The Public Costs and Revenues from a New House in Kirkland

Establishing a solid estimate of the cost of serving residential development is extraordinarily difficult.

In the course of preparing the estimates below, the Washington Research Council has reviewed the available economic literature and has contacted the National Association of Home Builders and visited with their economists and the Washington Real Estate Research Center at Washington State University. For the Kirkland case study we reviewed road and parks impact fee rate studies for the city of Kirkland; and annexation studies for the cities of Kirkland and Issaquah.

The costs of serving residential development vary from case to case. For example, calculating transportation impacts will depend on the number of units being added, the quality of the existing road system, the numbers of routes into the development, and the like. Similarly, whether or not development requires substantial upgrades to existing sewer and water systems depends on a number of site-specific variables. And so on. In addition, community standards will vary, adding another intangible to the equation.

In the spirit of a case study approach, however, the Research Council believes the following estimate of the public capital costs for a single-family house in Kirkland will be useful. It is based on the calculations used by the City of Kirkland in determining impact fees for roads and parks, as well as discussions with city and school district officials.

The public capital costs for a new single-family house in Kirkland comes to a total of $7,974. The cost is held down because the Lake Washington School District’s Kirkland area schools have capacity to absorb additional students. Elsewhere, the district is adding capacity to accommodate growth, at a cost of $10,391 per single-family residence.

A new house in Kirkland selling for $250,000 generates $21,680 in government revenue. For this house, growth clearly pays. However, the revenue accrues disproportionately to state government.
Details of capital cost estimates

The costs break down in this way:

Administrative Expenses: Equal to permit fees on the project
Fire: Minimal
Parks: $1,452
Roads: $2,661
Schools: Minimal
Sewer: $2,150
Water: $1,711
Total: $7,974

Administrative costs:
The development of a new housing unit imposes administrative costs on the city. Permit fees have been set to recoup these costs.¹

Fire:
Kirkland does not impose fire impact fees.

Kirkland’s growth is primarily infill, and the existing set of stations cover the city pretty well.²

Increasing population does bring the need for further capital equipment for the fire department. However, the primary indicator that the department looks to in deciding to increase staff and equipment is response time. If growth brings increasing traffic congestion, this will lead to a need to invest in more equipment, and eventually additional stations.

But as the road impact fee study shows, nearly half of the increase in road use is due to external growth and a bit less than half of the increase in road use due to internal growth is due to residential construction.

Parks:
The City of Kirkland commissioned a rate study, upon which it based its parks impact fees.³

The city employs a six-fold classification of parks and recreational facilities: community parks; indoor recreation space; pathways/trails; neighborhood parks; nature parks; and waterfront parks. The city only charges impact fees to cover costs of adding capacity for the first three of these categories. The city has sufficient capacity of in fourth and fifth (neighborhood parks and nature parks) to accommodate growth in the near term. The city’s capital improvement plan does not include any new capacity in the sixth category (waterfront parks).

For the other three types of parks, the cost of reaching the city’s standard of service is $1,452 for a single-family house and $1,022 for a multi-family unit. These costs are based on costs of projects in the city’s capital improvement plan.
The fees that the city actually charges are lower, $612 and $430 respectively. In part this is because real estate excise tax revenue is applied to some of these projects, and in part it is because the impact fee study assumes that the city will provide additional funds for each project in amounts equal to that received from impact fees.

Roads:

The City of Kirkland commissioned a rate study, upon which it based its road impact fee schedule.4

The study identified a twenty-year list of capacity augmenting, growth related traffic projects from the City’s comprehensive plan. The total projected cost of these projects is $44.67 million dollars. Of this total, the study expected $12.36 million (27.4 percent) to be covered by state grants, leaving $32.41 million in local costs. The study assigns 53 percent of this cost to “Kirkland traffic growth” and the remainder to non-Kirkland growth. (Non-Kirkland growth includes traffic passing through the city as well as one half of trips that begin [end] in the city and end [begin] outside of it.) The cost to the city of Kirkland growth is thus $17.31 million ($32.41 million times 0.53).

This cost is then allocated to new businesses and residences projected for the city in proportion to the number of trips generated by each. The cost to the city for a single-family residence is $1,931. The cost to the city for a multifamily residence is $1,172. Including the state’s share increases the costs to $2,661 and $1,615 respectively.

The city chose to set its impact fees at $966 for single-family residences and $586 for multifamily residences, one half of the local costs found in the study.

Even with the road investments anticipated in the city’s comprehensive plan, levels of service on Kirkland streets are expected to deteriorate. This deterioration is a “cost of growth” not included in the allocated costs above.

Schools:


Over the period, the district plans renovations at 4 Kirkland area schools. These renovations will increase capacity in permanent classrooms by 408 students. However, these schools are below capacity at the present time, and the new permanent classrooms are replacements for existing portables.

Kirkland does not appear to be an area where the district needs to add capacity. Reflecting this, the district has chosen not to ask the City of Kirkland to impose a school impact fee.6

The district does need to add capacity to serve growing enrollments in areas other than Kirkland, and the Capital Facilities Plan does include the calculation of impact fees. The calculated school capital cost for a single-family residence is $10,391. Capital levy property taxes to be paid by the homeowner offset $3,292 of this. The state contribution towards school construction is $3,500. The impact fee covers the remaining $3,499. The multi-family impact fee is much smaller, $119.
Sewer and Water:

In some cases a new residential unit imposes no cost on the city for water or sewer, as the existing capacities of water and sewer lines are sufficient to accommodate the increased flows. In other cases the does need to increase capacity. New housing pays water and sewer capital facility charges that have been set to recoup these costs on average.\(^7\)

The water capital facilities charge is $2,150 for a small (5/8" or 3/4") meter. The sewer charge is $1,711 for a single-family home.

## Details of Government Revenues

The construction of a $250,000 house generates considerable tax revenues for government.\(^8\)

### By Type

<table>
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<th>By Type</th>
<th>Total</th>
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<tbody>
<tr>
<td>Sales Tax</td>
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<td>Bus. &amp; Occ. Tax</td>
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<td>Property Tax</td>
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<td>Transp. Impact Fees</td>
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<td>Water/Sewer Fees</td>
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<td><strong>Total:</strong></td>
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### By Level of Government

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<th>By Level of Government</th>
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<td>King County</td>
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<td>City of Kirkland</td>
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<td>Lake Wash. School District</td>
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<td>Metro Transit</td>
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<td>Sound Transit</td>
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<td>King County Criminal Justice</td>
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<td>Other Districts</td>
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<tr>
<td><strong>Total:</strong></td>
<td><strong>$21,680</strong></td>
</tr>
</tbody>
</table>

### Sales Tax:

The most significant tax is the sales tax. The home purchaser does not directly pay sales tax, as that transaction is exempt. However, the builder must pay sales tax on the materials from which the house is constructed and on the wages paid to the workers who build the house. In urban King County, the sales tax rate is 8.8 cents per dollar. Of this, 6.5 cents goes to the state, 1 cent to the county or the city for general purposes, 0.8 cent to the county for Metro transit, 0.4 cent to Sound Transit, and 0.1 cent to the city and county for criminal justice.

### Real Estate Excise Tax:

The sales transaction is subject to the real estate excise tax at rates of 1.28 percent of the purchase price to the state and 0.50 percent to the city or county. In addition, the transaction in which the builder acquires the lot is subject to the REET.

### Business and Occupation Tax:

Subcontractors pay state business and occupation (B&O) tax at the rate of 0.48 of gross receipts. Likewise, the suppliers of materials pay B&O at the rate of 0.47.
Property Tax:
The builder paid property taxes from the time the lot was bought to the time the completed home was sold.

Fees:
The builder paid impact fees for roads and parks, capital facilities charges to connect to the water and sewer lines, and numerous permit fees.

Notes

1 Phone conversation with Rick Jammerman, Public Works Department.
2 Phone conversation with Fire Chief Jeff Blake.
6 Phone conversation with Assistant Superintendent Bob Collard.
7 Phone conversation with Rick Jammerman.
8 Taxes calculated using the Research Council’s tax model based on a home actually constructed in Kirkland.