Clark County Demographic Profile
2014 Regional Transportation Plan Update

- Clark County
- Skamania County
- Klickitat County
- City of Vancouver
- City of Camas
- City of Washougal
- City of Battle Ground
- City of Ridgefield
- City of La Center
- Town of Yacolt
- City of Stevenson
- City of North Bonneville
- City of White Salmon
- City of Bingen
- City of Goldendale
- C-TRAN
- Washington DOT
- Port of Vancouver
- Port of Camas-Washougal
- Port of Ridgefield
- Port of Skamania County
- Port of Klickitat
- Metro
- Oregon DOT
- 14th Legislative District
- 17th Legislative District
- 18th Legislative District
- 20th Legislative District
- 49th Legislative District

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INTRODUCTION

The long-range Regional Transportation Plan is a part of the required federal and state transportation planning process and represents the collective strategy for developing a regional transportation system to provide both mobility and accessibility for person trips and freight. The RTP includes all transportation modes and presents the framework plan to guide the longer-term development of the regional transportation system. The Plan supports the Comprehensive Growth Management Plan for Clark County and existing and future economic development. Regular update of the RTP is a federal requirement to ensure continuation of federal transportation funding to the region. Update to the RTP is needed not only to fulfill federal requirements but also to maintain consistency between state, regional, and local plans.

THE CURRENT MTP

The current Metropolitan Transportation Plan, with a horizon year of 2035, was adopted by the RTC Board in December 2011 with a Plan amendment to incorporate the C-TRAN Fourth Plain Transit Improvement Project's Locally Preferred Alternative adopted in August 2012. The current Plan's 2035 population forecast is 641,800 and employment forecast is 256,200. The land use allocation is based on the Comprehensive Growth Management Plan for Clark County (update adopted September 2007). Identification of projects in the long-range Metropolitan Transportation Plan, also known as the MTP, allows for the programming of projects for federal and state funding in the Transportation Improvement Program.

2014 RTP UPDATE

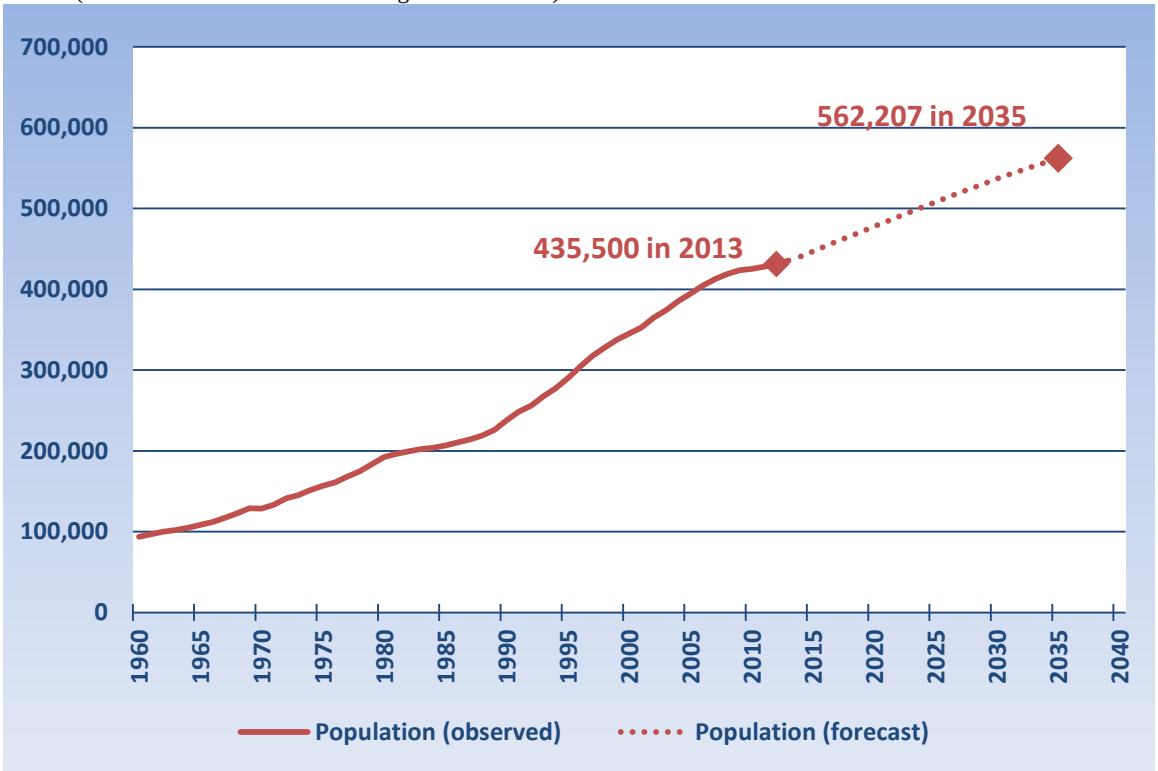
The 2014 RTP update is driven by federal requirements that a Plan update must be adopted at least every four years. An RTP must be in place at the end of 2015 to ensure uninterrupted receipt of federal funds for transportation projects programmed in the Transportation Improvement Program (TIP). The RTP update must address prescribed federal planning factors including support for economic vitality, transportation safety, security, accessibility and mobility options for people and freight, environmental protection and enhancement, energy conservation, quality of life, transportation system connectivity, efficient system management and operation and preservation of the existing system. The adopted plan must also maintain consistency between federal, state and local plans. These plans include local comprehensive and capital facilities plans, C-TRAN's 20-year Transit Development Plan, WSDOT's Highway System Plan, WSDOT's Strategic Highway Safety Plan, and the Washington Transportation Plan with policy goals of economic vitality, preservation, safety, mobility, environment and stewardship.

DEMOGRAPHIC PROFILE

Establishing household and employment growth forecasts and allocations are important steps in the RTP update process. The number and location of future households and jobs is an integral part of defining the future the plan will address. While the number and location of households and employment are major factors that influence the magnitude and patterns of future travel in the region, they are not the only demographic factors that influence future travel behavior and decisions. This document provides data on many of these national, state and county demographic trends and other socioeconomic factors, including: growth forecasts, age, driver licensing, race and ethnicity, poverty, auto ownership/availability, employment sectors and commuting patterns.

Figure 1: Clark County Population 1960 to 2040 – Observed and 2014 GMA Forecast

(Sources: US Census and Washington State OFM)



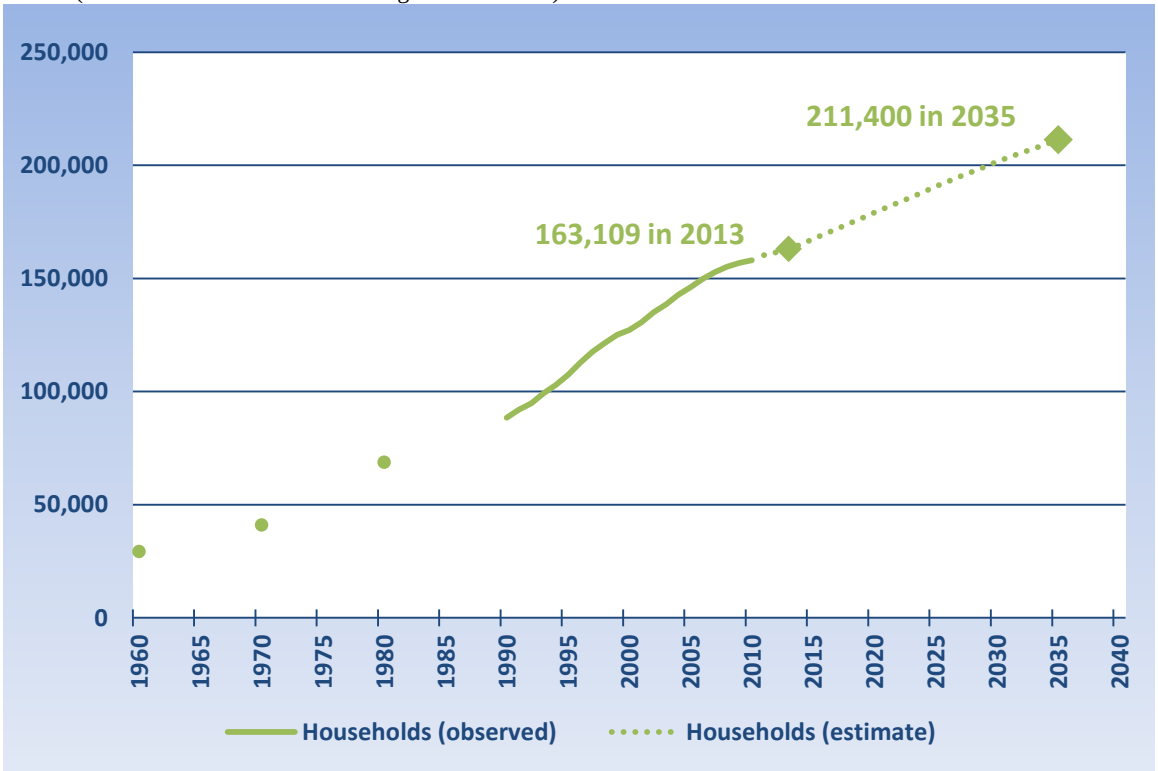
In January, the Board of County Commissioners (BOCC) adopted the Washington State Office of Financial Management's (OFM) most recent medium 2035 population projection for Clark County, 562,207 persons, as the county's official population projection for the GMA update. This represents an average annual growth rate of about 1.1% and about a 30% increase in population between 2013 and 2035.

The observed data in this chart come from OFM's intercensal estimates of population and can be found here: http://www.ofm.wa.gov/pop/april1/hseries/default.asp
and http://www.ofm.wa.gov/pop/april1/default.asp

The forecast data are from OFM's most recent county-level population projects published in 2012 and can be found here:
http://www.ofm.wa.gov/pop/gma/projections12/projections12.asp

Figure 2: Clark County Households 1960 to 2040 – Observed and Draft GMA Forecast

(Sources: US Census and Washington State OFM)



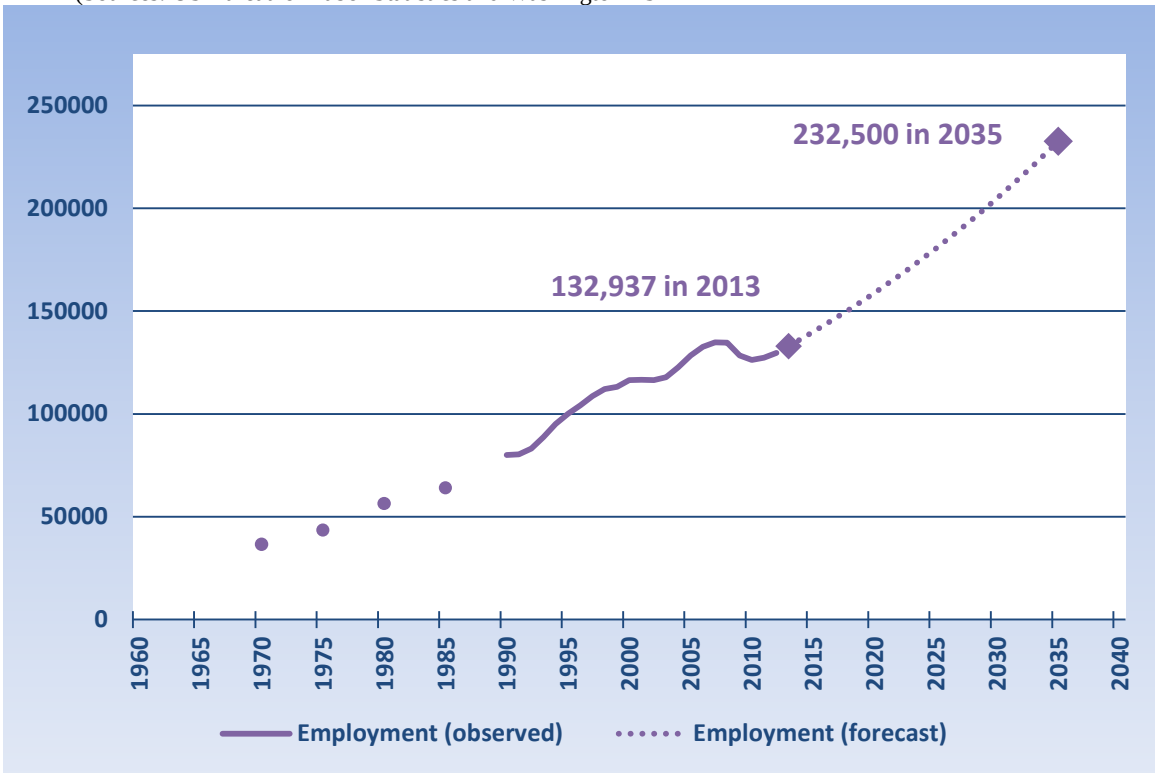
Transportation planning considers personal transportation from the perspective the household. Decisions about work location, home location, vehicles available for use, driving children to school, sports and etc. are all decisions that are made at the household level. People plan and behave differently based on their household characteristics. A 4-person household, with 2 workers and 3 cars, is very different from a 2-person, retired household with a single car. The average household size assumption being used GMA planning work is 2.66 persons per household for 2035. This is a slight decrease from the 2.68 to 2.67 we see today and would mean about 211,400 households in 2035.

The observed data are from the decennial census conducted by U.S. Census Bureau - http://factfinder2.census.gov/faces/nav/jsf/pages/index.xhtml

The forecast data are based on OFM's most recent county-level population projects published in 2012 and converted to households using the GMA update's 2.66 persons per household assumption for 2035.

Figure 3: Clark County Non-Farm Employment 1960 to 2040 – Observed and GMA Forecast

(Sources: US Bureau of Labor Statistics and Washington ESD



In April the Board of County Commissioners (BOCC) adopted an employment growth forecast of 91,200 new non-farm jobs between 2015 and 2035, as the county's official population projection for the GMA update. This results in a total of about 232,500 non-farm jobs in 2035. This represents an average annual growth rate of about 2.6% - or about a 75% increase in jobs between now and the 2035 horizon year.

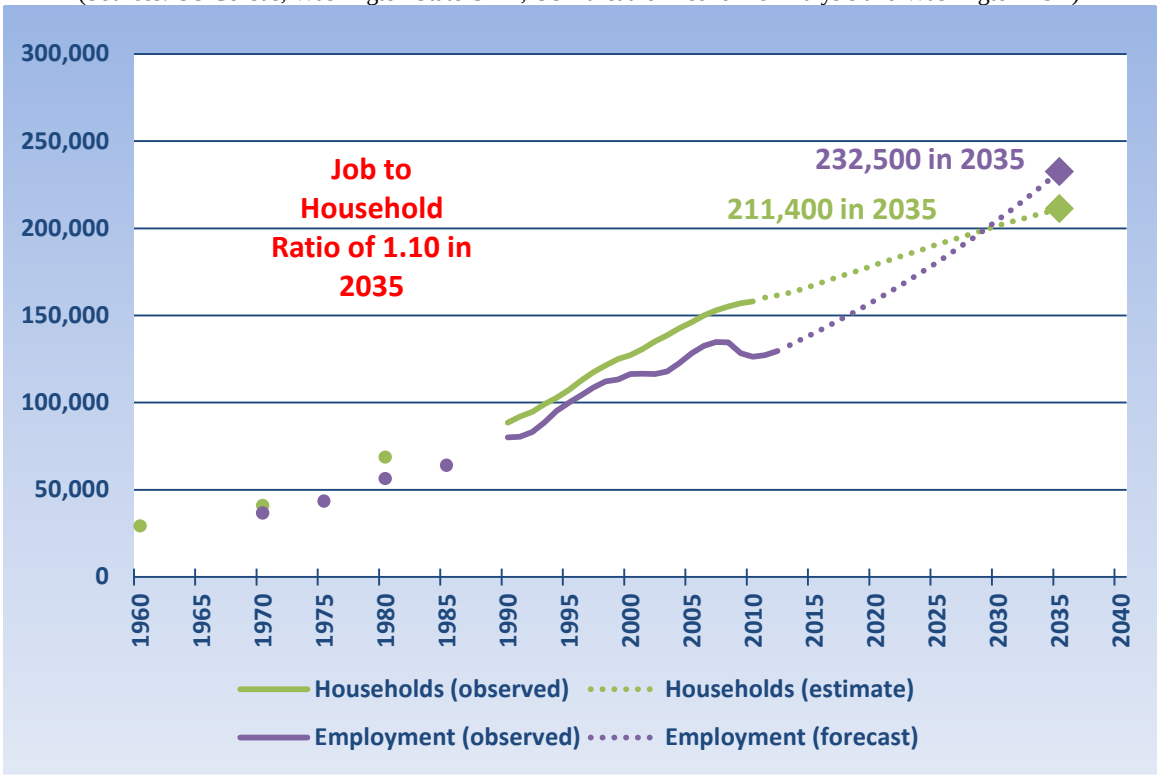
Employment not only provides jobs for workers, but services for customers – opportunities for shopping, recreation, entertainment, doctor appointments, haircuts, repair services and many others. Both commuting to work and traveling to services contribute to personal travel. Additionally, employment locations are also generators of both freight and goods movement.

The observed data (1970-1985) come from historical data from the U.S. Department of Labor's Bureau of Labor Statistics and the Washington State Employment Securities Department (1990 – present) - https://fortress.wa.gov/esd/employmentdata/reports-publications/regional-reports/county-profiles/clark-county-profile (see County Data tables).

The forecast data are based on the adopted BOCC employment forecast at a 2.6% annual growth rate.

Figure 4: Clark County Household and Employment 1960 to 2040 – Observed and Draft GMA Forecast

(Sources: US Census, Washington State OFM, US Bureau of Economic Analysis and Washington ESD)

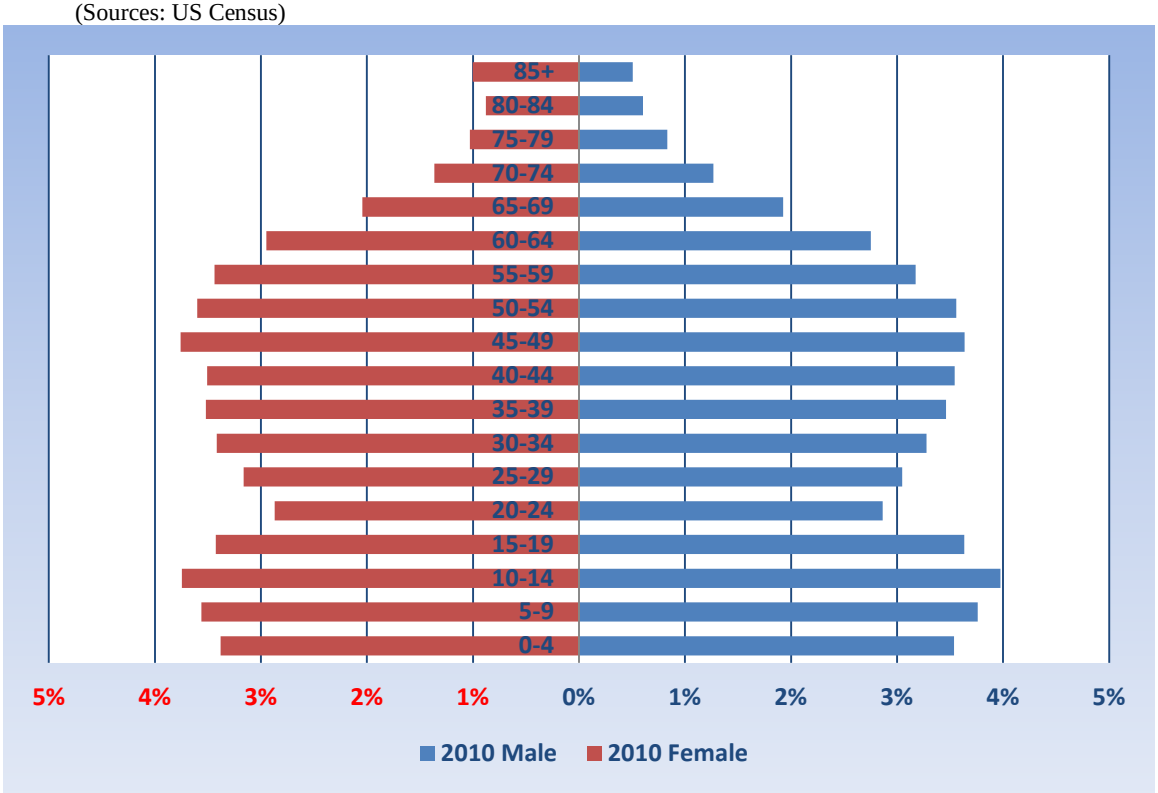


Together – the total number of households and employment are an important component to estimating the magnitude of future travel needs. The geographic arrangement and distribution of households and employment play a role in estimating future travel patterns - including origin/destination patterns, time of day choice, travel mode choice and others.

Similar to previous household and employment forecasts, these forecasts estimate that sometime before 2035 the county's job to household ratio will exceed 1 and the county enters a time when there is more than one job for every household. These forecasts yield a job per household ratio of 1.1 in 2035.

Figure 5: Clark County 2010 Population Pyramid, Proportion of Total Population by Age and Sex

(Sources: US Census)



This is a population pyramid based 2010 Census data. Demographers use population pyramids to look at the distribution of a population by age (the vertical axis) and sex (the horizontal axis).

For example, here we see that in 2010 males aged 0-4 made up about 3.5% of the county's population, while females of the same age group made up 3.4%.

Populations that are growing primarily due to natural increase (i.e., the birth rate greater than the death rate) tend to have a wide base that slopes up to the older age groups at the top – like a pyramid. Slow growing and more stable populations tend to be more like a column.

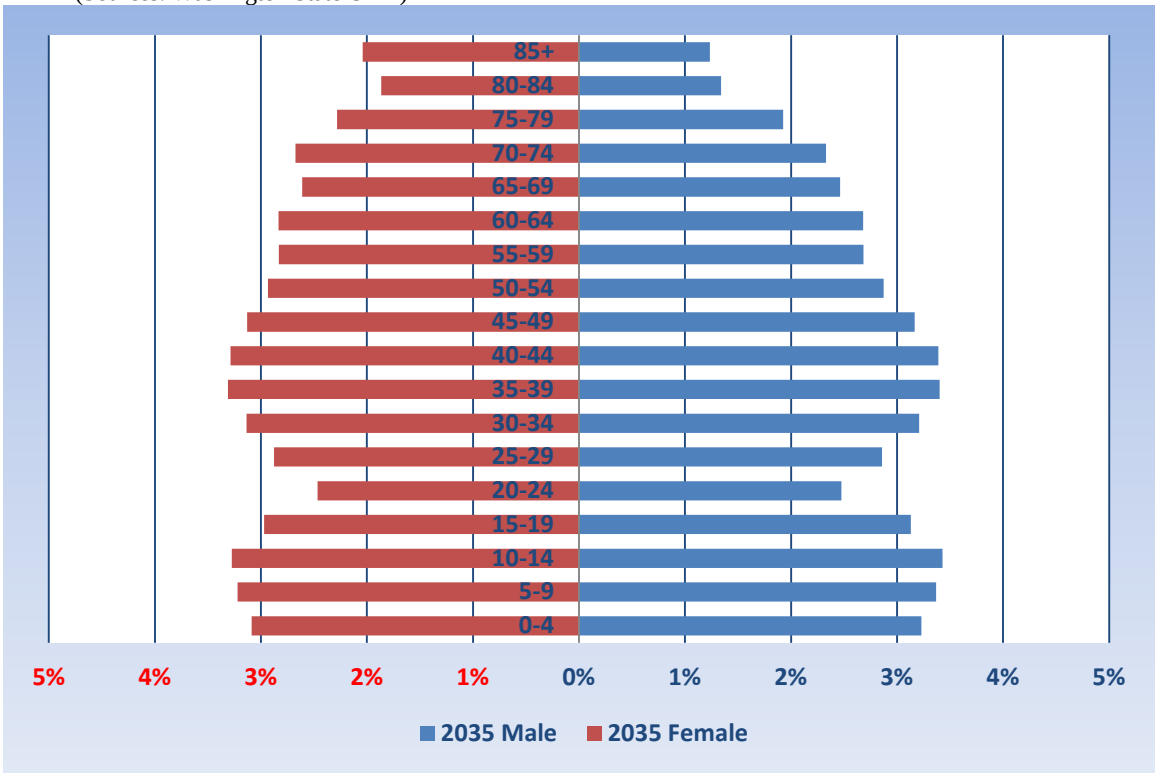
You can see that below age 60 we are more like a column with a pyramid on top.

While natural increase plays a small role in the growth of the county's population, the major component of growth is immigration – people relocating here.

Note that the column has a narrow waist around the 20-24 year old age group. Two main factors are at play here. First, young adults depart to college and to live/work in cities that are attractive to them. And secondly, immigration to the county tends to be predominately made up of family households with children.

Figure 6: Clark County 2035 Population Pyramid, Proportion of Total Population by Age and Sex

(Sources: Washington State OFM)



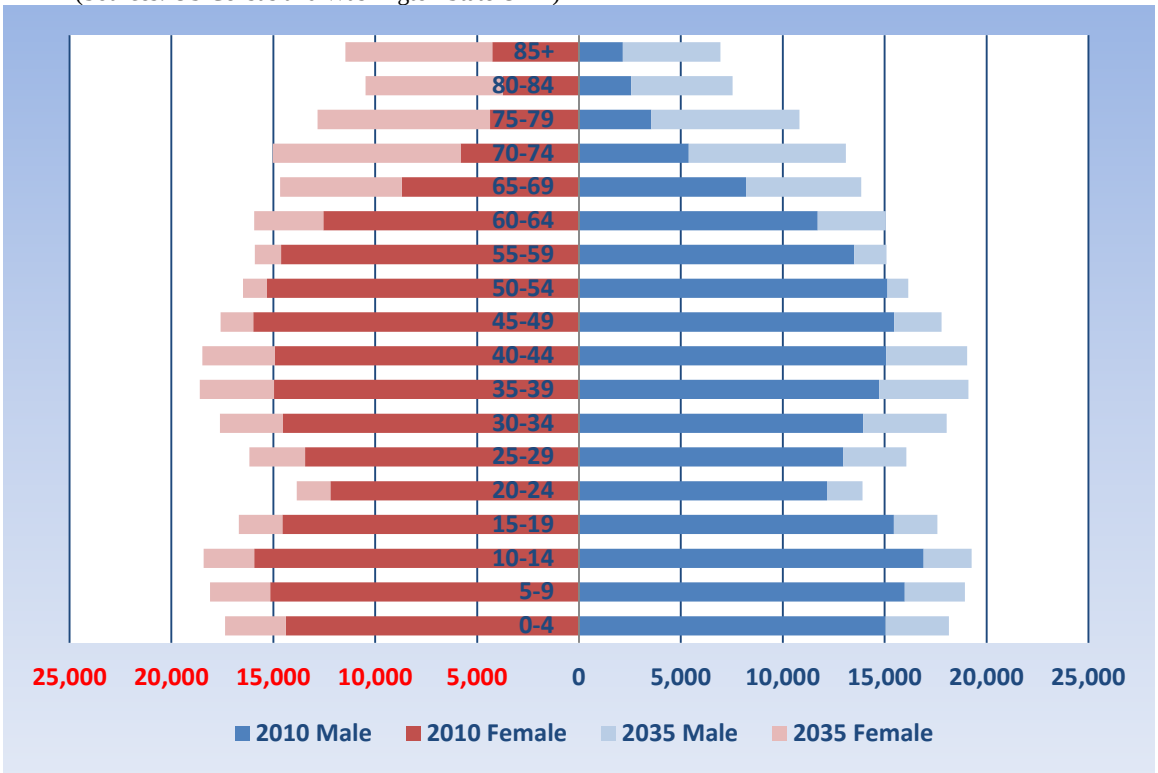
This is the population pyramid for 2035. You can see that the shape is even more like a column. The large increase in the 65+ age groups is due to the aging of the population. The tendency of female to outlive males is clearly shown by strong male/female imbalance at ages over 70.

The narrow base and columnar shape indicates that growth will continue to be largely dependent on immigration to the county.

This forecast of population by age and sex source for 2035 is from OFM's most recent county age and sex projections for medium forecast adopted by the BOCC. The projection can be found here: http://www.ofm.wa.gov/pop/gma/projections12/projections12.asp

Figure 7: Clark County 2010 & 2035 Population Pyramid, Total Population by Age and Sex

(Sources: US Census and Washington State OFM)

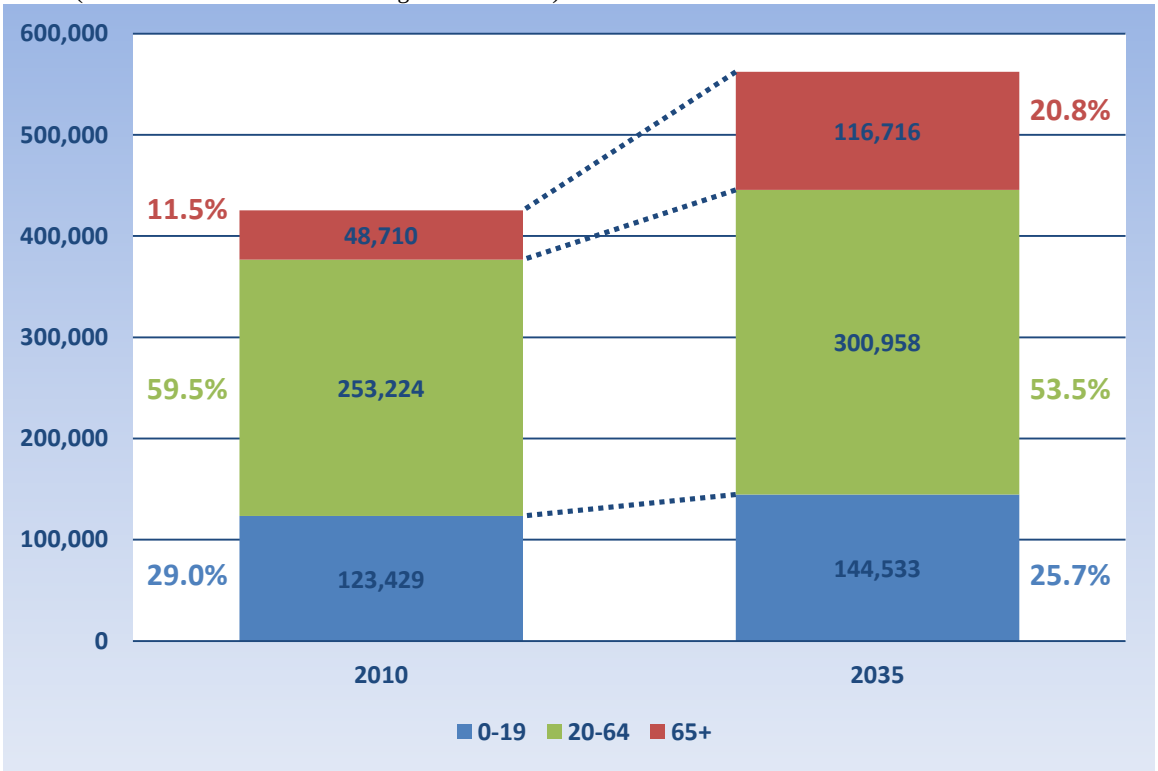


This graph combines both 2010 and 2035 pyramids together and shows the total number of the population by age and sex for both 2010 and 2035 - not percentages of total population.

There is growth in every age group; however the largest increases are in the 65+ age groups and this is mainly due to current residents aging in place.

Figure 8: Clark County 2010 and 2035 Populations by Age Cohorts

(Sources: US Census and Washington State OFM)

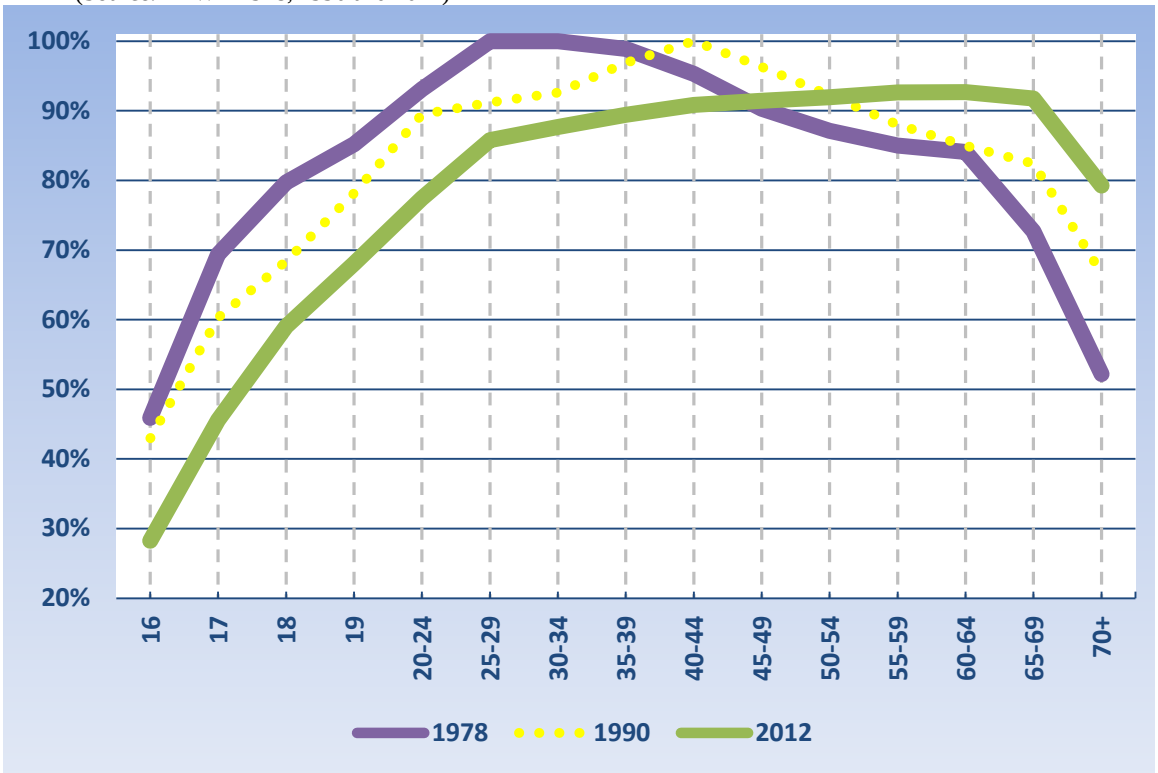


This is a simpler chart that only looks at three age groups, 0-19, 20-64 and 65+. The 65+ age group is forecasted to grow from 50K to almost 120K - from 11.5% of the population to almost 21%. This growth accounts for half of our expected increase in population between now and 2035.

The population around the entire country is aging and nationally there has been recognition that road signage may need to change to accommodate older drivers, including: larger fonts, better lighting, reflective striping and etc. Human service transportation needs are also likely to increase, including paratransit, ride programs and etc. An increase in the proportion of older households will also mean a decrease in the number of work trips generated per household, an increase medical related trips, and shifts in time-of-day for travel.

Figure 9: 1978, 1990 and 2012 – Licensed Drivers as a Percentage of Age Group, US National Data

(Source: FHWA 1978, 1990 and 2012)



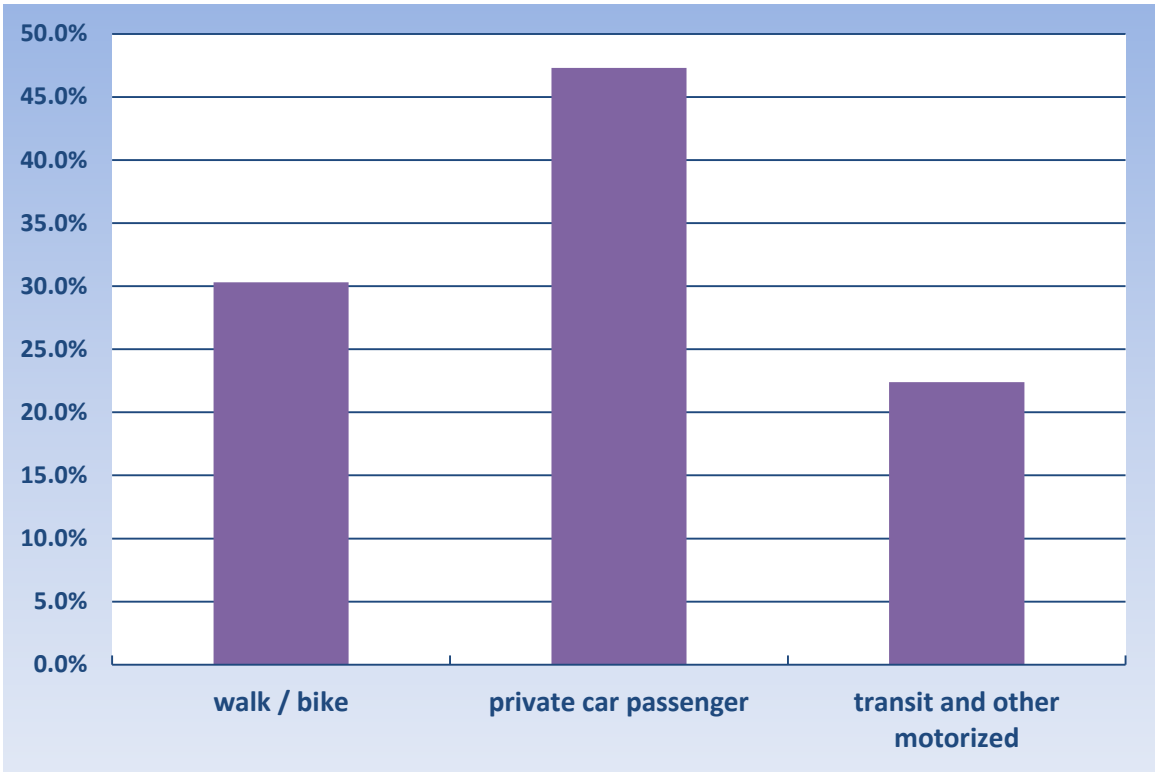
There are changing trends in the area of drivers' licensing with relation to age. This is a graph of the share of licensed drivers by age – for 1978 (the first year the data was available), 1990 and 2012. Note, this is national data; however there are two main points of interest.

First, the percentage of those 65+ with a driver's license has seen 20 to 30 point gains in their age groups. The 70+ group has moved from a bit over half licensed in 1978 to nearly 80% as of 2012. Conversely, the percentage of those under age 40 with a driver's license have seen a 10 to 24 point drop within their age groups. For example, the percentage of licensed 17 year olds has dropped to about 45% from a high of nearly 70% in 1978. Even the 30 to 34 year old group has dropped from near 100% to less than 90%.

http://www.fhwa.dot.gov/policyinformation/statistics.cfm

Figure 10: Percent of Daily Person Trips by Mode for 16 Years and Older with No Driver's License, Clark County

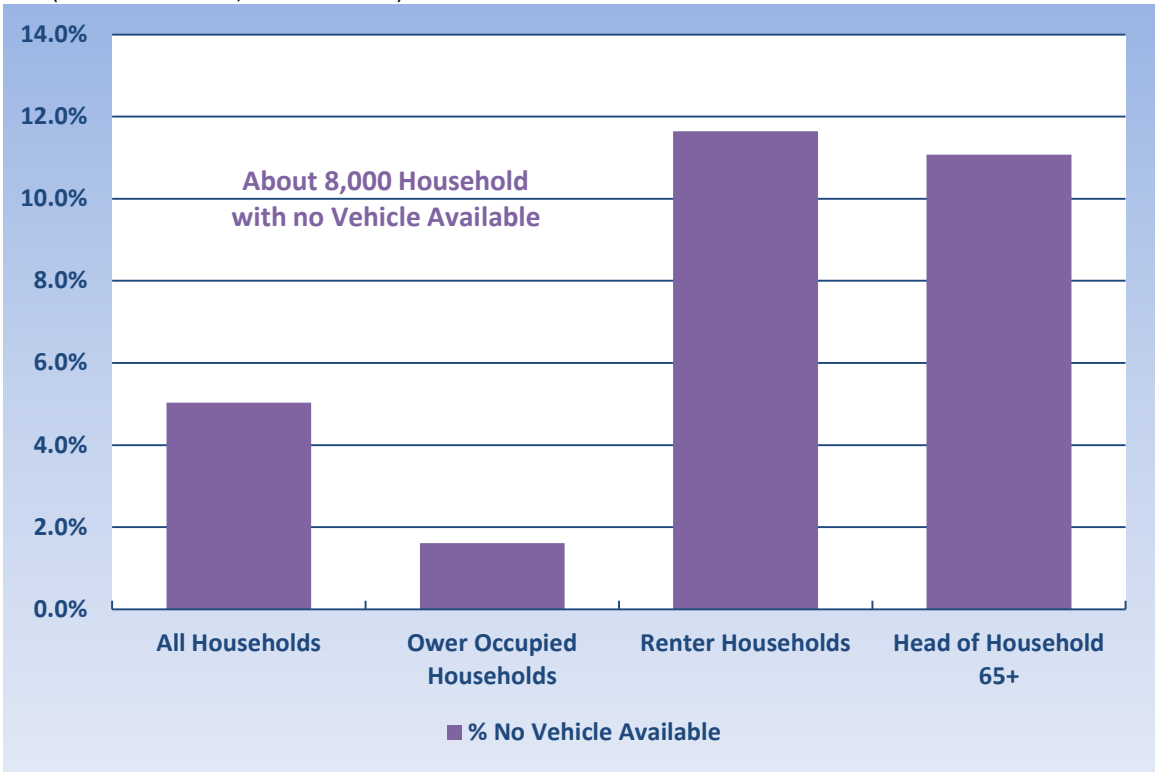
(Source: 2009 RTC Household Travel Survey)



The 2009 Clark County Household Travel Survey can provide us some information regarding the travel behavior of those without driver's licenses over the age of 16. It found that they make nearly 50% of their daily person trips as a passenger in car, about 30% walking or biking and about 22% by transit or another motorized mode.

Figure 11: 2012 Vehicle Availability by Household Tenure and Age for Clark County

(Source: US Census, 2008-2012 ACS)

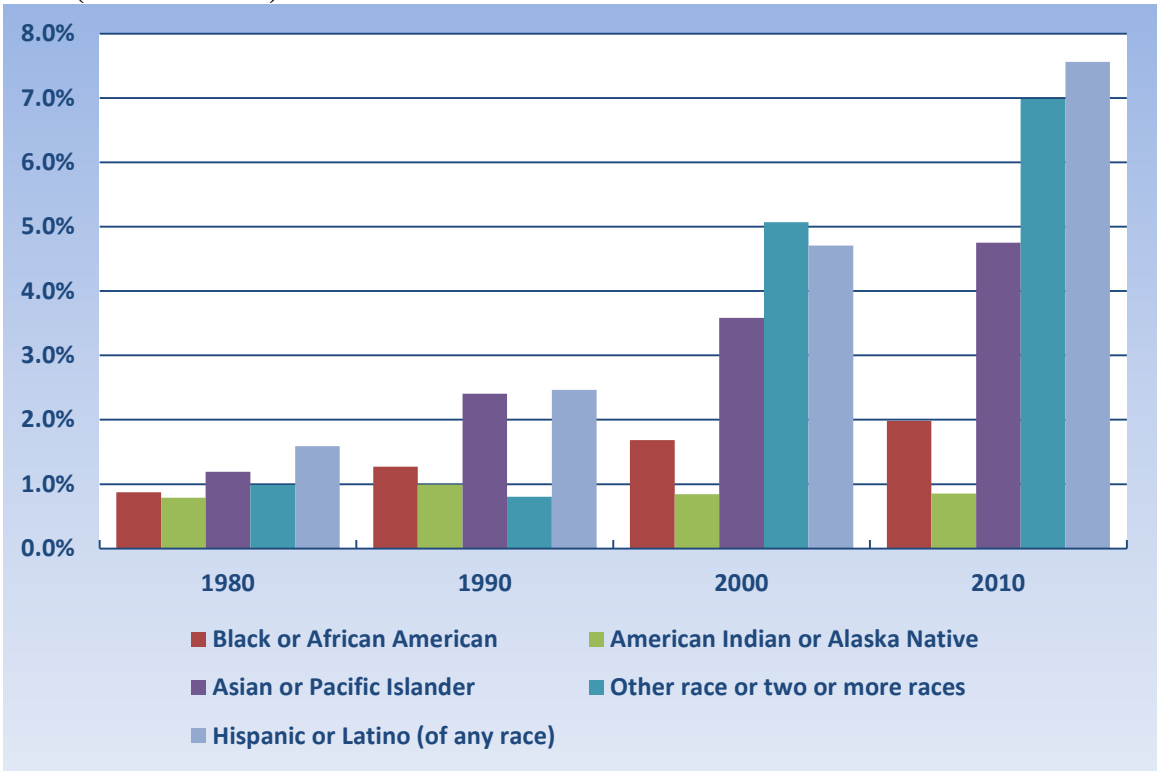


A valid driver's license is not the only requirement to drive, access to an automobile is also very important. This is a graph of vehicle availability for households from the 2012 5-year American Community Survey produced by the US Census Bureau. About 8,000 Clark County households have no vehicle available for use.

There is a significant difference between renter vs. owner occupied households, with 11.5% of renting households with no vehicle available compared to less than 2% for owner occupied households. Looking at age, for households where the head of the household is 65 or older, over 1 in 10 households do not have access to a car. Households that do not have access to a vehicle have different transportation needs and are often transit dependent.

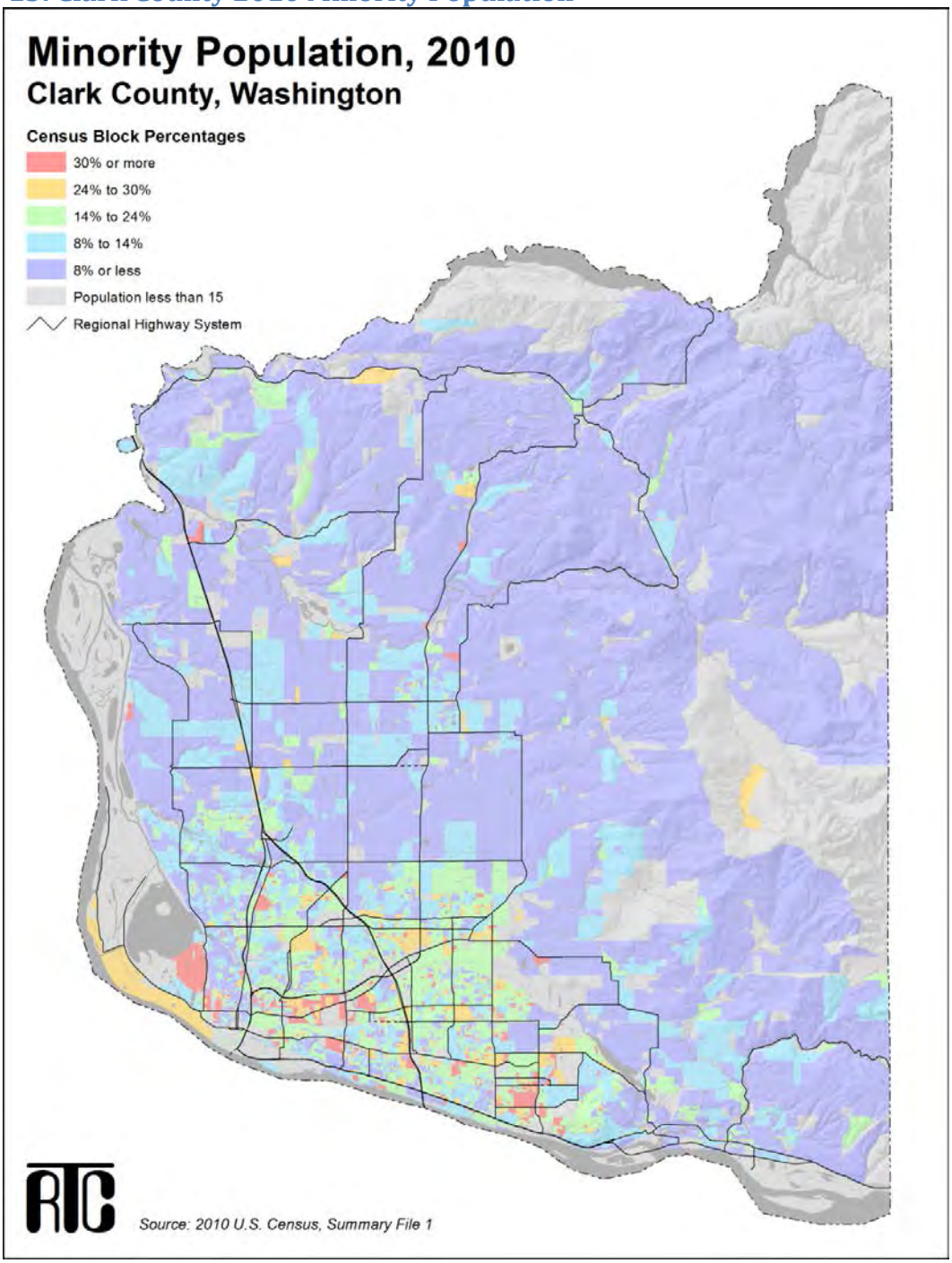
Figure 12: Clark County 1980-2010, Minority Population Percentages

(Source: US Census)



This is graph of minority population as a percentage of total population for Clark County from 1980, 1990, 2000 and 2010 Census data. Since 1980, the proportion minority population in the county has been steadily increasing from below 5% in 1980 to nearly 20% today. This trend will continue and is likely to accelerate over the coming decades.

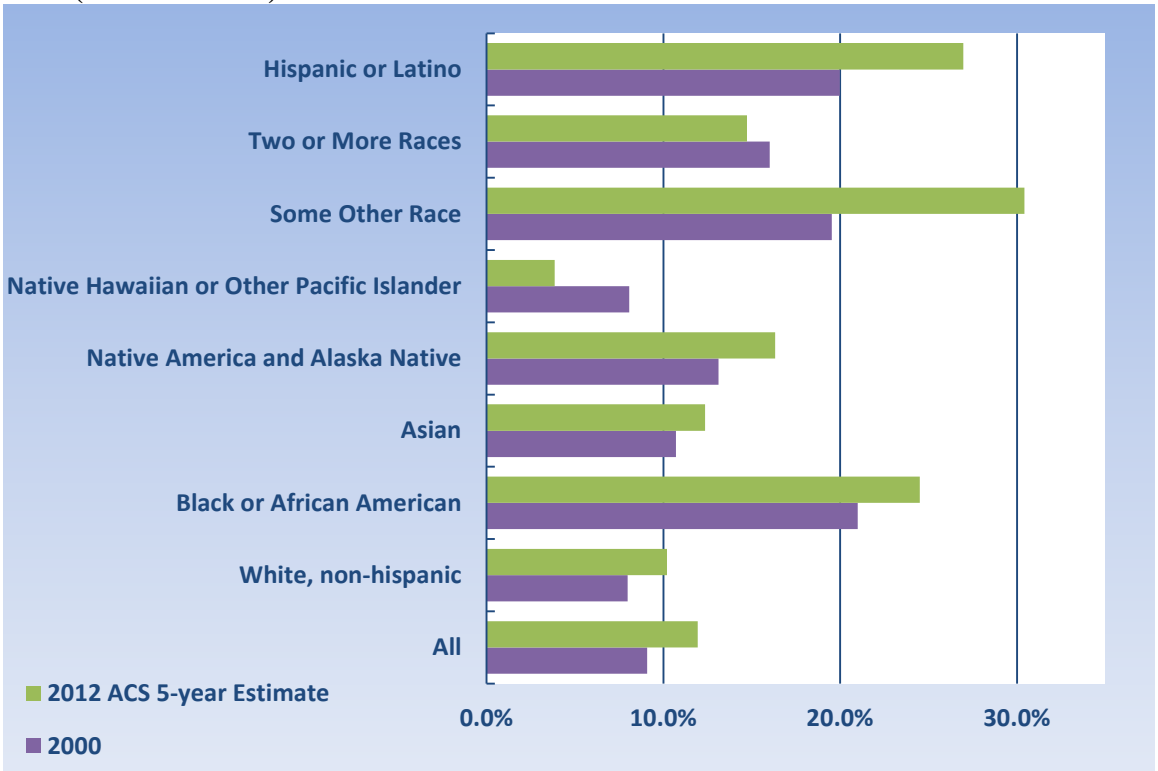
Figure 13: Clark County 2010 Minority Population



This is a map of the distribution of the minority population in Clark County in 2010. Red and yellow indicate areas where the proportion of the minority population exceeds 30% and 24% respectively and these are above the county average of nearly 20%. Green are places where the proportion of the minority population between 14-24%. Blue and purple indicate areas where the proportion of the minority population is less than 14% and 8% and below the county average.

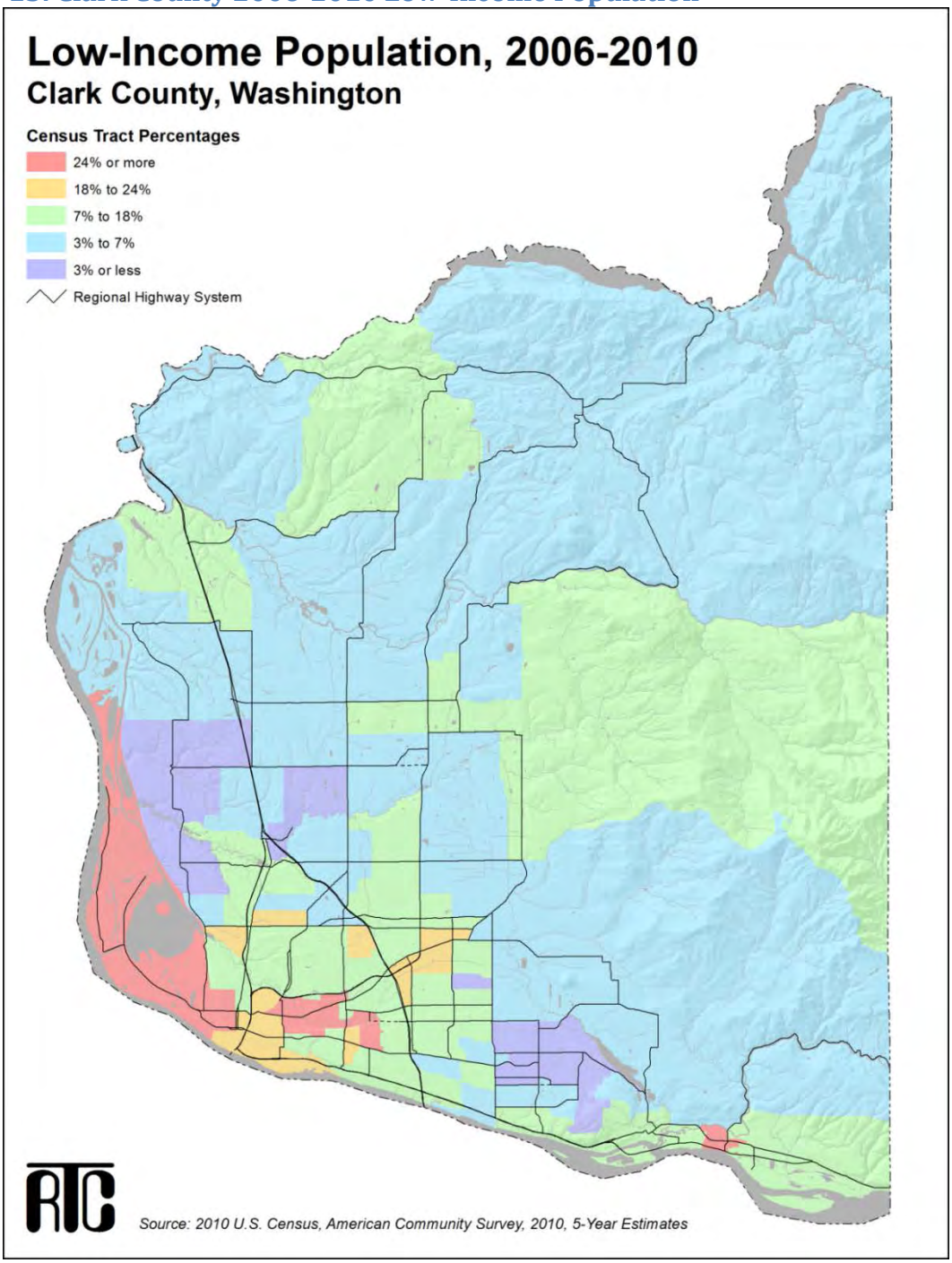
Figure 14: Clark County 2000 and 2012, Poverty Rates by Race and Ethnicity

(Source: US Census)



This is a graph of poverty rates by race and ethnicity from 2000 US Census and the 2012 American Community Survey 5-year estimate. The overall poverty rate in the county increased from about 9% in 2000 to around 12% in 2012. However, this is still below the below the 2011 national rate of 16% and the state rate of 14%. Poverty rates in the county are up for all, regardless of minority status, except for those identifying as mixed race and the Native Hawaiian and other Pacific Islander group. Poverty affects household travel behavior - limiting household resources available pay for travel; limiting vehicle availability; and increasing dependence upon transit and non-motorized modes of travel.

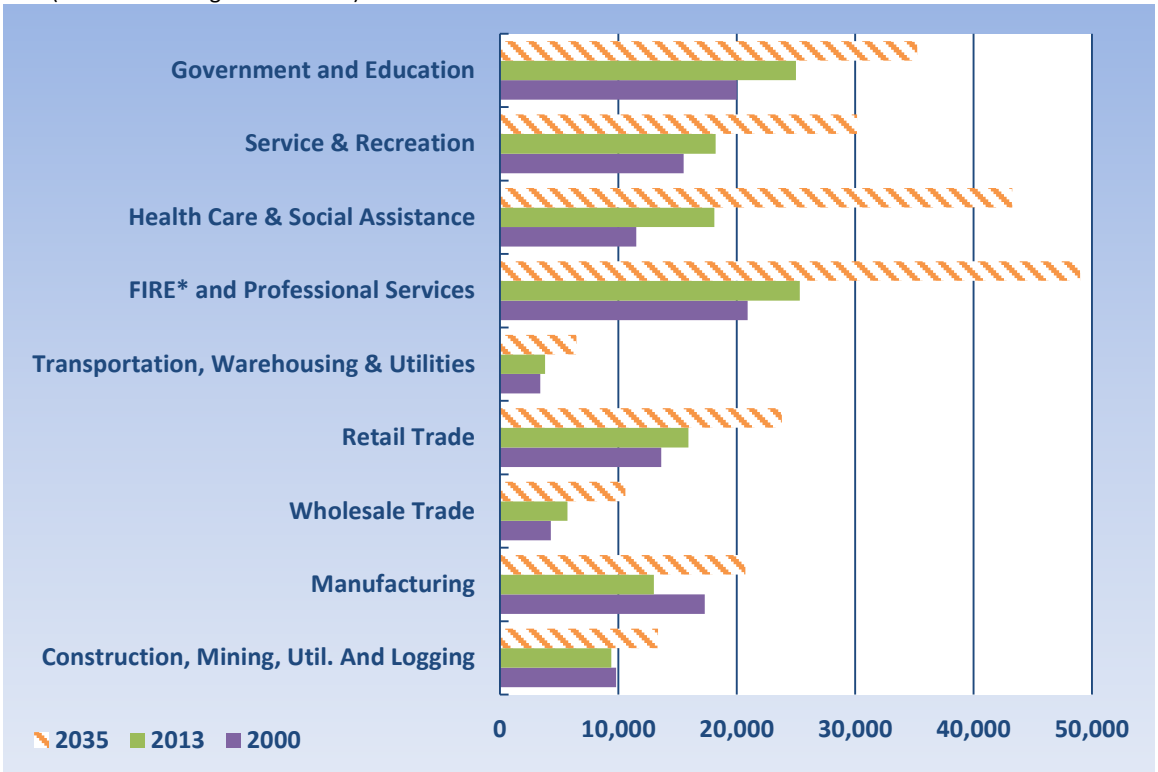
Figure 15: Clark County 2006-2010 Low-Income Population



This is a map of the distribution of low-income individuals. Red and yellow indicate census tracts were poverty rates exceed 24% and 18% respectively. These are significant departures from the county average of 12%. Green areas are census tracts near the county average and have poverty rates between 7-18%. Tracts colored blue and purple are areas were the poverty rate is below 7% and 3% respectively and are significantly below the county average.

Figure 16: 2000 & 2013 Clark County Observed Employment Totals by Sector with 2035 Forecast

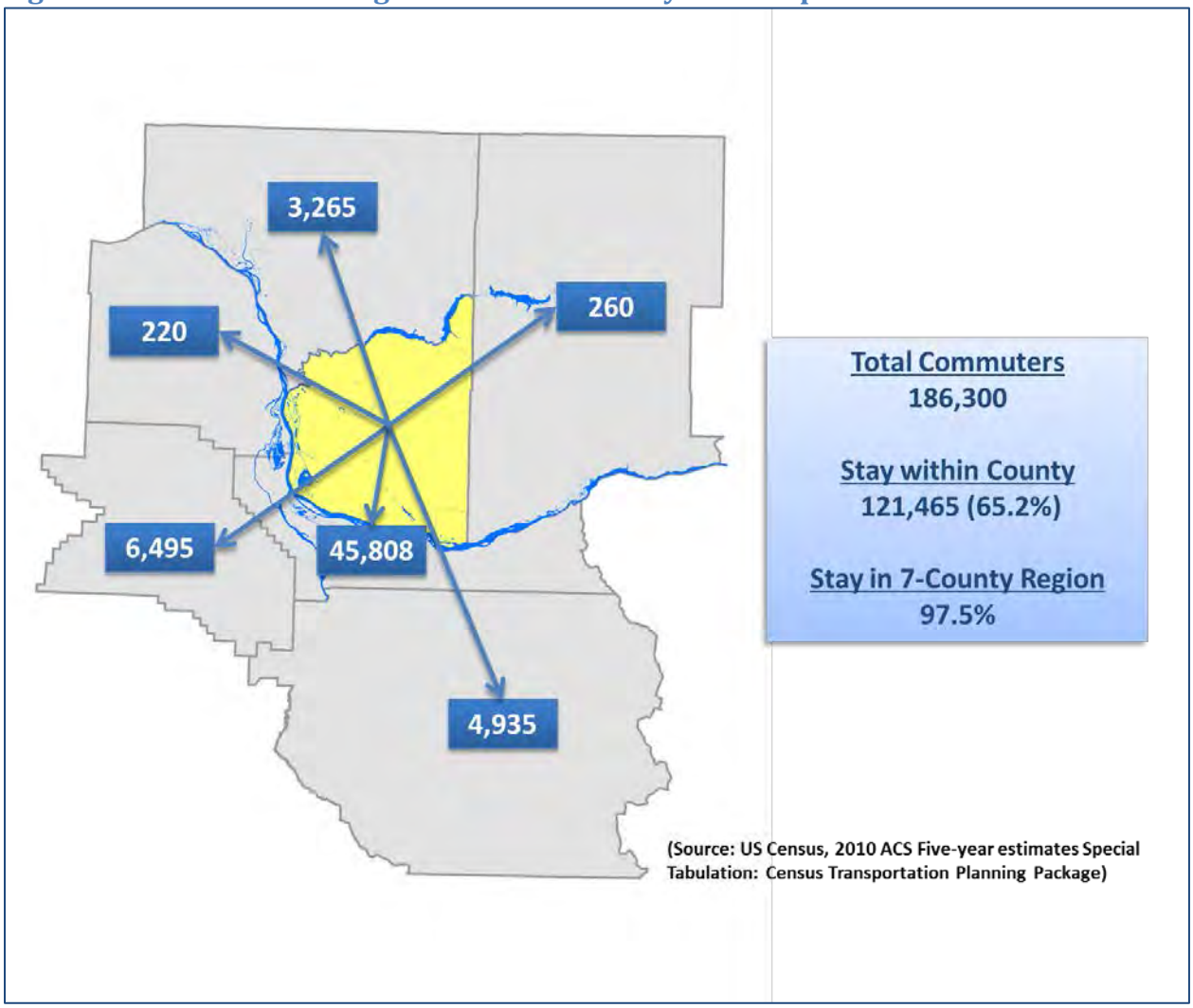
(Source: Washington State ESD)



*Note – FIRE stands for Finance, Insurance and Real Estate

This is a chart of Clark County non-farm employment by sector. 2000 and 2013 are observed data from the Washington State Employment Security Department. Between 2000 and 2013 there was growth in all sectors, except for manufacturing and construction, mining, utilities and logging. The forecast represents a best-guess estimate from the state's regional economist for SW Washington. Forecasting total employment out 20-years is very difficult task and a break down by economic sector is even more so. Given current national and regional trends, this is one of many possible outcomes and is provided here as an example of a possible future. Note, there is growth in employment across all sectors, with very strong growth in the healthcare sector – this naturally correlates with the growth in the aging population.

Figure 17: 2010 Commuting – From Clark County to Workplace

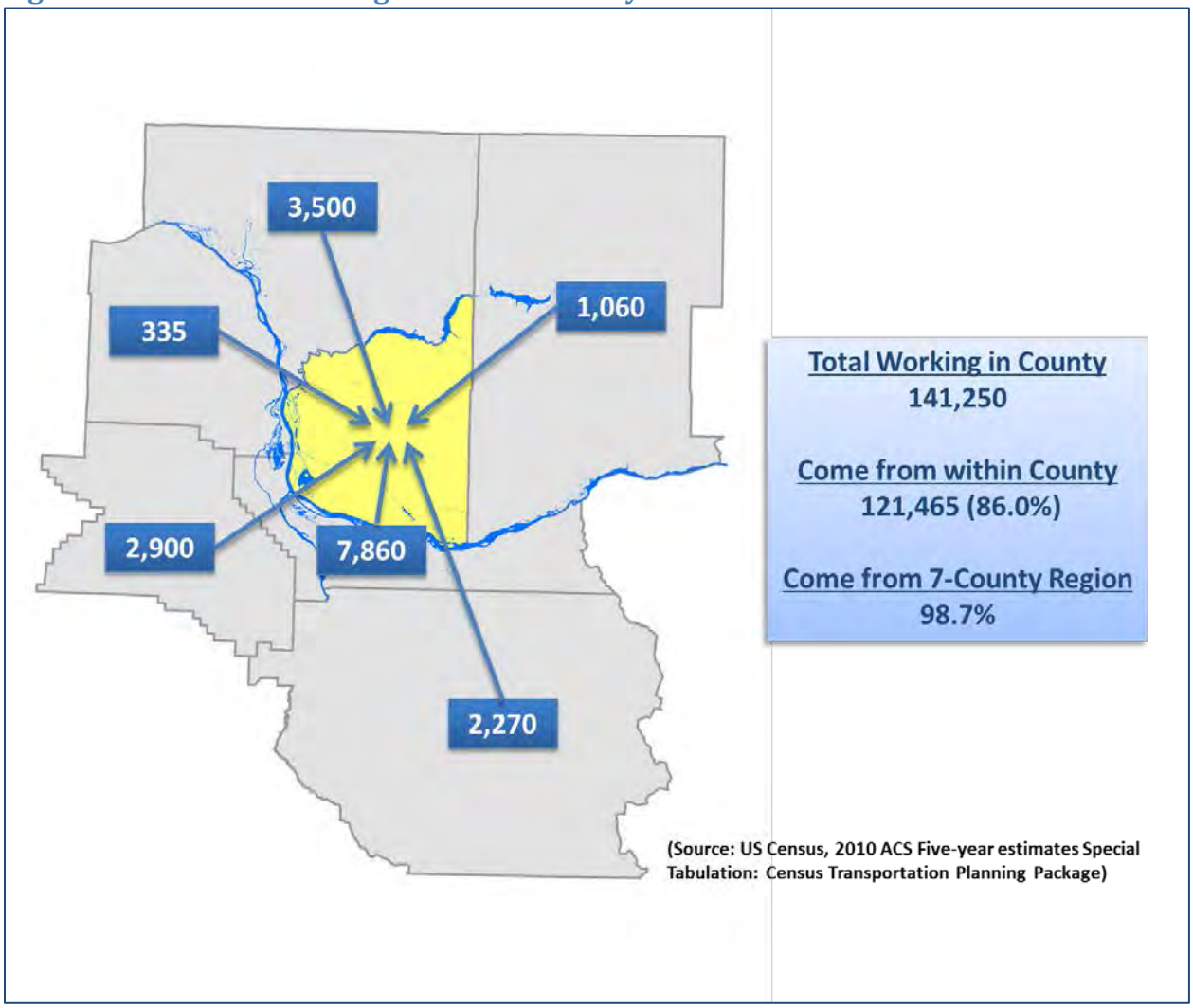


The following figures represent county to county commute flow data from the 2010 Census Transportation Planning Package. Above are the flows for Clark County residents to their place of work. Of the 186,300 workers residing in Clark County -

- About 121,500 (65%) stay within the county
- Around 46,000 (24%) travel to Multnomah County for work
- Nearly 6,500 (3.5%) travel to Washington County for work
- Just under 5,000 (2.6%) travel to Clackamas County for work
- Over 3,000 (1.8%) commute to Cowlitz County

This data can be found at - http://data5.ctpp.transportation.org/ctpp/Browse/browsetables.aspx

Figure 18: 2010 Commuting – To Clark County from Residence

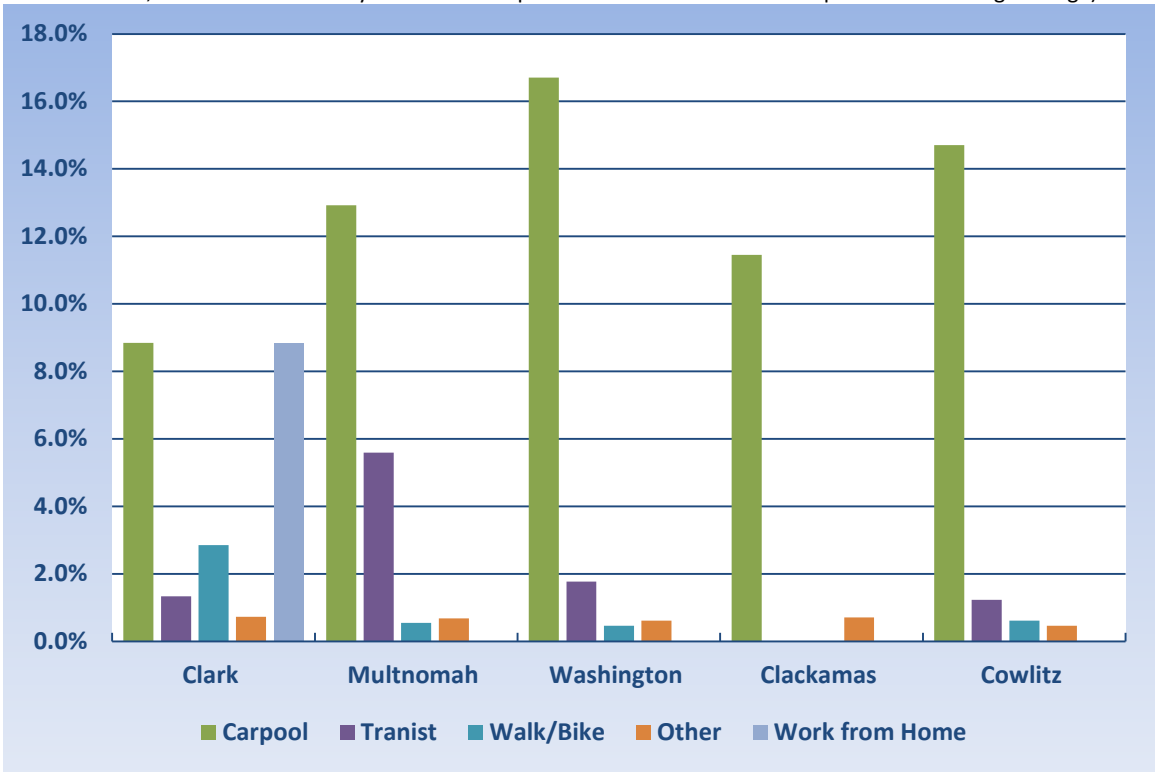


This figure shows the home location of those who work in Clark County. Of the 141,250 persons working in Clark County –

- About 121,500 (86%) reside within Clark County
- About 14% of those working in Clark County live outside the county
- Nearly 8,000 (5.6%) reside in Multnomah County
- 3,5000 or 2.5% reside in Cowlitz County
- Nearly 3,000 (2%) reside in Washington County
- A little over 2,000 (1.6%) reside in Clackamas County

Figure 19: 2010 Non-Drive Alone Travel Modes to Workplace by Destination for Clark County Workers not Working at Home

(Source: US Census, ACS 2006-2010 Five-year estimates Special Tabulation: Census Transportation Planning Package)

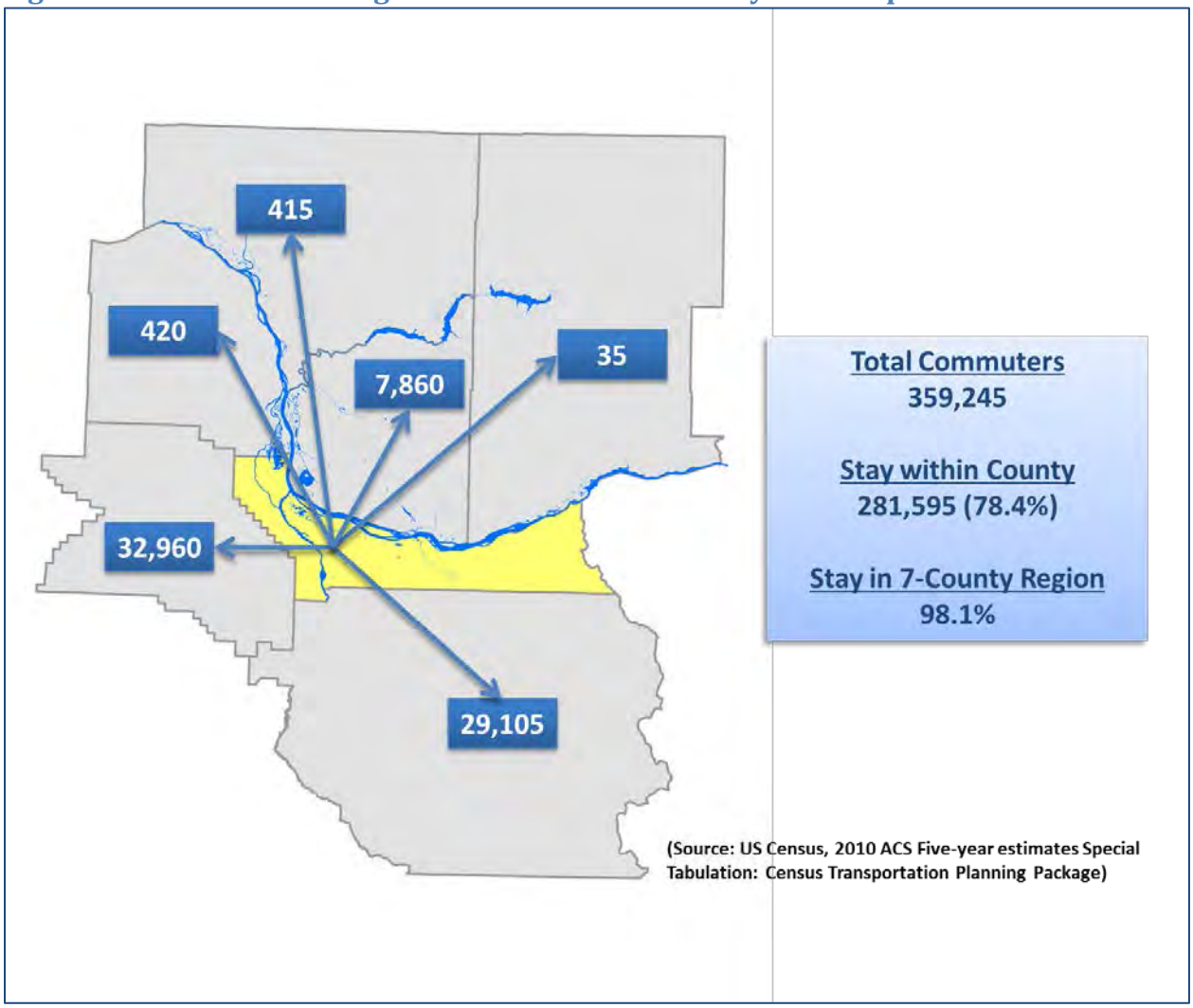


This a graph of journey to work trip mode choice for Clark County residents by work place location for workers not working at home. This graph does not include the drive alone mode. No matter the destination within the 5-county area, the drive alone mode share for work trips is at between 80% (Multnomah) to 88% (Clackamas).

- Commuters to Washington County are the most likely to carpool – at nearly 17%
- Commuters to Multnomah County are the most likely to use transit – at over 5.5%
- Naturally, commuters within Clark County are the most likely to use non-motorized modes – with walk/bike at just over 3%, as their commute trips lengths are the shortest.

The same Census data set shows that 5.8% of employed Clark County residents worked from home in 2010, an increase from 4.4% in 2000 and 3.3% in 1990. By way of comparison, Multnomah County's work at home rate in 2010 was about 6.1%.

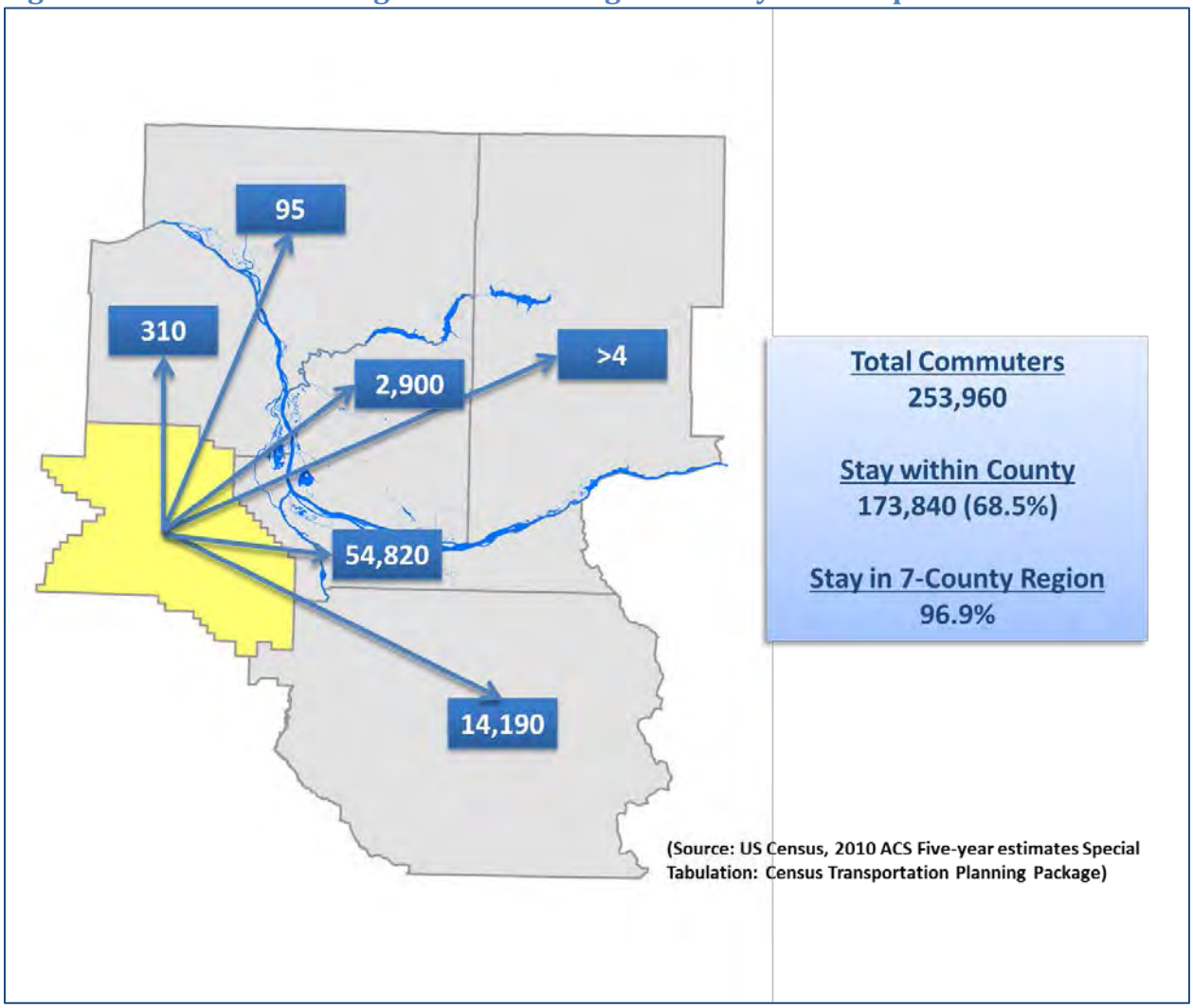
Figure 20: 2010 Commuting – From Multnomah County to Workplace



In order to provide a better sense of regional commuting patterns, the following three figures show the commuting flows of Oregon residents by county to the their workplace county.

- Over 78% of Multnomah working residents stay within the county for work
- 33,000 (9.2%) commute to Washington County
- Nearly , 30,000 (8.1%) to commute to Clackamas County
- About 8,000 (2.2%) to commute to Clark County

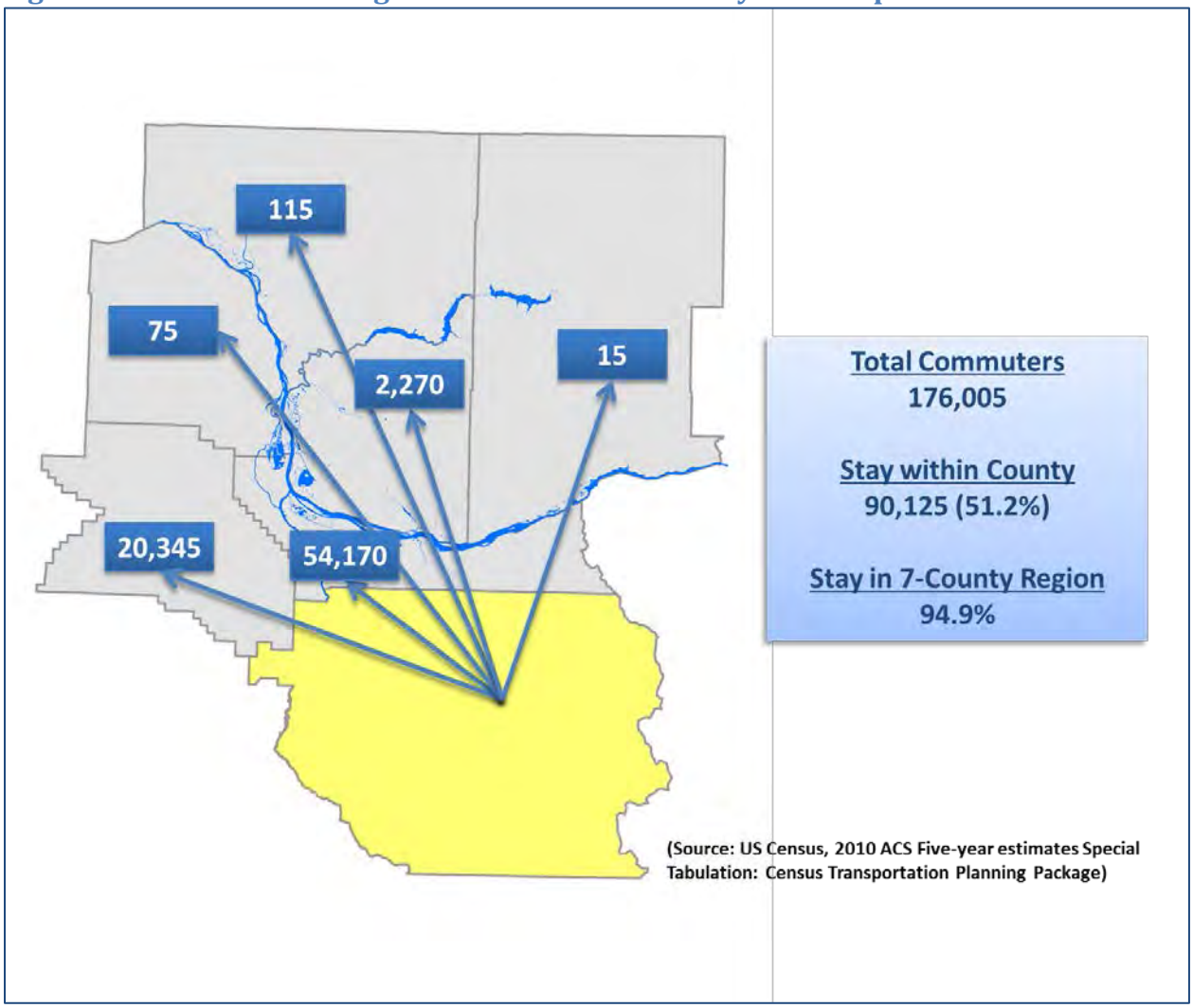
Figure 21: 2010 Commuting – From Washington County to Workplace



For Washington County –

- Over 68% of the county's working residents work within the county
- About 55,000 (21.6%) commute to Multnomah County
- Just over 14,000 (5.6%) commute to Clackamas County
- Nearly 3,000 (1.1%) commute to Clark County

Figure 22: 2010 Commuting – From Clackamas County to Workplace



For Clackamas County commuting –

- Just over half stay of resident works commute to jobs within the county
- Over 54,000 (30.8%) commute to Multnomah County
- Over 20,000 (11.6%) commute to Washington County
- A little over 2,000 (1.3%) to commute to Clark County