

# DATA SNAPSHOT

**THURSTON THRIVES COMMUNITY DESIGN ACTION TEAM**



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**Thurston County Public Health & Social Services Department**

**August 2013**



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## INTRODUCTION

**Thurston Thrives** is a community initiative focusing on how healthy people are today and the *factors* that influence how healthy the community will be in the future. These factors are: health behavior, the physical and built environment, health services, and local social and economic conditions. Together, these factors directly impact how long local residents live and the quality of life they experience during their lifetime.



Thurston Thrives was established by the Thurston County Board of Health and is overseen with assistance of the Thurston Thrives Advisory Council. Topics that research has shown significantly influence community health are reviewed with the help of action teams. Each action team is led by a community member with in-depth knowledge of the topic area. The action teams are empowered to develop a common agenda on how best to address their topic area locally and are asked to report their recommendations to the Board of Health and Thurston Thrives Advisory Council.

## COMMUNITY DESIGN AND HEALTH

In 2013, the Thurston Thrives Community Design Action Team was formed to review the topic of community design and its connection to health. **Chris Hawkins, Active Healthy Communities Coordinator for Thurston County Public Health & Social Services Department** serves as the Community Design Action Team lead.

## SNAPSHOT

The purpose of this report is to provide support to those examining the connections between community design and health.

- ◆ Data in this report provides a current snapshot of community health issues associated with active transportation, land use, destinations and health consequences of community design. A selected set of measures related to the topic are presented.
- ◆ Other local community data reports and plans with additional information about this topic may be available and are not integrated into the snapshot.

## QUESTIONS

If you have questions about:

- ◆ The Thurston Thrives initiative contact Chris Hawkins, Coordinator, 360-867-2513, [hawkinsc@co.thurston.wa.us](mailto:hawkinsc@co.thurston.wa.us)
- ◆ The Snapshot Report contact Mary Ann O'Garro, Epidemiologist, 360-867-2525, [ogarrom@co.thurston.wa.us](mailto:ogarrom@co.thurston.wa.us)

# ACTIVE TRANSPORTATION

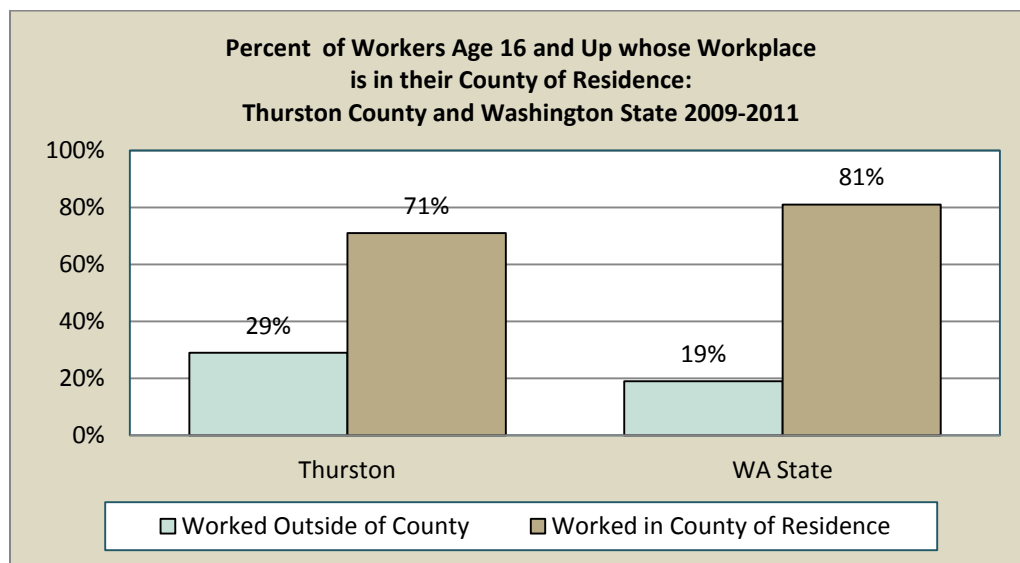
Transportation influences health and well-being.



## COMMUTE TO WORK.

Walking and biking to work provide health benefits such as opportunities for physical activity and social interactions. The decision to walk or bike to work is influenced by a range of modifiable community conditions including: safety from motor vehicle injury and crime, presence and condition of sidewalks, presence of bike lanes or paths, how efficiently connected streets are and location of public transportation bus stops. In Thurston County, 96% of workers do not work at home and 46% commute to a workplace less than 20 minutes from their home. (1-4)

**MEASURE: Percent of county workers whose workplace is in Thurston County.**

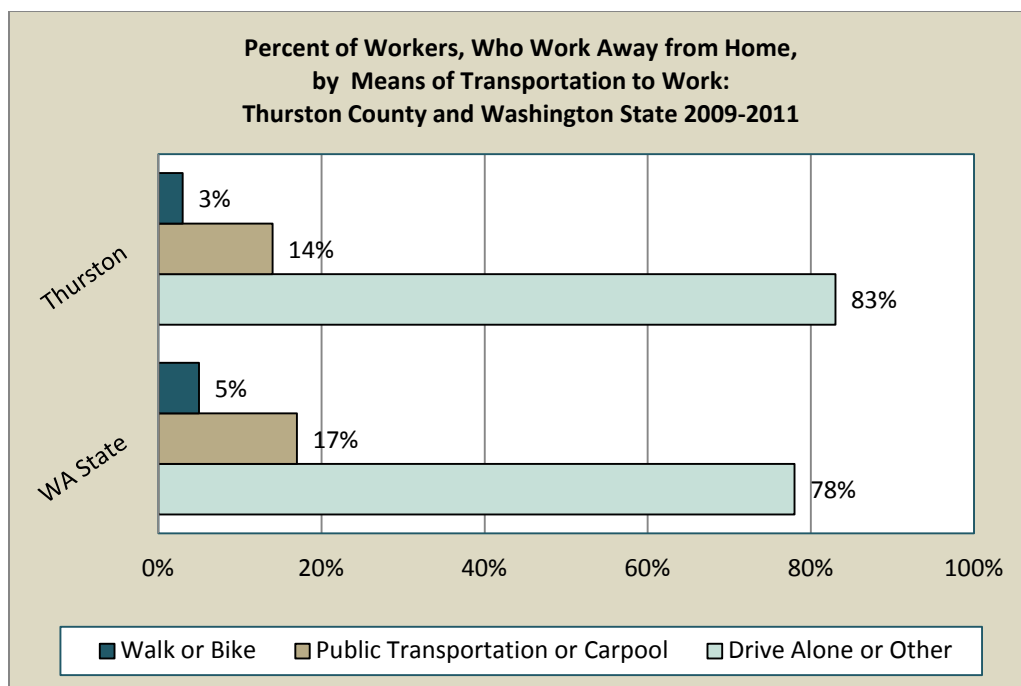


Data Source: American Community Survey (4)

### WHAT WE KNOW.

- ◆ Thurston County workers are more likely to work outside of county boundaries when compared to Washington State.
  - Between 2009-2011, 29% of county workers age 16 and up worked outside of Thurston County compared to 19% for Washington State.
- ◆ Workers age 16 and up who work outside of county boundaries varies by gender. Between 2009-2011 an estimated:
  - 20% of *female* county workers worked outside of Thurston County.
  - 38% of *male* county workers worked outside of Thurston County.

**MEASURE: Percent of county workers, who work away from home, that walk or bike to work.**



Data Source: American Community Survey (4)

**WHAT WE KNOW.**

- ◆ Between 2009-2011, an estimated 96% or 110,899 Thurston County workers age 16 and up worked away from home and 4% or 4,948 worked at home.
  - Among Thurston County workers age 16 and up, who worked away from home, an estimated:
    - 1,984 or 2% *walked* to work.
    - 1,475 or 1% *biked* to work.
    - 2,428 or 2% used *public transportation* to get to work.
    - 12,817 or 12% *carpooled* to work.
    - 90,670 or 82% *drove alone* to work.
    - And 1,525 or 1% used some other means to get to work (e.g. motorcycle, taxi).

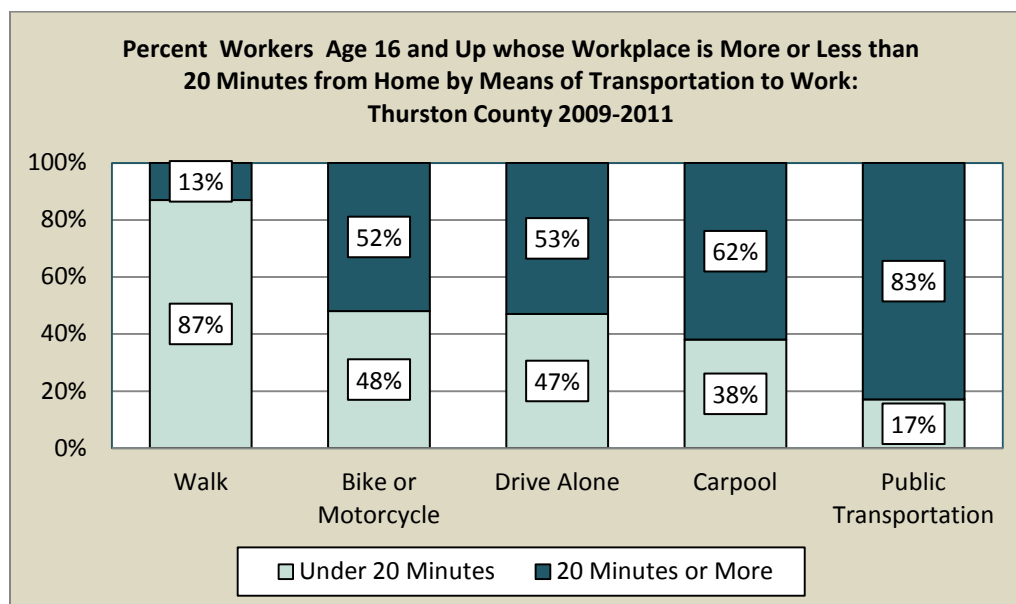
INCORPORATED AREA	WALK OR BIKE	PUBLIC TRANSPORTATION OR CARPOOL	DRIVE ALONE OR OTHER
Bucoda	1%	21%	78%
Lacey	2%	11%	87%
Olympia	9%	16%	75%
Rainier	2%	15%	83%
Tenino	6%	19%	75%
Tumwater	2%	17%	81%
Yelm	2%	13%	85%

Data Source: American Community Survey (5)

## PUBLIC TRANSIT.

Public transportation plays a role in health. People who use public transit, such as buses, engage in more physical activity. More minutes of physical activity are gained not only from walking to or from transit stops, but also to local services and other destinations near home or work. Using public transportation is one approach to reducing motor vehicle-related air pollution. Outdoor air pollution can make symptoms of respiratory diseases like asthma, worse. (1, 6-8)

### MEASURE: Percent of county workers by means of transportation and commute time.

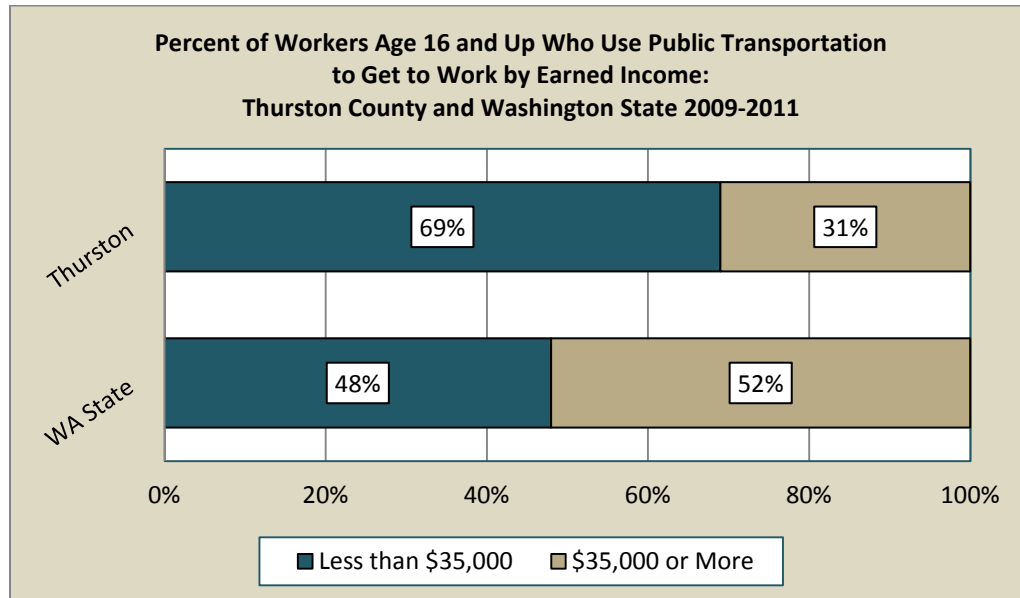


Data Source: American Community Survey (4)

### WHAT WE KNOW.

- ◆ Thurston County workers are less likely to use public transportation to get to work compared to Washington State. Between 2009-2011 an estimated:
  - 2% of county workers, who work away from home, use public transportation to get to work compared to 6% for Washington State.
- ◆ County workers who use public transportation are more likely than workers using other means of transportation to work, to have a commute that is 20 or more minutes.
- ◆ Between 2009-2011 an estimated:
  - 70% of county workers who drive alone, work less than 30 minutes from their home.
  - 47% of county workers who drive alone, work less than 20 minutes from their home.
  - 11% of county workers who drive alone, work less than 10 minutes from their home.

**MEASURE: Percent of county workers who use public transportation by income.**



Data Source: American Community Survey (4)

**WHAT WE KNOW.**

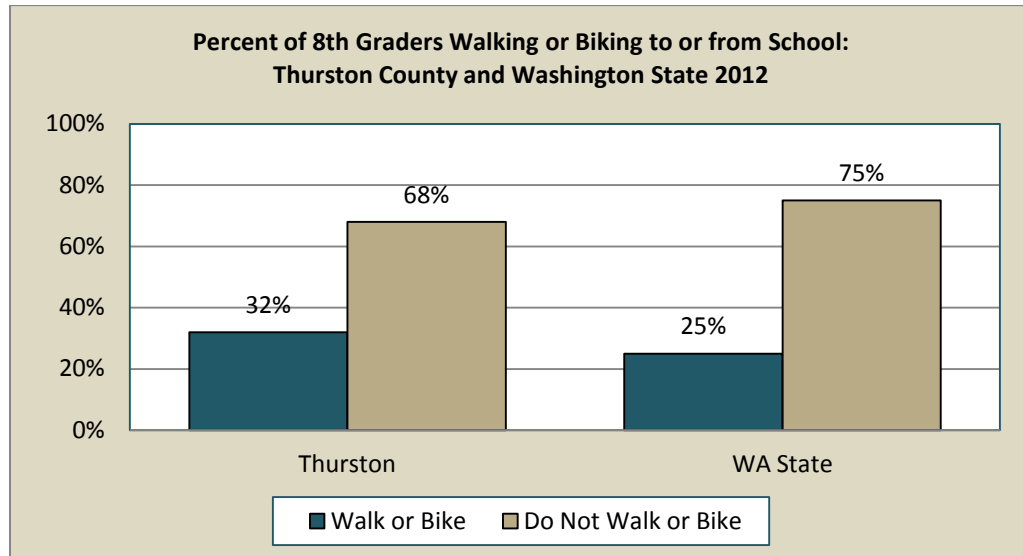
- ◆ Thurston County workers age 16 and up who use public transportation to get to work:
  - Are more likely to be low income or living in poverty (defined as earning \$35,000 or less annually) compared to Washington State.
- ◆ Between 2009-2011, an estimated:
  - 15% of Thurston County workers who used *public transportation* to work had no vehicle available (85% had 1 or more vehicles available).
  - 16% of county workers who *walked* to work had no vehicle available (84% had 1 or more vehicles available).



## SCHOOL TRAVEL.

Traveling to or from school by walking or biking has been declining for many years. This change is influenced by many factors including: location of schools, distance from home, road conditions (e.g. traffic, crosswalks) and parent concerns about safety. Children who walk or bike to school engage in more physical activity. (3, 9-10)

**MEASURE: Percent of county 8<sup>th</sup> graders who walk or bike to or from school.**



Data Source: Healthy Youth Survey (11)

### WHAT WE KNOW.

- ◆ Thurston County 8<sup>th</sup> graders are more likely to walk or bike to or from school compared to Washington State. However, walking and biking to school is declining in Thurston County which is a pattern seen across the nation.
  - In 2012, 32% of county 8<sup>th</sup> graders walked or biked to/from school 1 or more days a week.
  - In 2008, 40% of county 8<sup>th</sup> graders walked or biked to/from school 1 or more days a week.
- ◆ Rural and urban school districts in Thurston County are similar in whether 8<sup>th</sup> graders walk or bike to school.
  - In 2012, 33% of 8<sup>th</sup> graders in rural schools districts walked or biked to/from school 1 or more days a week compared to 32% in urban school districts. (Rural = Rainier, Rochester, Tenino, Yelm. Urban = North Thurston, Olympia, Tumwater. No data for Griffin available).
- ◆ Thurston County 8<sup>th</sup> graders are more likely to walk than bike to school. In 2012 an estimated:
  - 29% walked to or from school 1 or more days a week.
  - 9% biked to or from school 1 or more days a week.

# LAND USE

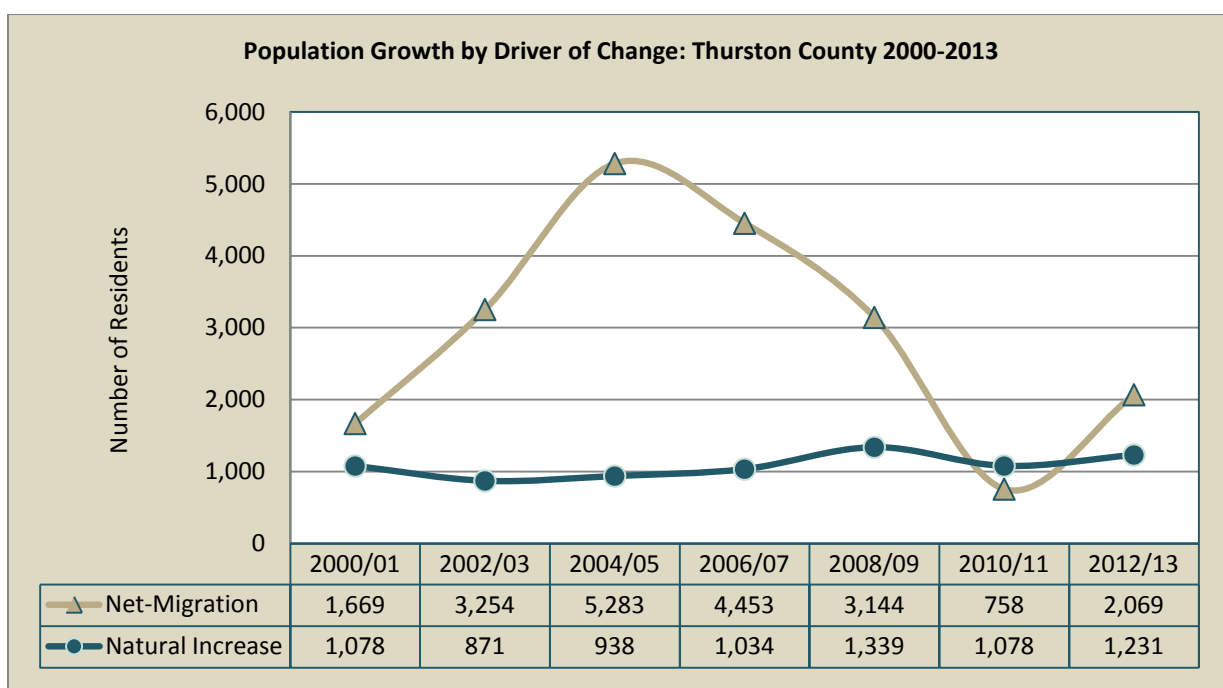
**Decisions about zoning and what is built where impact health.**



## POPULATION GROWTH.

Population growth over the past decade has resulted in many changes to neighborhoods, cities and communities across Thurston County. However, change has come again with population growth slowing locally in recent years. Population change is driven by two main factors, natural increase and net-migration. Natural increase is defined as the number of births minus deaths. Net-migration, which captures people moving into an area, is defined as the total increase of the population minus natural increase. (12)

### MEASURE: Population increase in number of residents by driver of change.



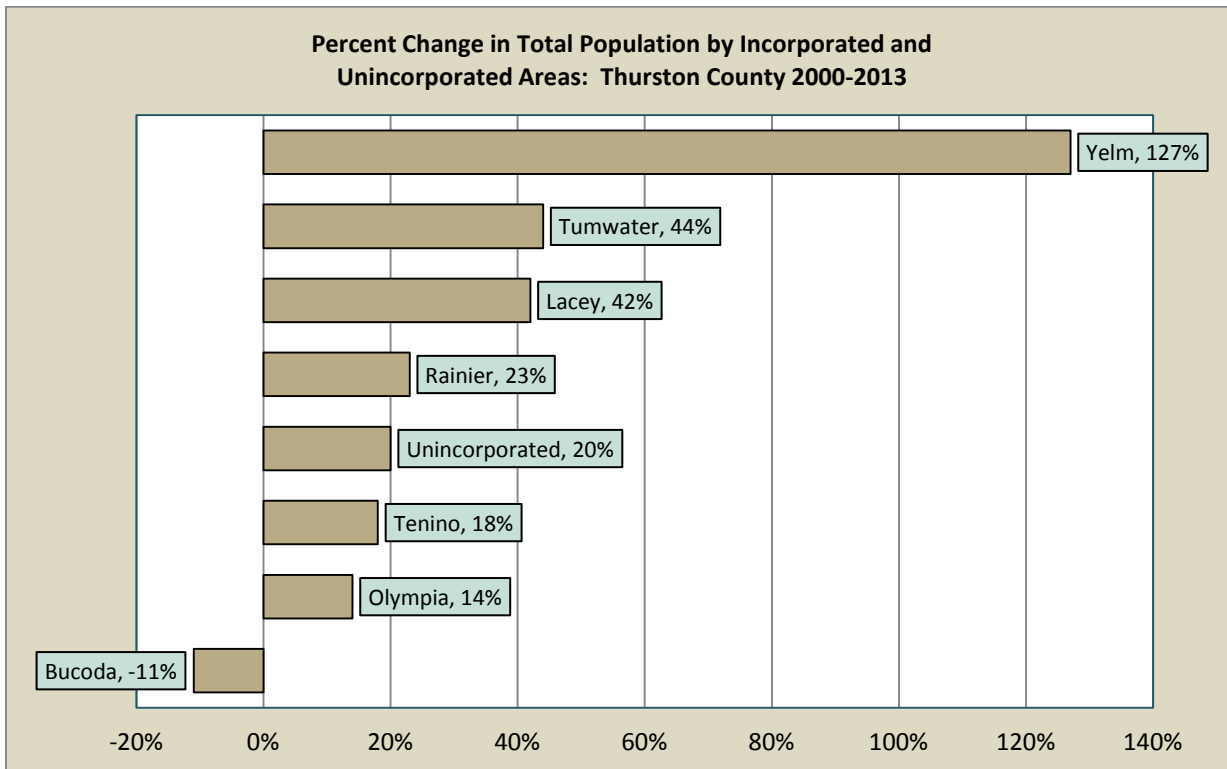
Data Source: Components of Population Change Estimates (12)

### WHAT WE KNOW.

- ◆ Between 2000 and 2013, the residential population of Thurston County grew by 25% or 52,745 residents.
  - In 2000 the total population of the county was 207,355. By 2013 it had increased to an estimated 260,100 residents.
- ◆ Growth in the county population is expected to continue, however new residents moving into the county (net-migration) has become less of a driver of change than it once was.
  - Over the last decade 2000-2010, 23% of population growth in Thurston County was due to natural increase and 73% net-migration.
  - During this decade 2010-2013, 45% of population growth in the county was due to natural increase and 55% net-migration.

Population growth has impacted areas throughout Thurston County. Incorporated areas (officially recognized cities or towns), and unincorporated areas (the county) have almost all experienced an increase in residential population. Annexation of land into city boundaries can influence change in population.

**MEASURE: Percent change in population for incorporated and unincorporated areas.**



Data Source: Decennial Census Counts and Population Estimates (13-14)

**WHAT WE KNOW.**

- ◆ Between 2000 and 2013, the City of Yelm had the fastest growing residential population in Thurston County, followed by the City of Tumwater and the City of Lacey. This pattern remains the same when looking at the current decade (2010-2013).

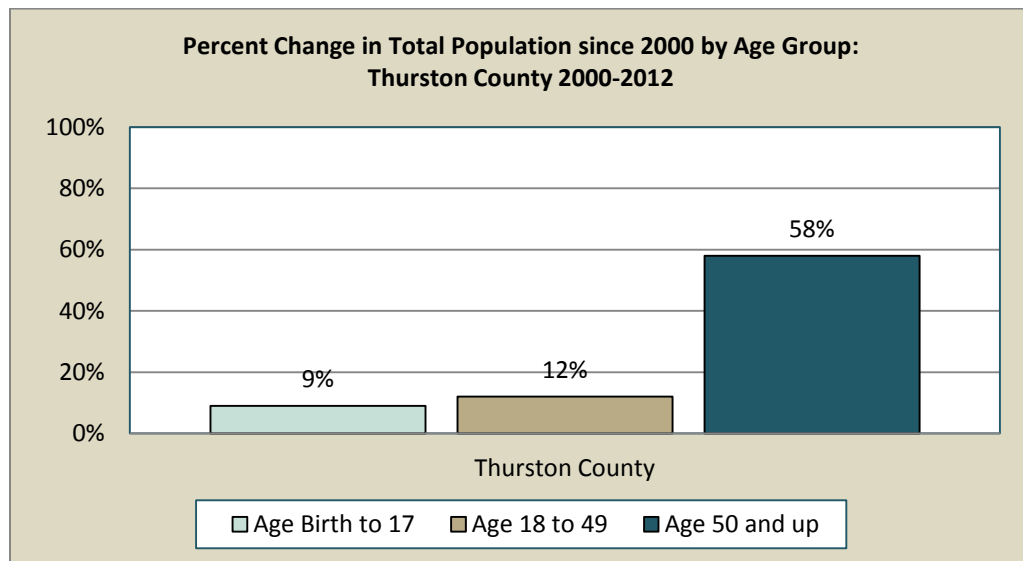
AREA	POPULATION IN 2000	POPULATION IN 2013
Bucoda	628	560
Lacey	31,226	44,350
Olympia	42,514	48,480
Rainier	1,492	1,840
Tenino	1,447	1,705
Tumwater	12,698	18,300
Yelm	3,289	7,470
Unincorporated County	114,061	137,395

Data Source: Decennial Census Counts and Population Estimates (13-14)

## AGE OF POPULATION.

Land use and community design are impacted by demographic shifts. Growth in the number of children in a community has implications for a range of issues including: building schools or expanding existing schools, access to parks or playgrounds, and neighborhood sidewalk installation or maintenance. Growth in the older adult population has other implications including: locating assisted living facilities or senior housing, accessibility of sidewalks, and availability of safe street crossing. (15-17)

### MEASURE: Percent increase in population by age group.



Data Source: Intercensal and Postcensal Population Estimates (18-19)

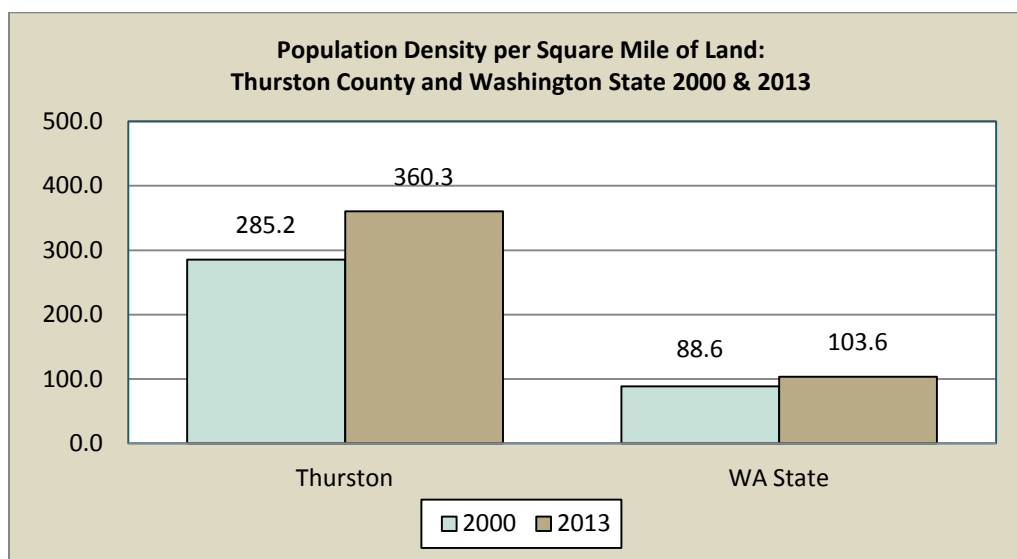
### WHAT WE KNOW.

- ◆ In Thurston County, the age group that has grown the *fastest* since 2000 is adults age 50 and up. There were 57,393 adults *age 50+* in the county in 2000. As of 2012, the number increased to 90,549.
  - In 2000 there were 97,435 adults *age 18-49* in the county. As of 2012, the number increased to 108,881.
  - In 2000 there were 52,527 children *age birth-17* in the county. As of 2012, the number increased to 57,370.
- ◆ Between 2000 and 2012, the residential population of Thurston County grew from 207,355 to 256,800 residents.

## DENSITY.

Many aspects of a community contribute to whether it is a desirable, healthy place to live. A key modifiable aspect is population density and mixed land use, which connects to how many people live in a specific area and what has been built nearby. Destinations of interest and how short the distance is between homes, workplaces, schools, businesses and recreation can influence health by making it easier to walk or bike to them. Population density is defined as the number of people per square mile of land for a specific geographic area. (20)

### MEASURE: Population density per square mile of land.



Data Source: Population Density Estimates (21)

### WHAT WE KNOW.

- ◆ Thurston County is more densely populated than Washington State overall.
  - In 2013, Thurston County was the 6<sup>th</sup> most densely populated county in the state when compared to all other counties (1<sup>st</sup> = King, 2<sup>nd</sup> = Clark, 3<sup>rd</sup> = Kitsap, 4<sup>th</sup> = Pierce, 5<sup>th</sup> = Island).
- ◆ In 2013, Lacey is the most densely populated city within Thurston County.

INCORPORATED AREA	DENSITY IN 2000	DENSITY IN 2013
Bucoda	557.9	436.4
Lacey	1826.9	2547.9
Olympia	2267.4	2445.2
Rainier	883.4	1000.5
Tenino	1618.7	1120.1
Tumwater	1157.9	1188.1
Yelm	573.1	1275.7

Data Source: Population Density Estimates (22)

# DESTINATIONS

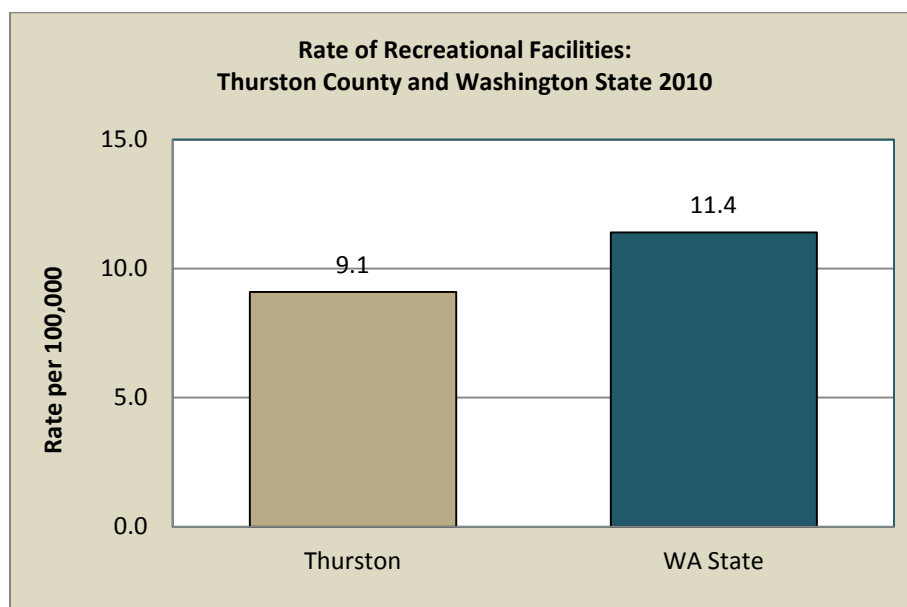
Places that positively influence health matter.



## RECREATION.

Parks, green spaces and public places for leisure and social activities contribute to a healthy community. Access to recreational facilities that support fitness and sports are also destinations that promote health through physical activity. Having an adequate number of recreational facilities in a specified area is desirable, though presence of a facility alone does not equal access. Access is impacted by a range of issues including location, cost, safety and knowledge about the type of services or activities offered by the facility. (20, 23)

### MEASURE: Rate of recreational facilities.



Data Source: County Business Patterns (23)

### WHAT WE KNOW.

- ◆ In 2010, Thurston County had a lower rate of recreational facilities when compared to Washington State. A higher rate is the direction of interest as that equates to more facilities available for local residents.
  - The Thurston County rate of 9.1 per 100,000 for the 2010 time period was the 19<sup>th</sup> lowest in the state when compared to all other counties.
- ◆ There were 23 recreational facilities in Thurston County as of 2010. Not included in this number are non-profit facilities, such as those operated by the YMCA or local school facilities that are open to the public.

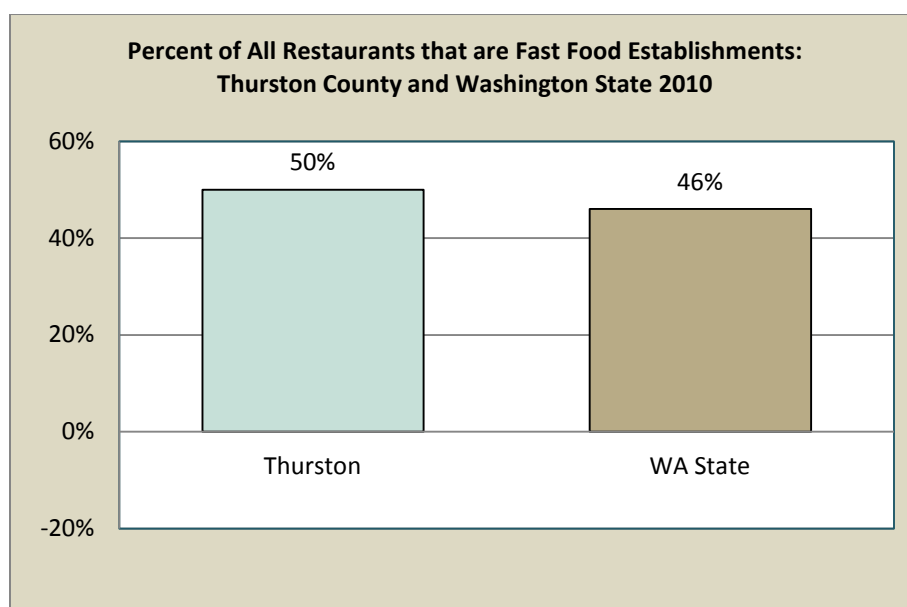


## HEALTHY FOOD.

Health behaviors and beliefs are complex and influenced by many factors. There is growing evidence that one powerful influence is the community food environment. The environment that surrounds where people live determines which food options are present, how many of these options are healthy, how convenient or time saving they are to obtain and how much they cost. These conditions in turn play a role in the decisions people make about what they eat. Eating healthier reduces risk for a wide range of health issues. (20, 24)

Farmers markets, community gardens and grocery stores can improve access to healthy foods, such as fruits and vegetables. Though fast food restaurants may provide healthy options, eating meals from this particular type of restaurant is associated with being overweight or obese. (23- 24)

### MEASURE: Percent of all restaurants that are fast food establishments.



Data Source: County Business Patterns (23)

### WHAT WE KNOW.

- ◆ Thurston County has a higher percent of restaurants that are fast food establishments compared to Washington State. Half, 50%, of all Thurston County restaurants were fast food in 2010.
  - The county ranked 6<sup>th</sup> highest in the state when compared to all other counties (several counties tied with Thurston at 50%).

# HEALTH CONSEQUENCES

**Health issues connect to the built environment that surrounds you.**

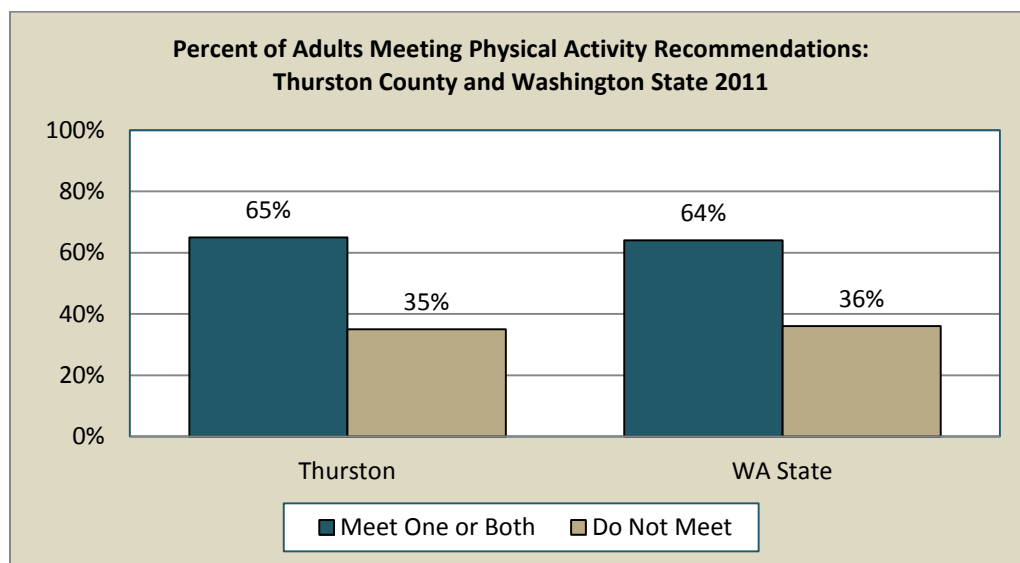


## PHYSICAL ACTIVITY.

Physical activity can take many forms from walking, bicycling, gardening, sports and dancing. The more you get, the more beneficial it is to your health. Physical activity reduces risk for dying from heart disease or stroke, reduces risk of developing type 2 diabetes, reduces symptoms of depression and improves ability to maintain current weight or lose weight. (25-26)

Recommendations for physical activity differ for adults and children. The guidelines for adult physical activity are: 1) doing 150 minutes a week of aerobic activity and 2) doing muscle strengthening activities 2 or more days a week. For children the physical activity guideline is doing 60 minutes of aerobic activity every day. (27)

**MEASURE: Percent of county adults meeting one or both physical activity recommendations.**



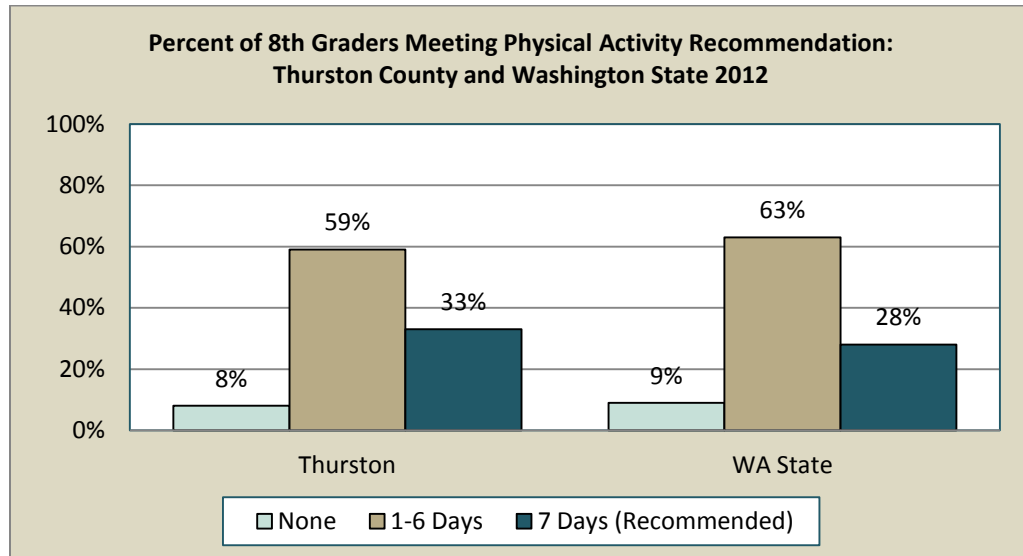
Data Source: Behavioral Risk Factor Surveillance Survey (28)

### WHAT WE KNOW.

- ◆ In 2011, an estimated 35% of Thurston County adults did not engage in the recommended amount of weekly aerobic and/or muscle strengthening physical activity.
  - This equates to 68,830 county adults not meeting any physical activity recommendations.
- ◆ Only 23% of Thurston County adults met both physical activity recommendations (aerobic and muscle strengthening) in 2011.
- ◆ In 2011, 23% of Thurston County adults were inactive, engaging in no weekly physical activity.

The current physical activity guideline for children is getting 60 minutes of aerobic activity every day of the week. (27)

**MEASURE: Percent of 8<sup>th</sup> graders meeting physical activity recommendation for children.**



Data Source: Healthy Youth Survey (11)

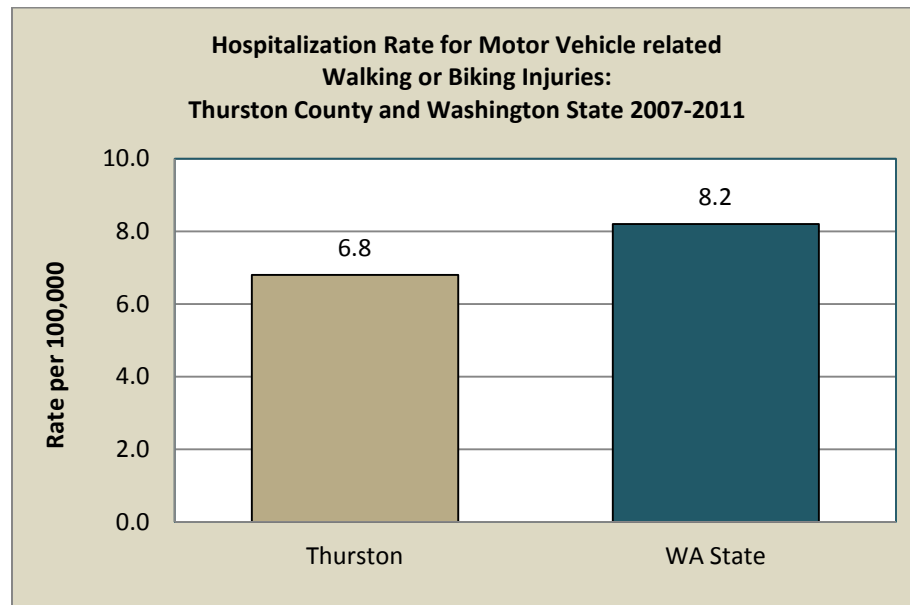
**WHAT WE KNOW.**

- ◆ Thurston County 8<sup>th</sup> graders are more likely to engage in the recommended amount of physical activity, 60 minutes a day/7 days a week, compared to Washington State.
  - In 2012, an estimated 67% of Thurston County 8<sup>th</sup> graders did not engage in the recommended amount of physical activity.
- ◆ Rural and urban school districts in Thurston County are similar in whether 8<sup>th</sup> graders engage in the recommended amount of physical activity of 60 minutes a day/7days a week.
  - In 2012, 33% of 8<sup>th</sup> graders in rural schools districts engaged in the recommended amount of physical activity compared to 35% in urban school districts. (Rural = Rainier, Rochester, Tenino, Yelm. Urban = North Thurston, Olympia, Tumwater. No data for Griffin available).

## MOTOR VEHICLE INJURY.

The design of a community contributes to the safety of residents who walk or bike in the area. Speed limits, bike lanes, crosswalks and many other approaches can increase safety for those using non-motorized transportation for fun, exercise or commuting. (20)

**MEASURE: Rate of motor vehicle injury hospitalizations among residents who were walking or biking.**



Data Source: Hospital Discharge Data (29)

### WHAT WE KNOW.

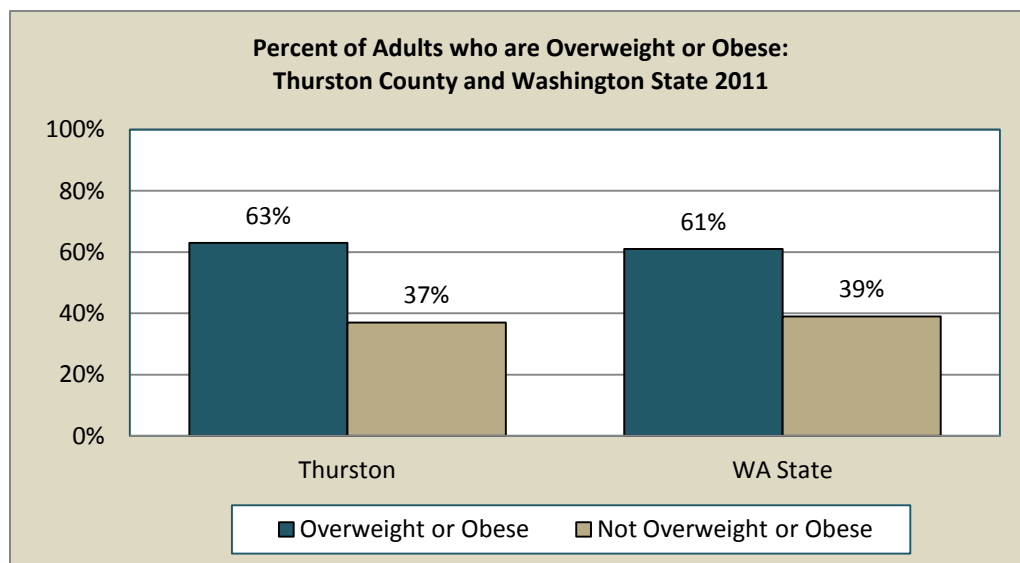
- ◆ Between 2007-2011, Thurston County had a lower rate of motor vehicle related injuries among residents who were walking or biking when compared to Washington State.
  - The Thurston County rate of 6.8 per 100,000 for the 2007-2011 time period was the 11<sup>th</sup> highest in the state when compared to all other counties.
- ◆ There were 85 hospitalizations, between 2007-2011, for motor vehicle related injuries among Thurston County residents who were walking or biking. Of these 85 hospitalizations:
  - 12% occurred among children age birth to 17.
  - 49% among adults age 18 to 49.
  - 39% among adults age 50 and up.

## OVERWEIGHT OR OBESE.

Obesity is a health condition that increases your risk for several diseases including type 2 diabetes, heart disease and stroke which are leading causes of death in Thurston County. In children and adults, obesity can cause high blood pressure, liver problems, joint problems and breathing problems. Being overweight also increases your risk for a range of health issues. (30)

There are many factors that influence whether someone is overweight or obese, but body weight fundamentally comes down to an imbalance between the number of calories consumed and amount of physical activity you engage in. Obesity in adults is defined as having a Body Mass Index (BMI) of 30 or higher based on height and weight. In children, obesity is defined as having a BMI at or above the 95% percentile for children the same age and sex. Being overweight is defined as having a BMI of 25.0-29.9 for adults and being at the 85<sup>th</sup> to 94<sup>th</sup> percentile for children. (31-32)

### MEASURE: Percent of county adults who are overweight or obese (based on BMI).

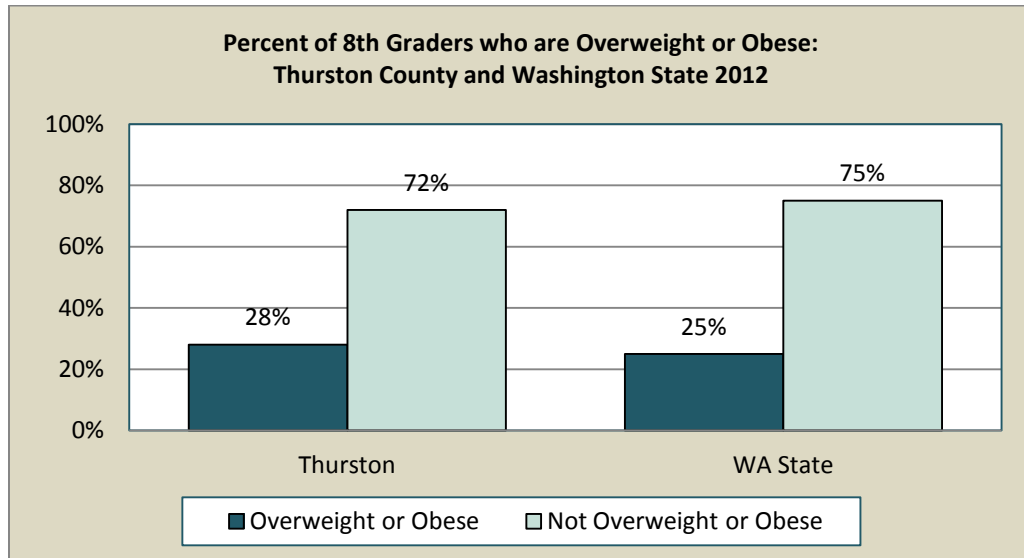


Data Source: Behavioral Risk Factor Surveillance Survey (28)

### WHAT WE KNOW.

- ◆ In 2011, an estimated 63% or 123,895 Thurston County adults were either overweight or obese.

**MEASURE: Percent of 8<sup>th</sup> graders who are overweight or obese.**



Data Source: Healthy Youth Survey (11)

**WHAT WE KNOW.**

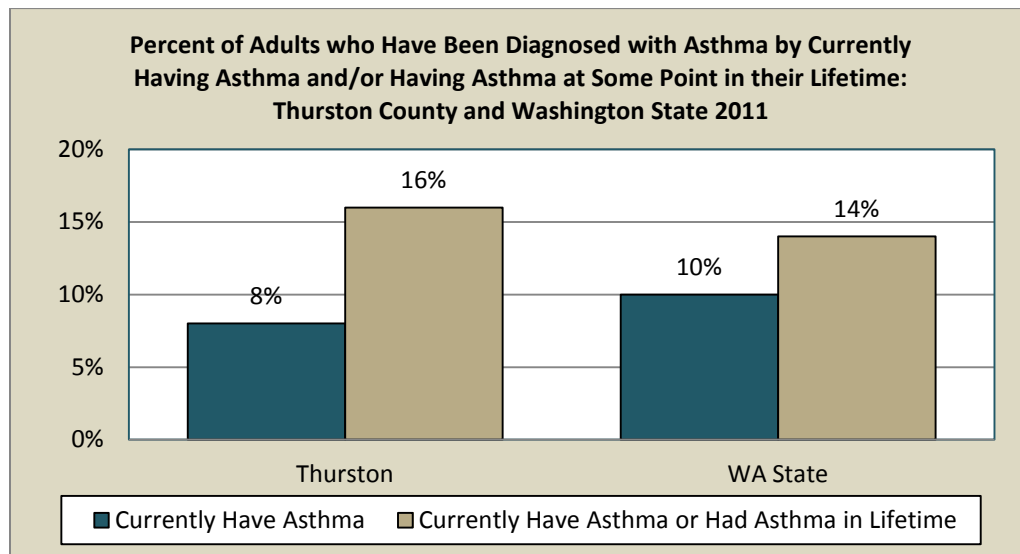
- ◆ Thurston County 8<sup>th</sup> graders are more likely to be overweight or obese compared to Washington State.
- ◆ In Thurston County, 8<sup>th</sup> graders in rural school districts are somewhat less likely to be overweight or obese compared to urban school districts.
  - In 2012, 27% of 8<sup>th</sup> graders in rural schools districts were overweight or obese compared to 31% in urban school districts. (Rural = Rainier, Rochester, Tenino, Yelm. Urban = North Thurston, Olympia, Tumwater. No data for Griffin available).

## ASTHMA.

Asthma is a chronic disease that affects your airways causing symptoms like coughing, wheezing, chest tightness and trouble breathing. When you experience a serious worsening of asthma symptoms, it is called an asthma attack. Asthma attacks are not all the same and some are worse than others. Asthma affects people of all ages, but usually starts during childhood. (33)

Avoiding things that make asthma worse and reducing exposure to triggers (things that can irritate the lungs) can help reduce the severity or frequency of asthma attacks. Examples of triggers include air pollution and cigarette smoke. Asthma contributes to missed days of school and work. (33-34)

### MEASURE: Percent of county adults who have been diagnosed with asthma.



Data Source: Behavioral Risk Factor Surveillance Survey (28)

### WHAT WE KNOW.

- ◆ In 2011, an estimated 8% or 15,733 Thurston County adults currently had asthma.
  - An estimated 16% or 31,465 of county adults either currently had asthma or had asthma at some point in their lifetime in 2011.



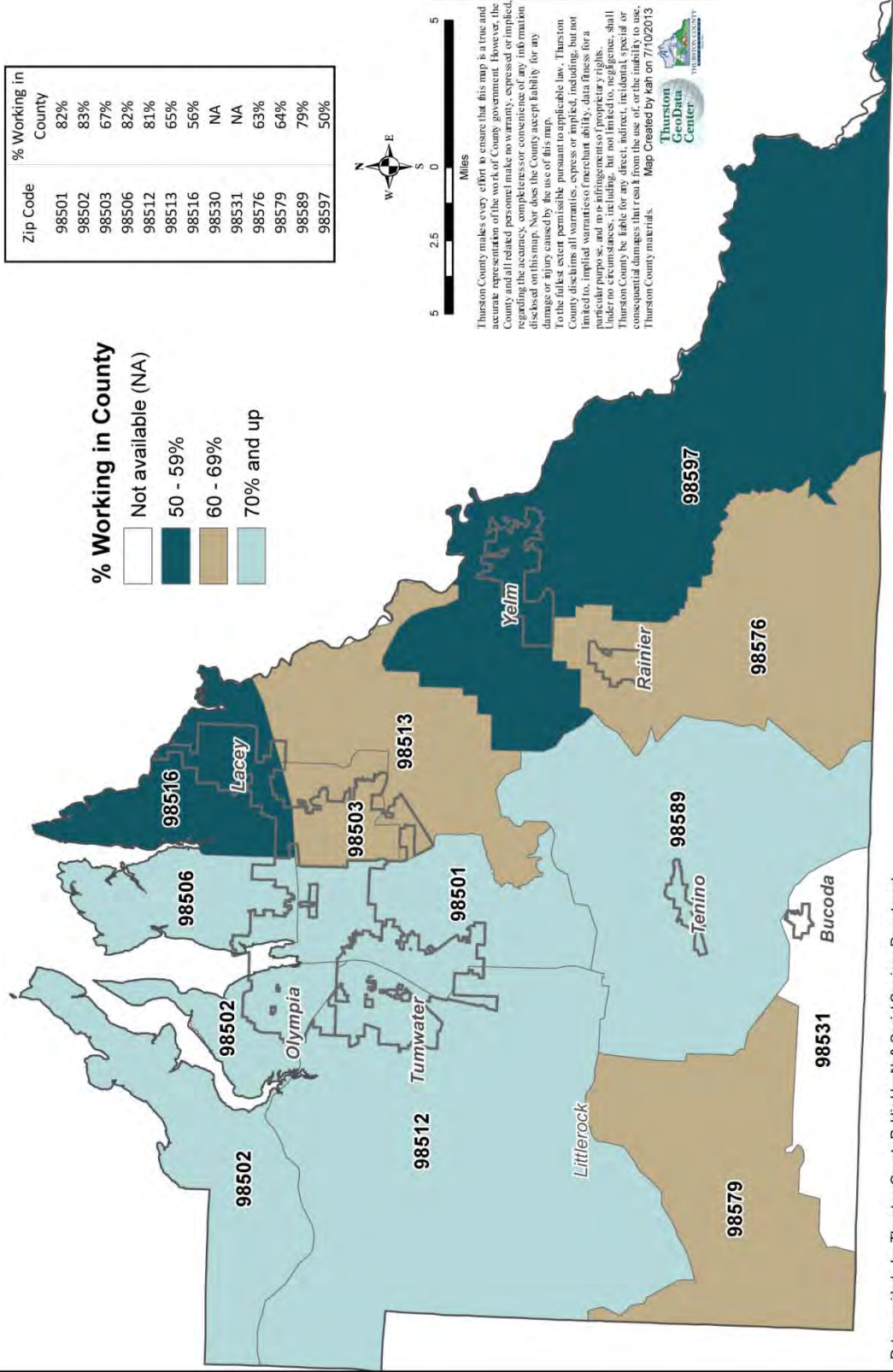
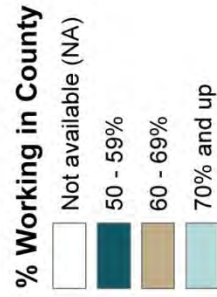
# MAP GALLERY

**Health in detail.**



# Percent of County Residents Whose Workplace is in Thurston County Zip Code Estimates 2007-2011

Zip Code	% Working in County
98501	82%
98502	83%
98503	67%
98506	82%
98512	81%
98513	65%
98516	56%
98530	NA
98531	NA
98576	63%
98579	64%
98589	79%
98597	50%



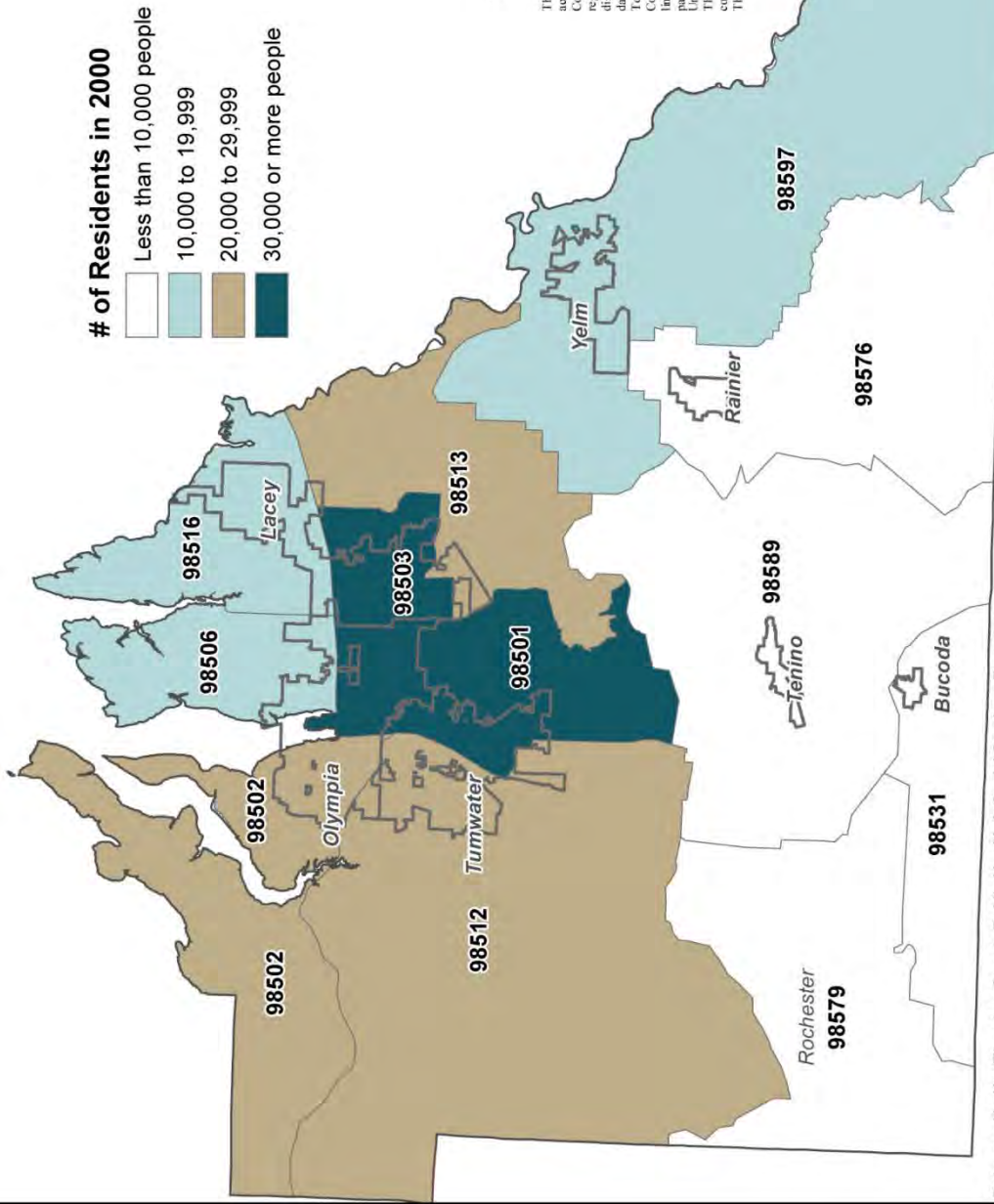
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Data provided by Thurston County Public Health & Social Services Department

Data Source: U.S. Census Bureau, American Community Survey

# Number of Residents of all Ages Thurston County Zip Codes 2000



Thurston County makes every effort to ensure that this map is a true and accurate representation of the work of County government. However, the County and all related personnel make no warranty, expressed or implied, regarding the accuracy, completeness or convenience of any information disclosed on this map. Nor does the County accept liability for any damage or injury caused by the use of this map. The County disclaims all warranties, express or implied, including but not limited to, implied warranties of merchantability, data fitness for a particular purpose, and non-infringement of proprietary rights. Under no circumstances, including, but not limited to, negligence, shall Thurston County be liable for any direct, indirect, incidental, special or consequential damages that result from the use of, or the inability to use, Thurston County materials. Map Created by ken on 7/16/2013

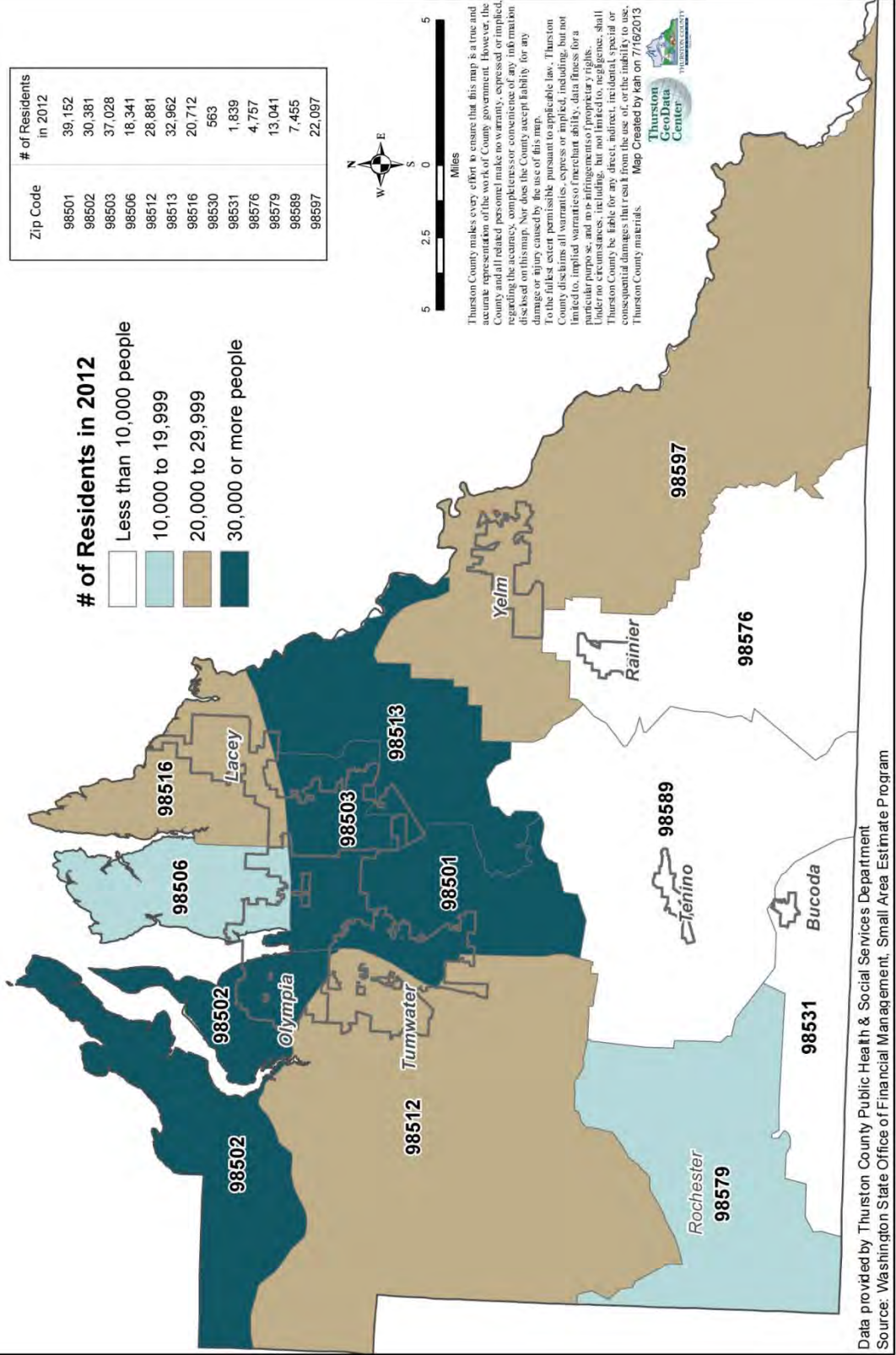


Data provided by Thurston County Public Health & Social Services Department  
Source: Washington State Office of Financial Management, Small Area Estimate Program

Data Source: Washington State Office of Financial Management



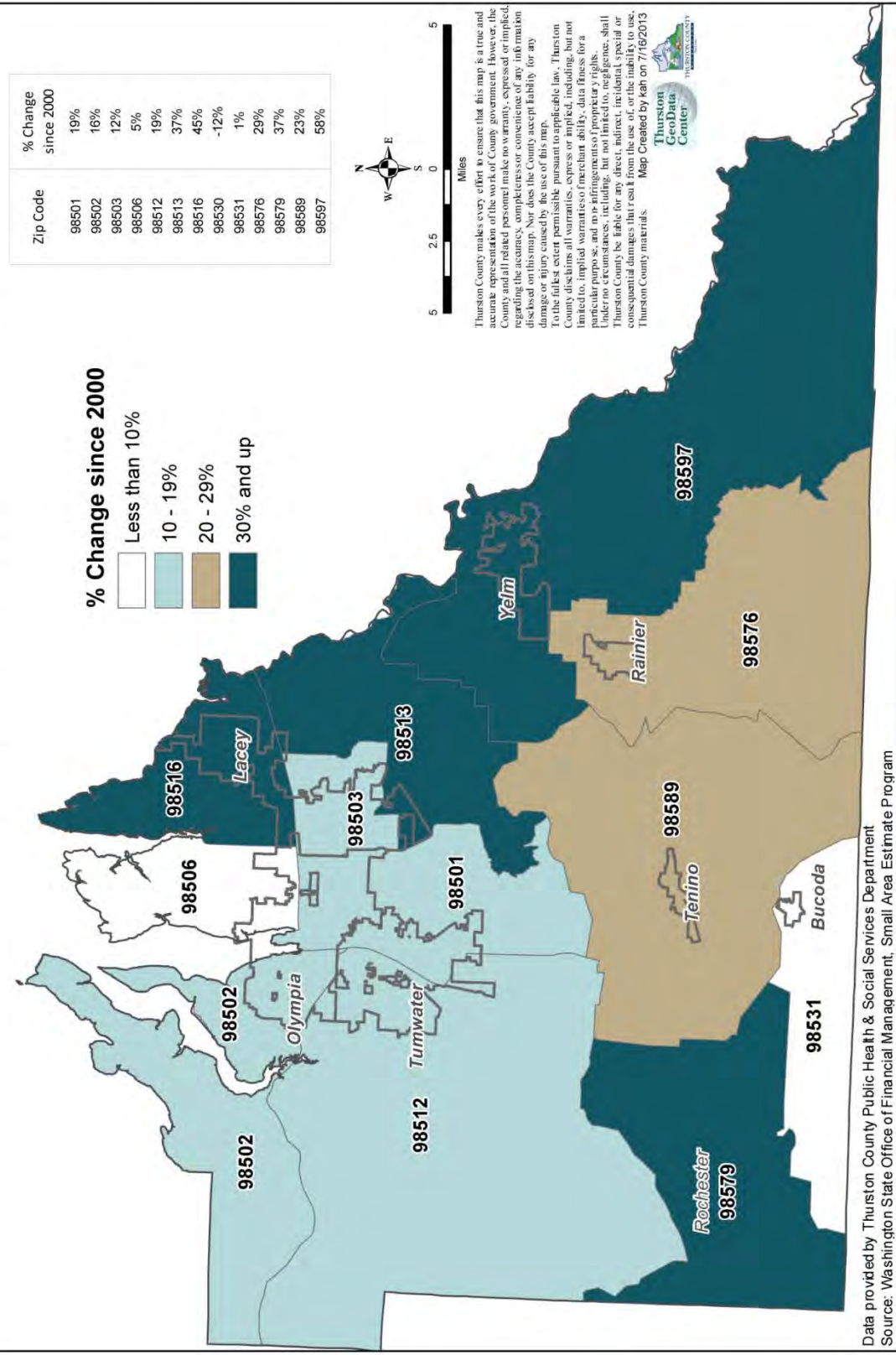
# Number of Residents of all Ages Thurston County Zip Codes 2012 Estimates



Data provided by Thurston County Public Health & Social Services Department  
Source: Washington State Office of Financial Management, Small Area Estimate Program

Data Source: Washington State Office of Financial Management

# Percent Change in Resident Population since 2000 Thurston County Zip Codes 2000-2012



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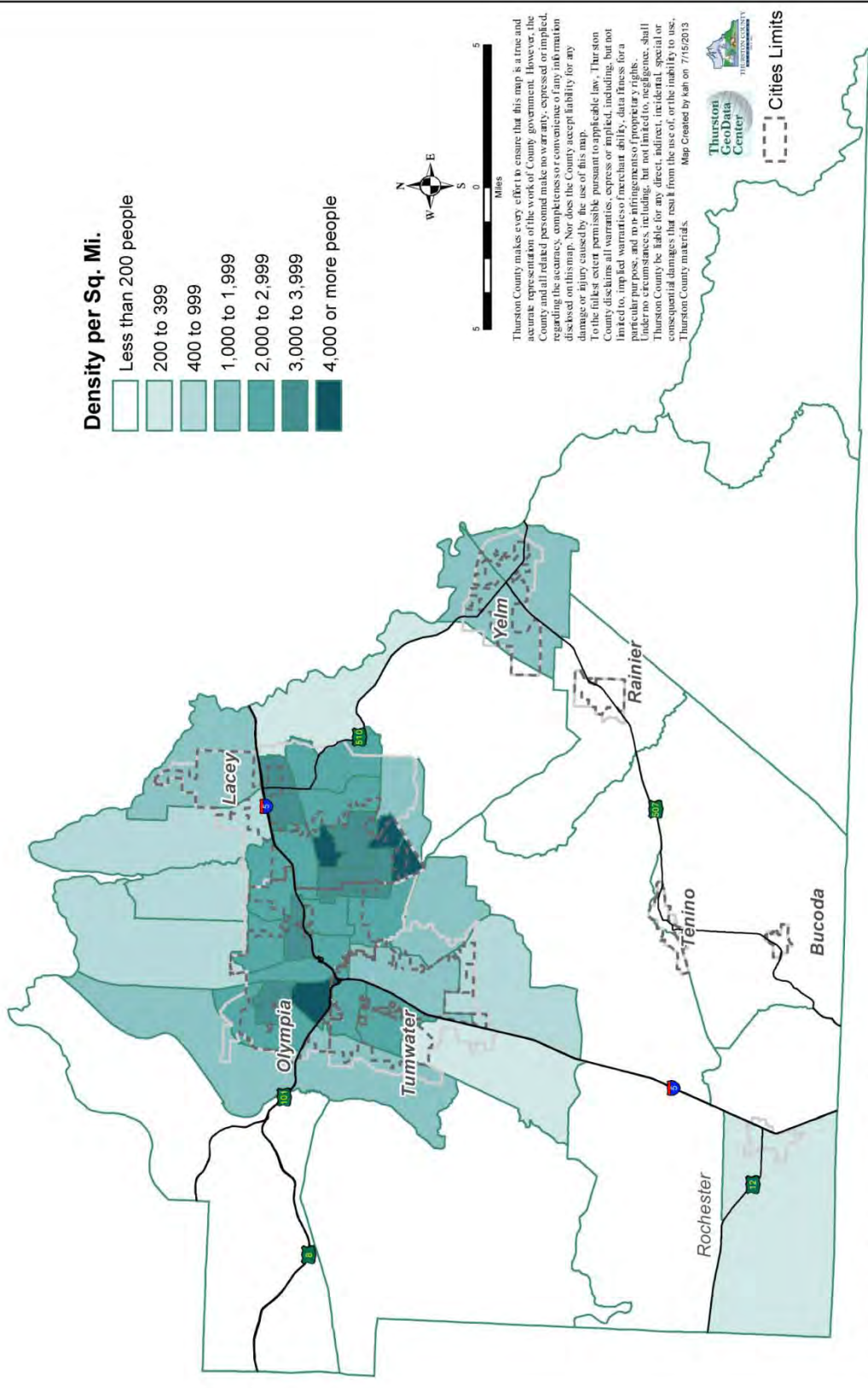


Data provided by Thurston County Public Health & Social Services Department  
Source: Washington State Office of Financial Management, Small Area Estimate Program

Data Source: Washington State Office of Financial Management



# Population Density Per Square Mile Thurston County Census Tracts 2010



Source: U.S. Census Bureau, 2007-2011 American Community Survey

Data Source: U.S. Census Bureau, American Community Survey

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