24, 2008).

⁷ Yelm Community Schools (May 2007); Executive Summary.

Other Recommended Mitigation Measures. The City of Yelm intends to maintain close coordination between development approvals for individual plat applications within the Thurston Highlands Master Planned Community, and school district planning to accommodate increases in the number of students to be served.

City decision makers will consider efficiencies involved in providing school sites, school buildings, and school bus transportation services within a single school district to serve the Thurston Highlands student population, and may make a recommendation to Yelm Community Schools and the Rainier School District in this regard. Because Thurston Highlands students would require a significant proportion of the total capacity of schools at every grade level (elementary, middle school and high school), there would be efficiencies associated with constructing, operating, and maintaining new school buildings in one district rather than two. There are also efficiencies to be considered in the provision of school bus transportation. The Thurston Highlands site is on the east boundary of the Rainier School District, approximately 5 miles from existing schools, with no point of access to SR 507 planned until the end of Phase 1 development (approximately 2012). In keeping with the City's *Sustainable Development Principles* (City of Yelm, September 19, 2006), City decision makers will take into consideration the desirability of providing educational services within neighborhoods where students could walk or ride their bicycles to school, to minimize the number of vehicle miles traveled for school bus transportation.

SIGNIFICANT UNAVOIDABLE ADVERSE IMPACTS

The Thurston Highlands student population would require construction of 2 to 5 elementary schools, a significant proportion of the capacity of existing middle schools and high schools, and all related operation and maintenance services.

Yelm Community Schools is projected to experience a significant capital shortfall (on the order of 41 percent) during Thurston Highlands Phase 1 development.

Yelm Community Schools would experience small shortfalls (0.2 percent to 2.4 percent of annual operating expenses) under the Preferred Alternative or Traditional Development Alternative for full build-out of the Master Planned Community. The Rainier School District would experience an annual shortfall equivalent to approximately 3 percent to 5 percent of its incremental annual expenditures, depending on the land use alternative selected for implementation.

The City would require that Mitigation Agreements be developed between the applicant and the school district(s) to address capital short-falls in the early stages of the project.

