

Whatcom Mobility 2040

Future Population and Land Use

Introduction

Title 23 Part 450 of Federal Code of Regulations states that the metropolitan transportation plan addresses “no less than a 20-year planning horizon as of the effective date” of the plan. As indicated by the title, *Whatcom Mobility 2040*, adopted in 2017, has a 23-year planning horizon. Whatcom County and Cities’ recently updated comprehensive plans use 2036 as the horizon year. Because 2036 falls short of the 20-year requirement for the regional/metropolitan transportation plan, WCOG is using the same land-use, population and employment assumptions as the regions’ jurisdictions but extending these factors to a 2040 horizon year.

Households and Employment

To measure impacts of population and employment growth on the regional transportation network, WCOG applies a conventional four-step, trip-based travel demand model. The model uses household travel characteristics to generate person trips that become the basis for a simulation of transportation activity on the transportation network (roads and transit routes). Current and forecast household and employment numbers are geographically allocated to traffic analysis zones (TAZ) that use transportation-based boundaries. Each TAZ’s expected trip activity is then assigned to (and from) the modelled roads and transit network. Transportation planning uses these data and outputs to help anticipate needs and opportunities to accomplish regional transportation goals.

Further Information about WCOG travel model can be found at the following link - [WCOG Regional Travel Demand Model](#)

Base Year 2013

The modelled base year was updated to 2013 for the purposes of informing the 2016 county’s and cities’ comprehensive plan updates. In 2015, a consultant in joint effort with Whatcom County and WCOG compiled and developed the 2013 demographics and employment data. The 2013 data included Washington State Office of Financial Management (OFM) estimates, jurisdiction parcels and parcel permits information, and other local jurisdiction input.

Forecast 2036

The forecast year 2036 was also developed jointly with consultants, Whatcom County and WCOG to formulate demographics and employment for the development of the county’s environmental impact statement (EIS) and comprehensive plan update. WCOG updated the modelled transportation network to reflect completion of capacity-adding projects with full funding currently listed in the regional and state Transportation Improvement Programs (TIP) to year 2021. Projects not fully funded or other projects currently planned in years beyond 2021 were excluded.

Forecast 2040

WCOG developed the 2040 household and employment forecast as an extension of Whatcom County’s Comprehensive Plan for 2036 that was completed in 2015. Overall, the *Whatcom Mobility 2040* households and employment growth maintains the forecast distribution established by the Whatcom County’s land capacity analysis and preferred-alternative scenario for the 2036 comprehensive plan, at a slightly reduced overall annual growth rate.

Further information on Whatcom County’s 2036 comprehensive plan can be found at the following link - [Whatcom County Comprehensive Plan](#).

Fig_ household population, total households, and total employment from 2008 though 2040.

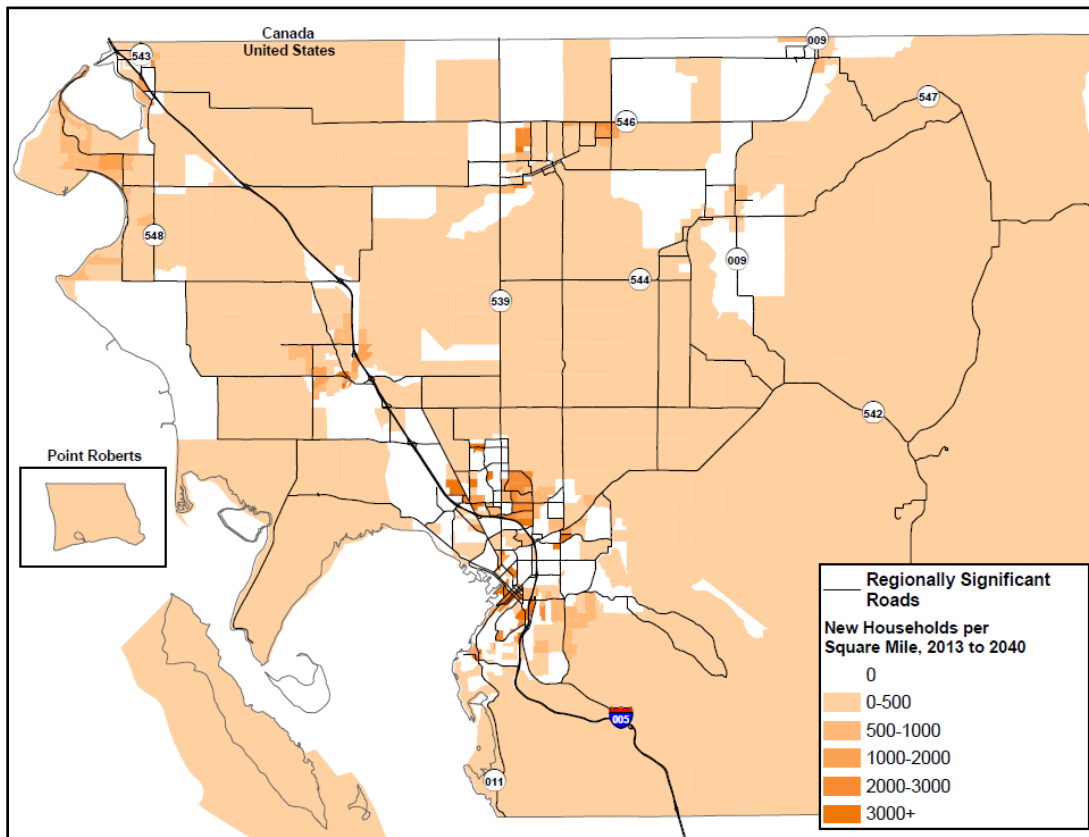
Forecast Summary

	2008	2013	2036	2040
Household Population*	185,774	198,882	268,750	282,204
Total Households	75,048	81,710	112,264	117,792
Total Employment	88,044	83,233	120,284	127,483

*Population is an estimate based on the household formula from the 2008 North Sound Travel Survey. The survey reports an average of 2.3 persons per household.

Households and employment are projected to increase by 44 percent and 53 percent respectively from 2013 to 2040. **Figs_ and_** illustrates the growth areas, by transportation analysis zones (TAZ), for households and employment with respect to the regional roads used for transportation analyses and impacts. The TAZ geographical boundaries vary in size according to their land-use type and population density. Urban areas have much smaller TAZs, whereas rural areas are larger covering more land. Note the growth areas for households are far broader than the more concentrated growth areas for employment.

Whatcom Household Growth from 2013 to 2040



Whatcom Employment Growth from 2013 to 2040

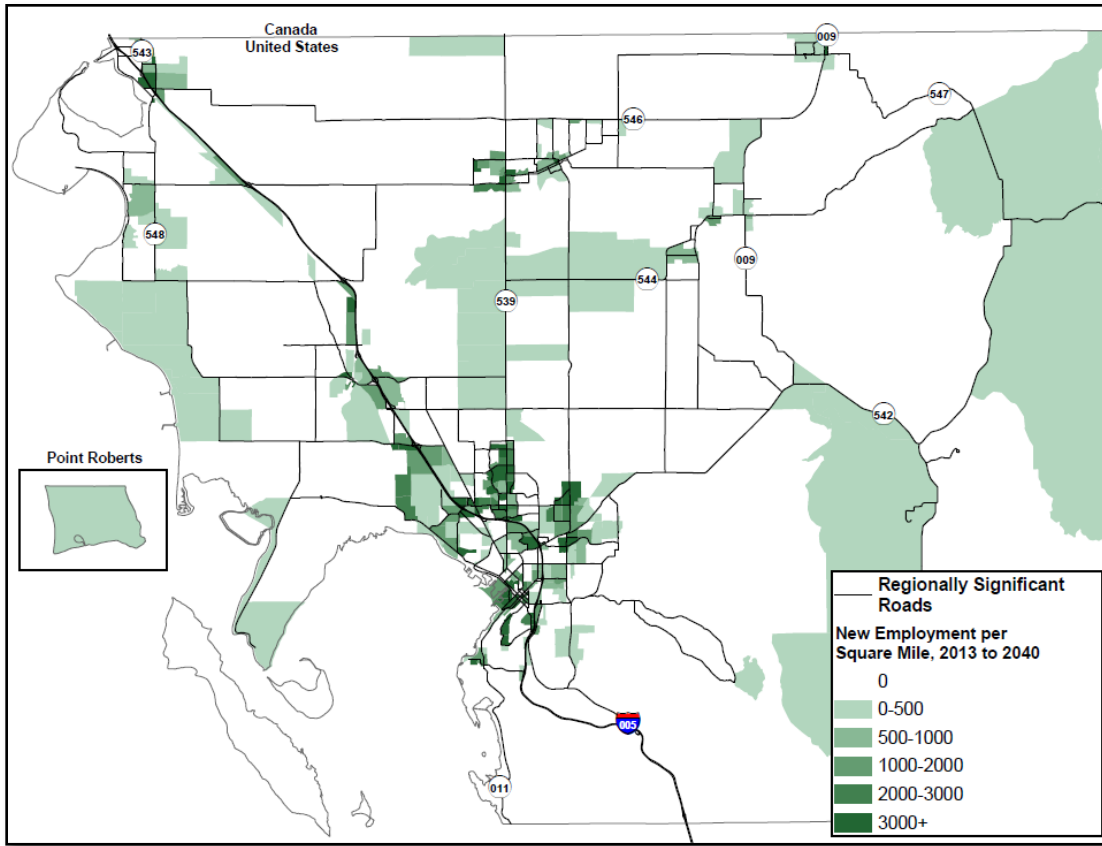


Fig. employment categorized by types and their expected growth through the forecast period that is applied to travel model calculations.

Growth by Employment Type

	2013	2040	% Increase
Education	7,721	10,953	41.9
Finance and Insurance	5,252	9,590	82.6
Services	25,370	39,480	55.6
Government	2,939	4,952	68.5
Manufacturing	8,892	12,510	40.7
Retail	18,863	27,283	44.6
Wholesale	3,749	7,037	87.7
Construction	6,369	9,523	49.5
Telecommunications	2,006	4,049	101.8
Agriculture	1,558	1,574	1.0
Other	367	380	3.5
Mining	147	152	3.4
All Employment	83,233	127,483	53.2

Please visit the *Whatcom Mobility 2040* [interactive map](#) for more in-depth 2040 maps and analyses.