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Kirkland's Growth in Housing and Traffic

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The purpose of this report is to investigate the relationship of Kirkland's growth in housing units to its growth in traffic.

The Washington State Office of Financial Management estimates that 1058 housing units were added to blocks whose centers are within the current bounds of Kirkland from 2010-2014. This is a 2.87 per cent increase to the 2010 count of 36,877 housing units, including the annexation area. Some neighborhoods grew faster than others. Houghton-Lakeview grew by 1.66%, Finn Hill by 1.72%, South Rose Hill by 2.59%, North Rose Hill by 5.03%, and the eastern portion of Kingsgate by 6.61%.

Similarly, traffic grew by 3.54 per cent during the period 2011-2015, as measured by the entering volumes of signalized intersections. The average daily entering volume for the 59 signalized intersections in 2011 was 25,732 vehicles and 26,643 in 2015.

Traffic growth at signalized intersections within or adjacent to neighborhoods is compared to the growth of housing units for selected neighborhoods as shown in Figure 1. At the neighborhood level, a trendline indicates a one per cent increase in housing units is associated with a 2.37 per cent increase in traffic at nearby signalized intersections. However, some of the traffic growth may not be caused by the growth in housing units, but by growth in employment or improvement in the economy.

The city-wide increase in traffic of 3.54 per cent and the city-wide increase in housing units of 2.87 per cent is a 1.23 per cent increase per a 1 per cent increase in housing units. At the neighborhood level a 1 per cent increase in housing units is associated with a 2.37 per cent increase in traffic at impacted signalized intersections. It should be noted that these estimates are for a five year period and should be doubled for a decade estimate or divided by 5 for an annual estimate.

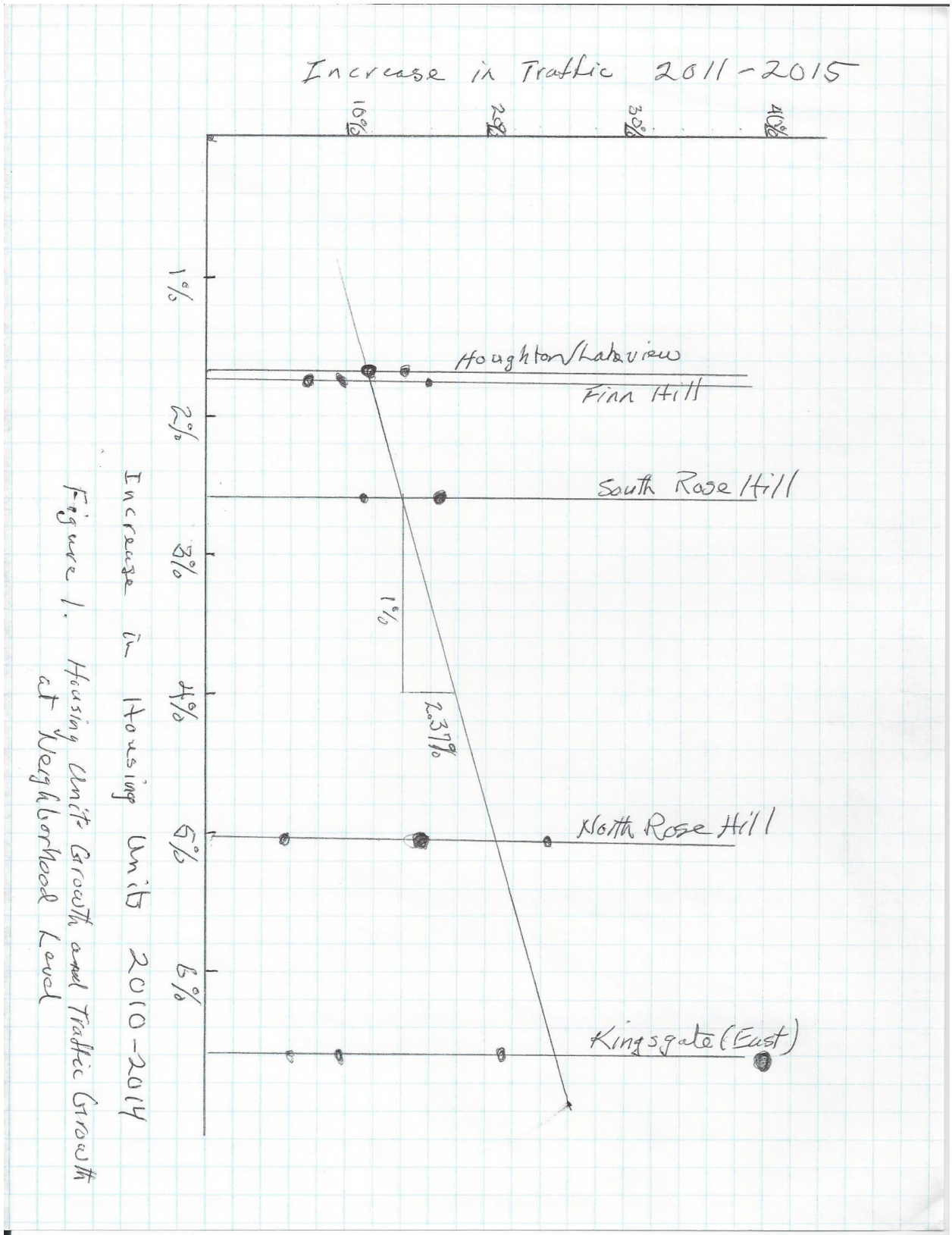

Figure 1. Housing Unit Growth and Traffic Growth at Neighborhood Level