

Memorandum

October 1, 2014

To: Rich Faith, Multnomah County

Cc:

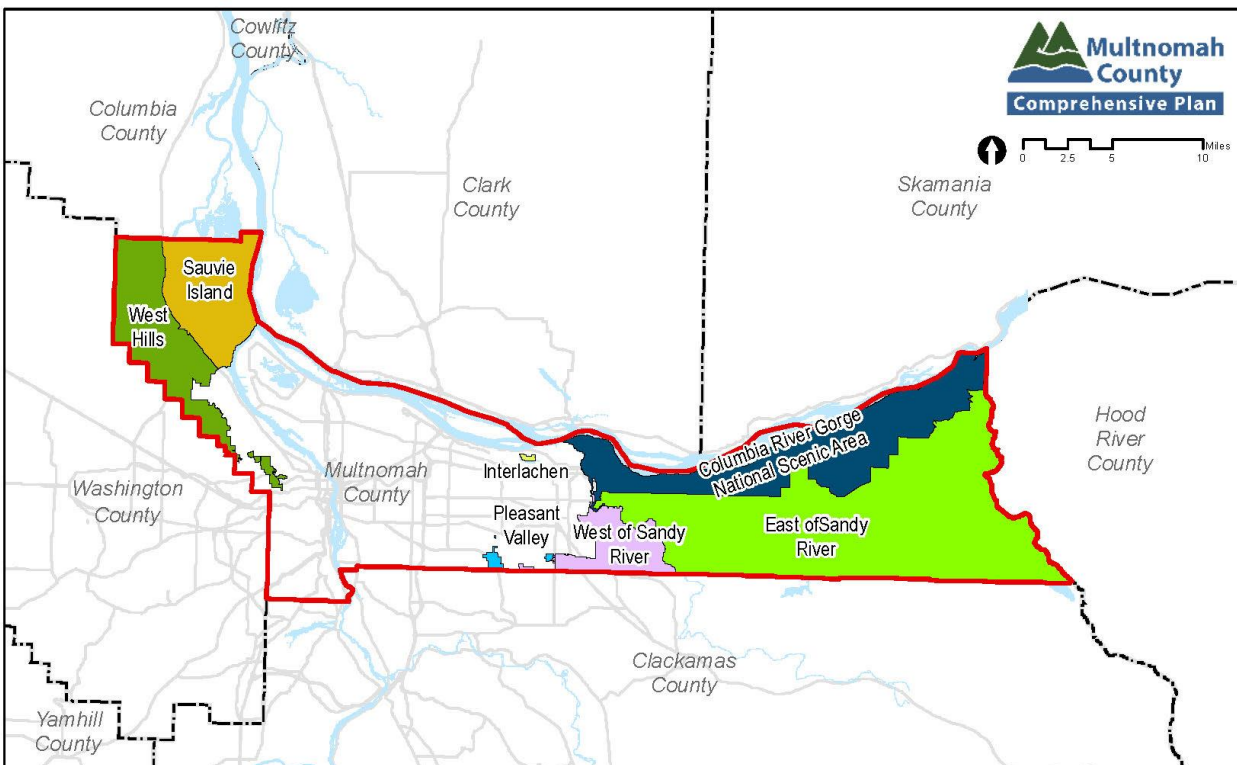
From: Matt Hastie, AICP, Andrew Parish, Zechariah Heck – Angelo Planning Group, Steve White Oregon Public Health Institute

Re: Multnomah County Community Demographic Profile

INTRODUCTION AND STUDY AREA

The purpose of this memorandum is to describe the demographic breakdown of Multnomah County, Oregon to support the public outreach and planning underway as part of the Multnomah County Comprehensive Plan Update. Also included is a summary of public health conditions, health determinants, and health outcomes. This effort is focused on the rural areas shown in Figure 1.

Figure 1. Context Map



Much of this analysis is based on US Census data, the boundaries of which do not align perfectly with the rural planning area boundaries. For example, the Census tract for Sauvie Island covers that rural area as well as a portion of West Hills (as defined in the Comprehensive Framework Plan and West Hills Rural Area Plan). The census tracts and block groups used in this analysis to describe the rural subareas of Multnomah County are shown in Figure 2 through Figure 4 and listed in Table 1. Additionally, some data is unavailable at the block group level, and block group boundaries have changed between the 2000 and 2010 censuses. In some cases, this memorandum simply describes the rural areas as West Multnomah County and East Multnomah County, as appropriate to address the shifts in boundaries over time and avoid inaccuracies in representing data trends over time.

Figure 2. Study Area Census Tracts (70, 71, 104.02, and 105)

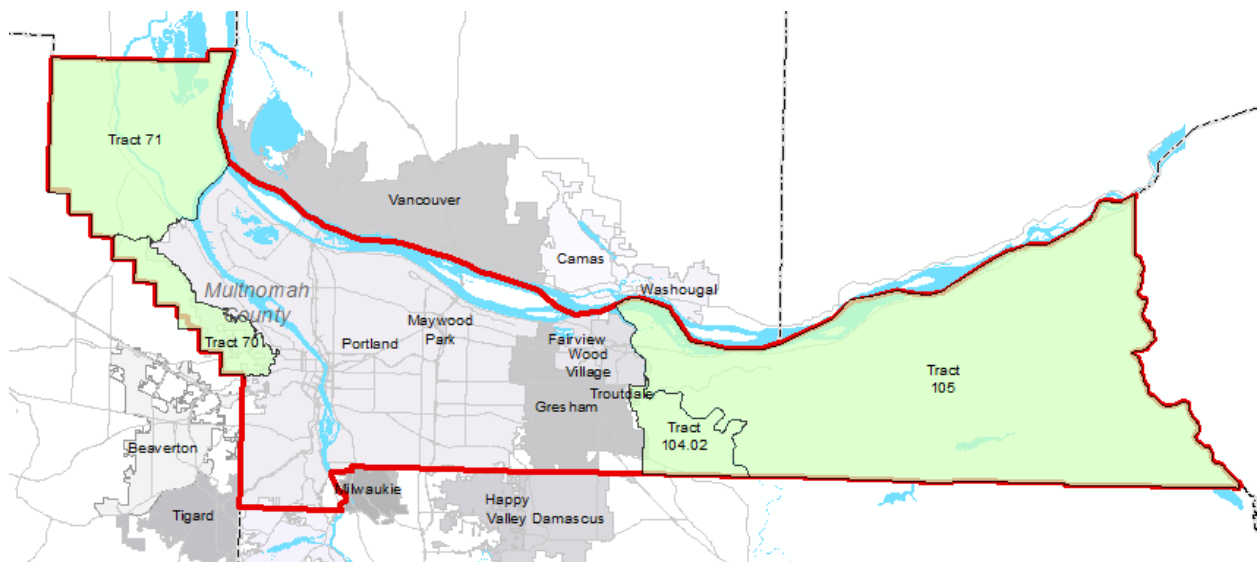


Figure 3. Study Area Block Groups (East Multnomah County)

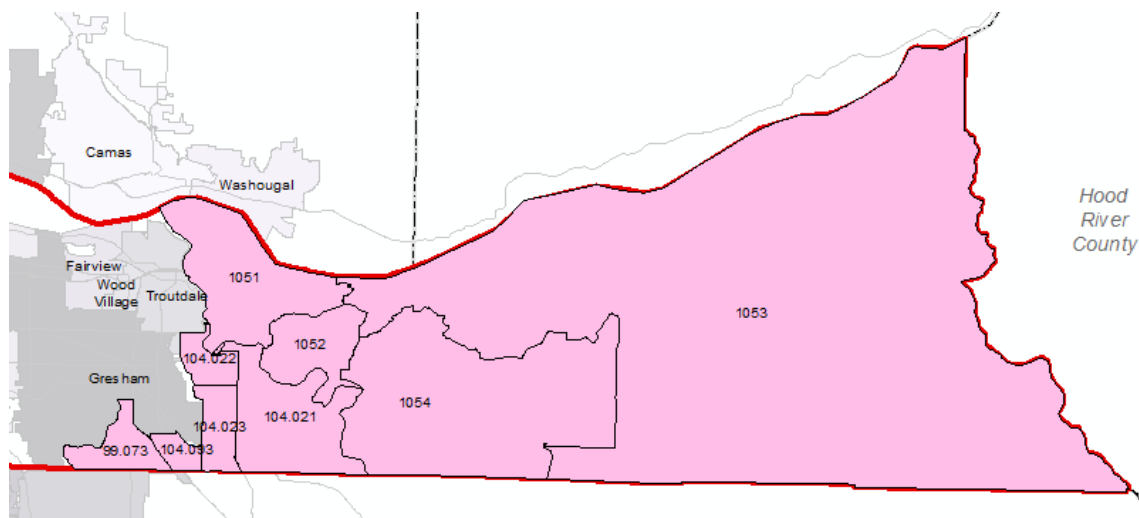


Figure 4. Study Area Block Groups (West Multnomah County)

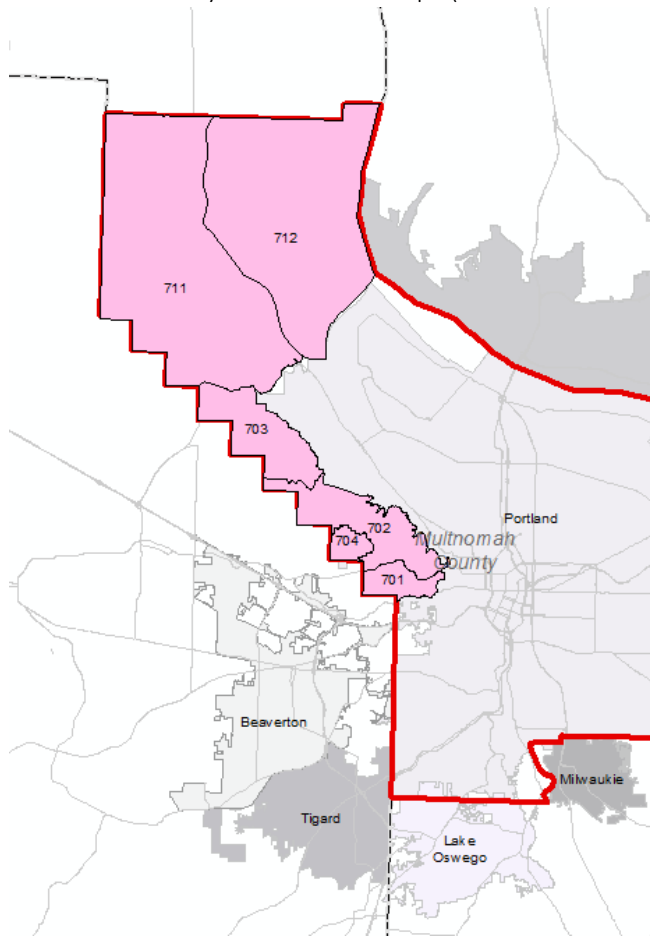


Table 1. Multnomah County Rural Subareas and Census Geographies

Plan Area	Census Geographies	
	2000 Census, 2010 Census, 2008-2012 ACS	2010 Census
East of Sandy River	Tract 105	Tract 105 BG 12 3 4
West of Sandy River	Tract 104.02	Tract 104.02 BG 1 2 3 ; Tract 104.09 BG 3; Tract 99.07 BG 3
West Hills	Tract 70	Tract 70, BG 1 2 3 4; Tract 71 BG 1
Sauvie Island	Tract 71	Tract 71 BG 2
West Multnomah County	Tracts 70 and 71	
East Multnomah County	Tracts 104.2 and 105	

The remainder of this memorandum describes the characteristics of Multnomah County and its subareas along the following topic lines: Population and Growth, Race/Ethnicity, Family and Households, Health Impacts, and Implications for Planning.

POPULATION AND GROWTH

Table 2 below describes the population of Multnomah County and its subareas. In 2010, the population of Multnomah County was at 735,334¹. This represents a significant increase from the 2000 Census figure of 660,486. Between the years 2000 and 2010, Multnomah County grew by 11.3%, or roughly 1.08% on average per year. This is similar to the State of Oregon, which grew 11.97%, or 1.14% per year, during the same period.

Table 2. Population of Multnomah County

	2010 Census
Multnomah County	735,334
East of Sandy River	3,926
West of Sandy River	10,184
West Hills	10,052
Sauvie Island	888

Source: 2010 Census Block Group Data

In contrast, the rural areas of the county grew at a much higher rate from 2000 to 2010 (see Table 3). West Multnomah County grew at roughly 3.2% a year on average, and East Multnomah County grew at roughly 1.5% per year on average. While this does not represent a significant change in total population compared to growth in the County as a whole, it is a relatively high growth rate for a rural area in Oregon, particularly compared to other rural parts of the state.

Table 3. Change in Population - 2000 Census and 2010 Census

	2000	2010	% Change	Population Density***
Multnomah County	660,486	735,334	11.3%	2.47 People/Acre
West Multnomah County*	7,963	10,940	37%	.25 People/Acre
East Multnomah County**	8,668	10,061	16%	.11 People/Acre
State of Oregon	3,421,399	3,831,074	11.9%	--

* Includes Sauvie Island and West Hills subareas

** Includes East of Sandy River and West of Sandy River subareas

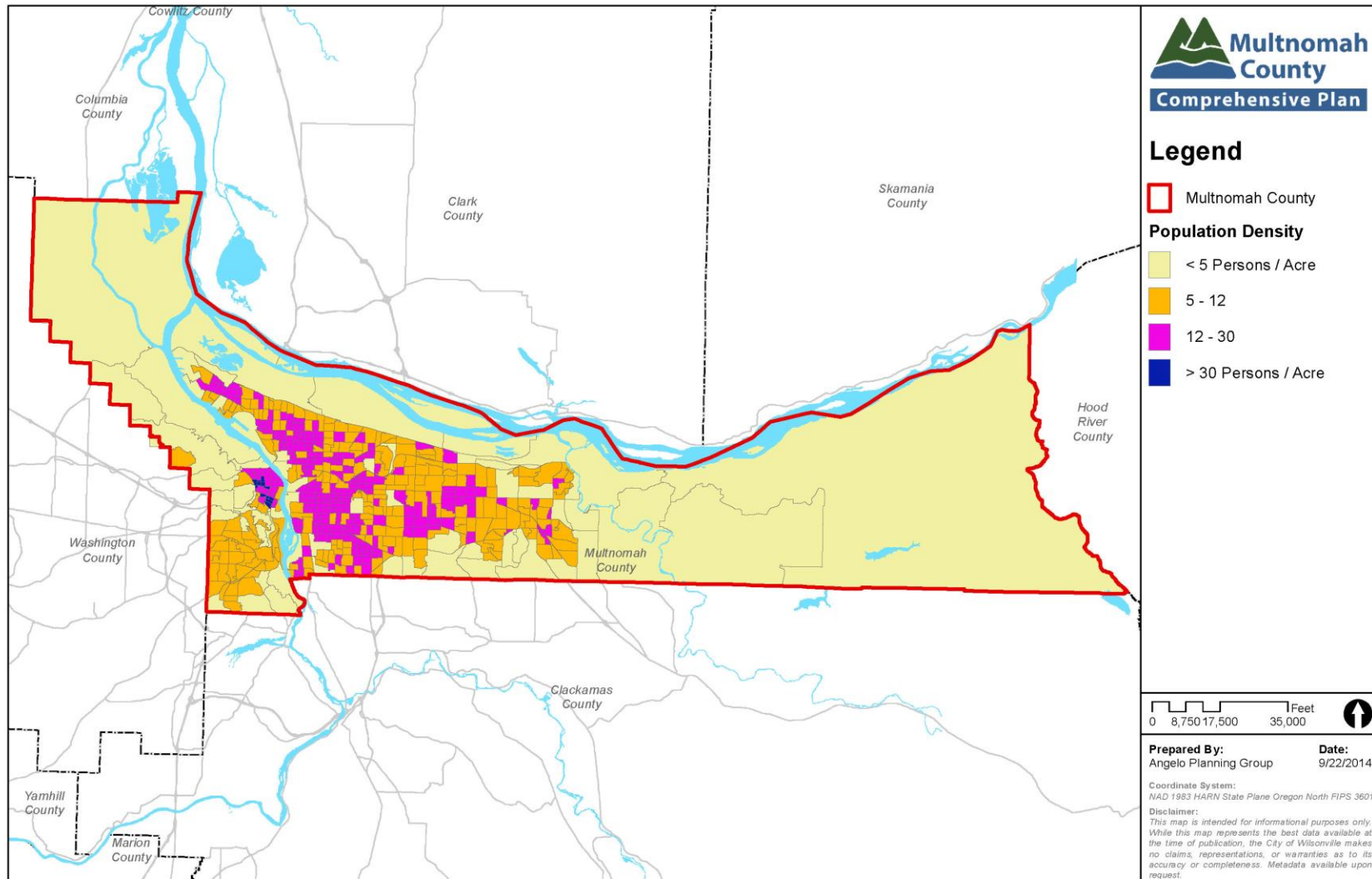
*** Calculated as 2010 population / total acres within Census Block Groups listed in Table 1

Source: 2000 and 2010 Census Tract Level Data

Figure 5 shows the population density of the county by block group, as of 2010. Unsurprisingly, most of the county's population is within the City of Portland and its suburbs and population density is much higher in those portions of the County.

¹ Source: U.S. Census Bureau 2010 Census

Figure 5. Population Density Map



RACIAL/ETHNIC BREAKDOWN

Table 4 below describes the racial and ethnic breakdown of Multnomah County, the county's rural areas, and the State of Oregon. Overall, Multnomah County has a somewhat higher proportion of African American and Asian residents than the state as a whole. The State of Oregon and Multnomah County have roughly same proportion of Hispanic/Latino residents, American Indian and Alaska Native residents, and Native Hawaiian and other Pacific Islander residents. However, the county's rural areas have contrasting demographic profiles when compared to the county as a whole and the State of Oregon. In general, the rural subareas have significantly less racial/ethnic diversity than the rest of the county and the state as a whole.

Table 4. Race and Ethnicity

	East of Sandy River	West of Sandy River	West Hills	Sauvie Island	Multnomah County	State of Oregon
RACE						
African American	0.7%	1.0%	1.0%	0.2%	5.4%	1.8%
American Indian or Native Alaskan	0.6%	0.7%	0.8%	1.8%	0.8%	1.4%
Asian	1.3%	3.1%	11.0%	1.0%	6.5%	3.7%
Native Hawaiian or Pacific Islander	0.0%	0.4%	0.1%	0.1%	0.5%	0.3%
Other Race	1.3%	3.5%	0.8%	5.2%	0.2%	5.3%
Two or More Races	3.4%	3.7%	3.8%	2.5%	5.4%	1.8%
White	92.7%	87.6%	82.5%	89.2%	72.1%	83.6
Ethnicity						
Hispanic/Latino	3.5%	7.8%	3.3%	0.9%	10.9%	11.7%
Not Hispanic/Latino	96.5%	92.2%	96.7%	90.1%	89.1%	88.3%

Source: 2010 Census Block Group Data

RACE AND ETHNICITY MAPS

The maps on the following pages show the distribution of race and ethnicity in the county.

Figure 6. Race – Percent White by Block Group

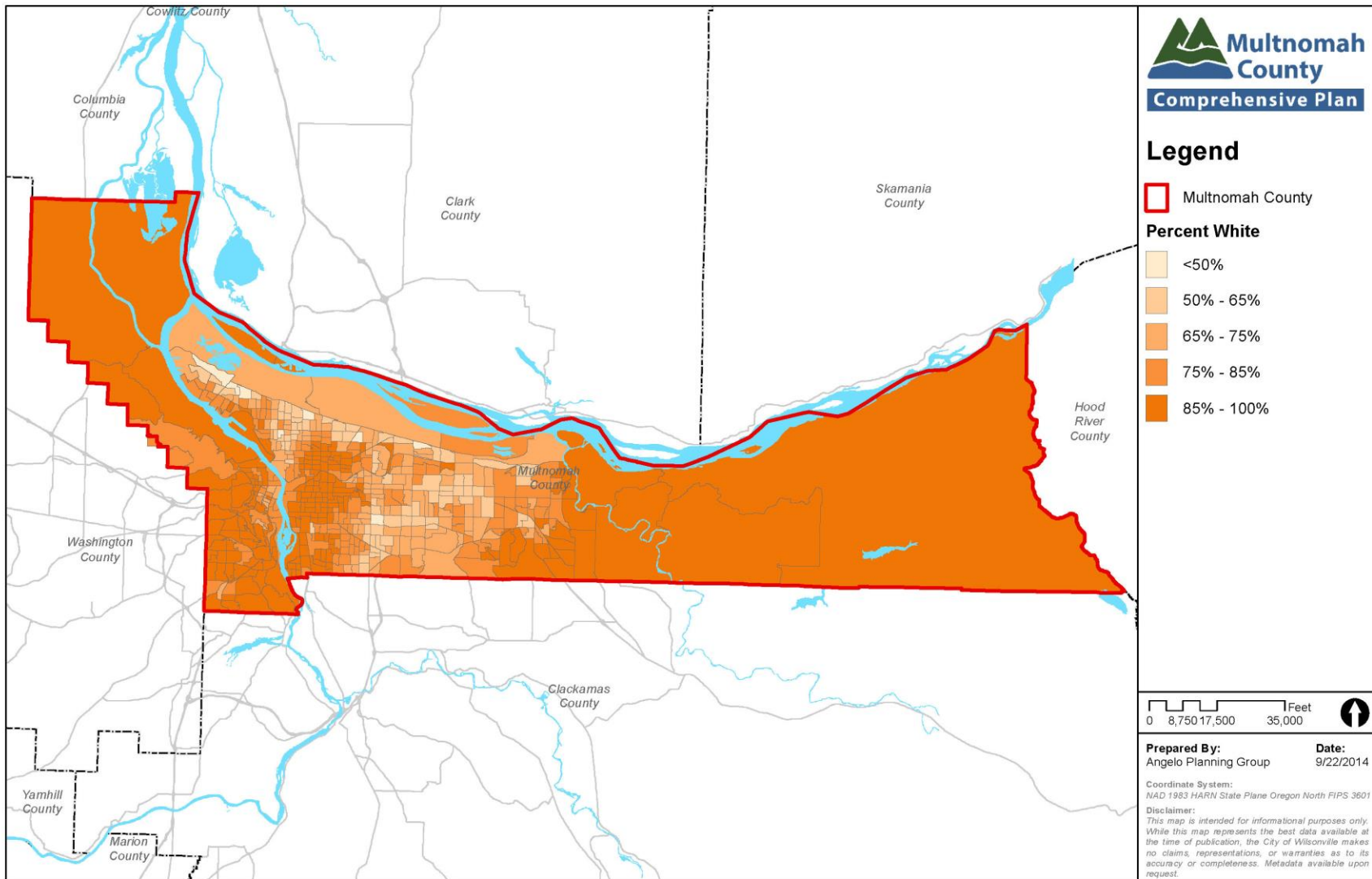


Figure 7. Percent African American by Block Group

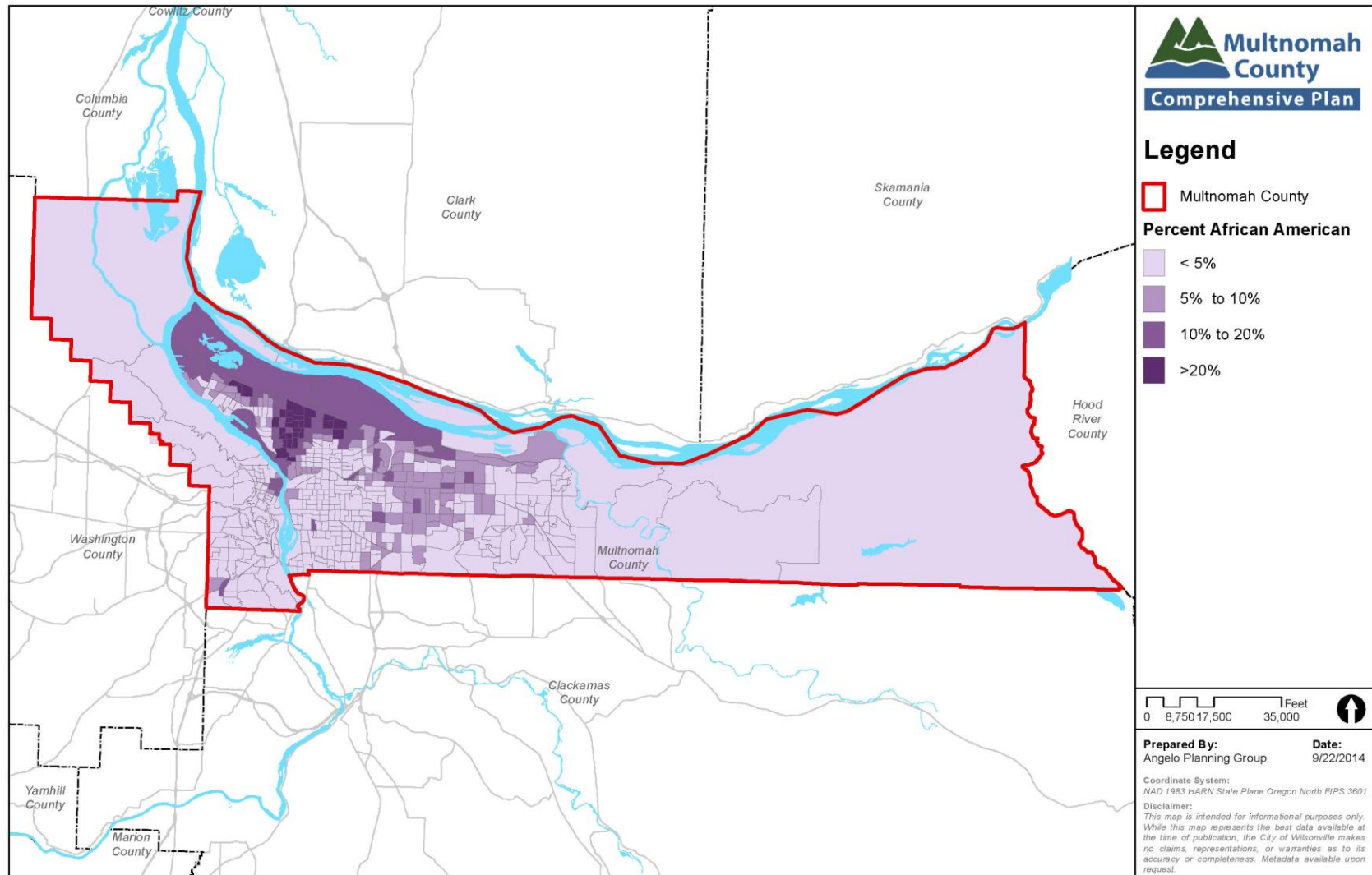


Figure 8. Percent Hispanic by Block Group

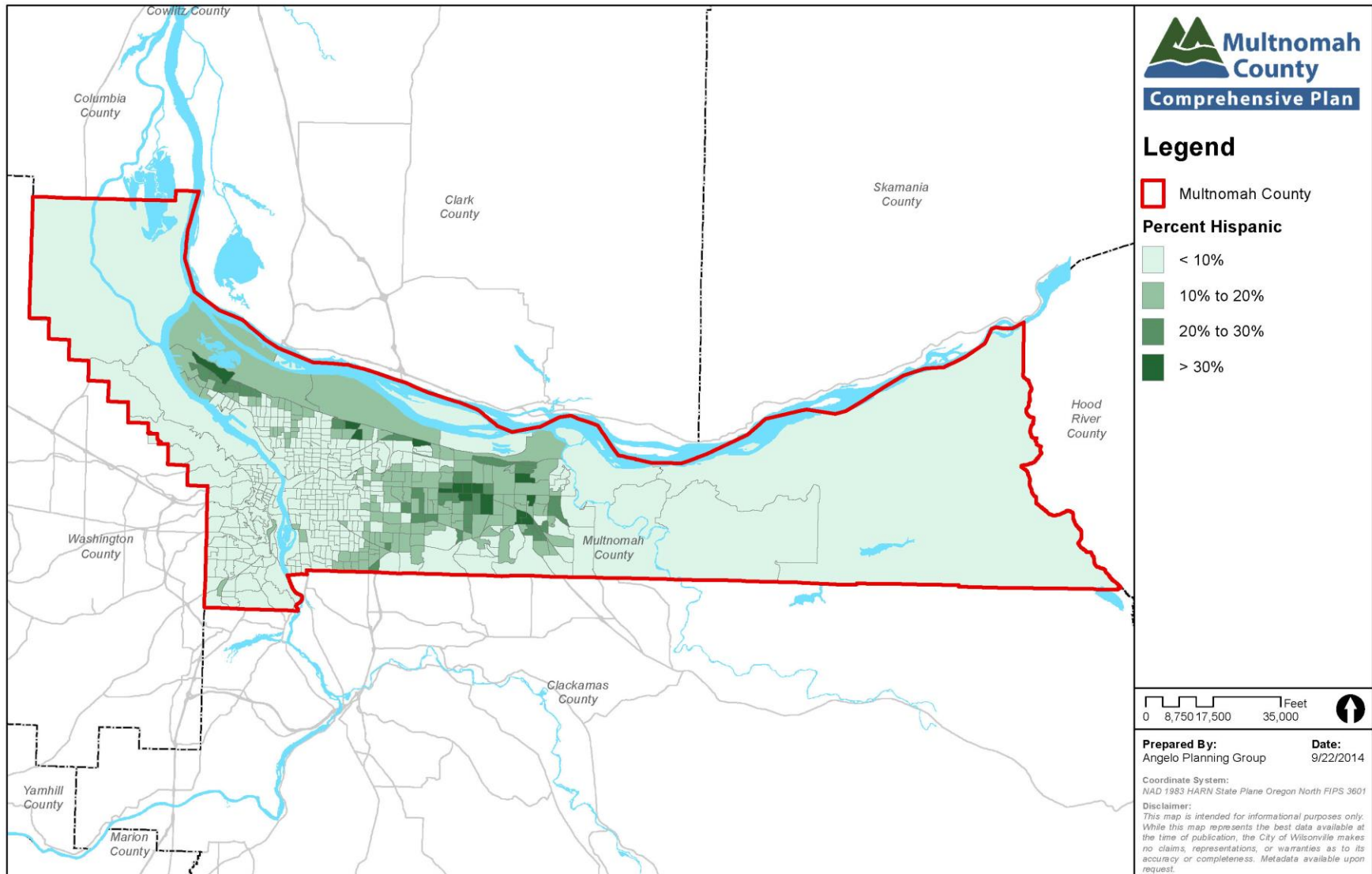
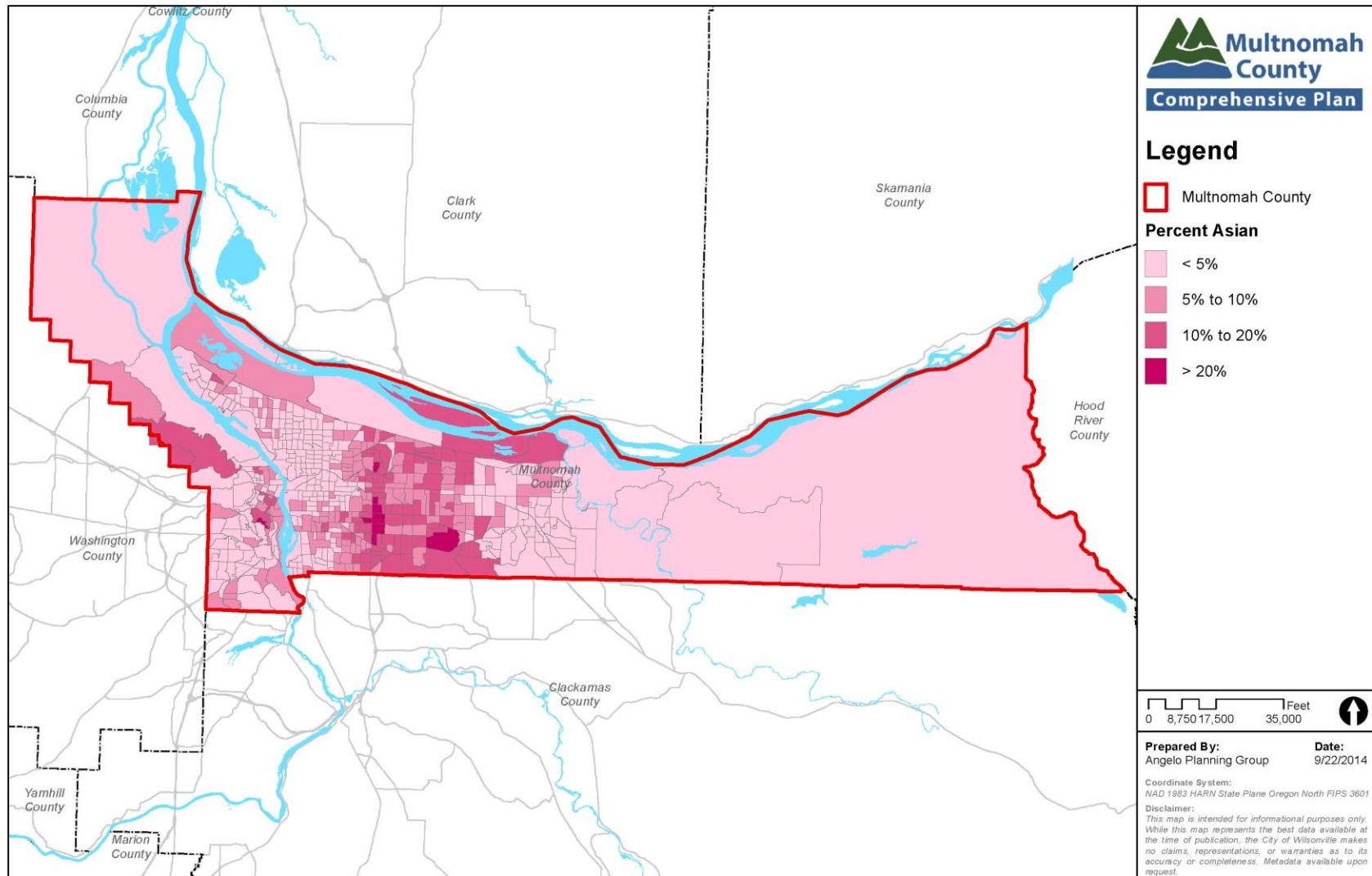


Figure 9. Percent Asian by Block Group



LANGUAGE SPOKEN AT HOME

Language spoken at home is described in Table 5. Overall, the proportion of residents who speak a language other than English at home is somewhat lower than that of the County as a whole. Although margins of error are high, it appears that there is a higher proportion of residents who speak Other Indo-European languages at home in East County, and residents who speak Asian and Pacific Islander Languages at home in West County.

Table 5. Language Spoken At Home

	West County		East County		Multnomah County
	Tract 70	Tract 71	Tract 104.2	Tract 105	--
English Only	83.6% +/-4.1	93.0% +/-5.4	92.9% +/-3.2	86.8% +/-6.8	80.4% +/-0.4
Language Other Than English	16.4% +/-4.1	7.0% +/-5.4	7.1% +/-3.2	13.2% +/-6.8	19.6% +/-0.4
Spanish	2.3% +/-1.7	5.5% +/-4.3	3.9% +/-2.5	2.2% +/-1.6	8.3% +/-0.2
Other Indo-European Languages	6.0% +/-2.6	1.5% +/-2.1	1.9% +/-2.0	7.8% +/-4.1	4.5% +/-0.3
Asian and Pacific Islander Languages	7.8% +/-2.2	0.0% +/-1.3	0.8% +/-0.7	3.2% +/-3.3	5.6% +/-0.2
Other Languages	0.3% +/-0.5	0.0% +/-1.3	0.6% +/-0.7	0.0% +/-0.9	1.1% +/-0.2

Source: 2008-2012 ACS Data

FAMILY AND HOUSEHOLDS

In Multnomah County, roughly 53% of households are Family Households, defined by the US Census Bureau as “a group of two or more people related by birth, marriage, or adoption and residing together.” As shown in Table 6, the only rural subarea that has a similar family household percentage is Sauvie Island, with 56.8%. All other rural subareas have higher than a 70% Family Household rate. For comparison, 63.4% of Oregonians live in Family Households.

The State of Oregon and Multnomah County have similar Median Ages, 38.4 and 35.7, respectively. However, the median age in rural subareas in the county are significantly higher. Of the County’s rural areas, Sauvie Island has the highest proportion of nonfamily households, the lowest average household size, and the highest median age.

Table 6. Family and Households

	East of Sandy River	West of Sandy River	West Hills	Sauvie Island	Multnomah County	State of Oregon
Number of Households	1,433 (100%)	3,573 (100%)	3,938 (100%)	410 (100%)	304,540 (100%)	1,518,938 (100%)
Family Households	1,063 (74.2%)	2,831 (79.2%)	2,832 (71.9%)	233 (56.8%)	163,539 (53.7%)	963,467 (63.4%)
Nonfamily Households	370 (25.8%)	742 (20.8%)	1,106 (28.1%)	177 (43.2%)	141,001 (46.3%)	555,471 (36.6%)
Mean Household Size	2.65	2.85	2.56	2.14	2.35	2.47
Median Age	44.8	40.1	43.9	50	35.7	38.4

Source: 2010 Census Block Group Data

ECONOMIC CHARACTERISTICS

Figure 10. Census Tract Reference for Economic Characteristics

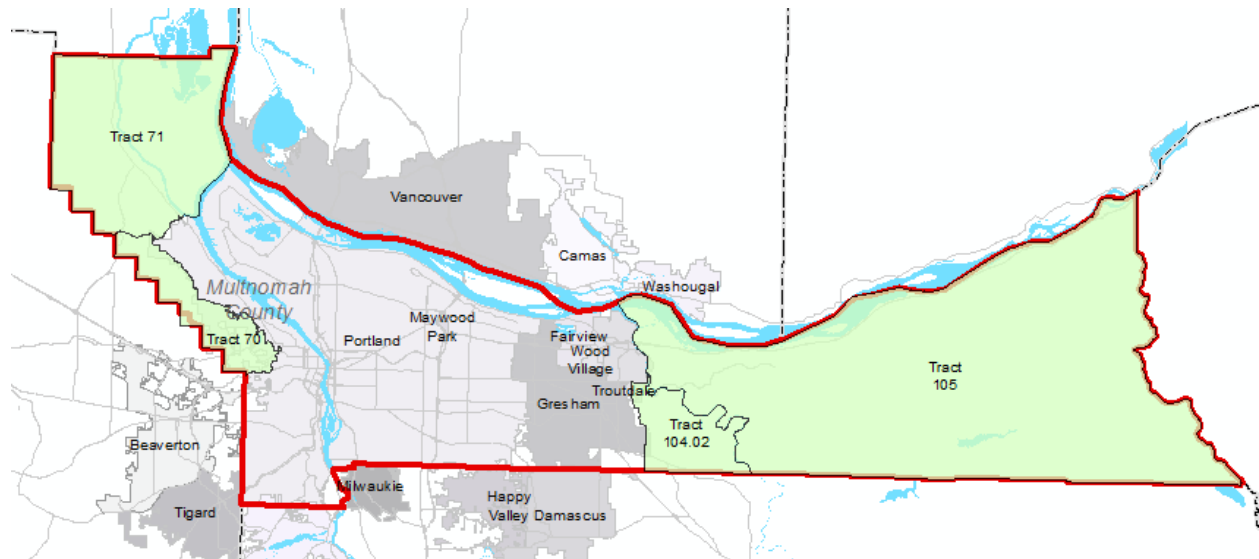


Table 7 describes selected economic characteristics of the study area. The rural areas of the county have a higher median household income than the county as a whole. West County seems to generally have a higher income, lower unemployment rate, and lower poverty rate than East County or Multnomah County as a whole, particularly Tract 70, which approximates the West Hills rural plan area. Due to the small sample size, however, margins of error are fairly high.

Table 7. Economic Characteristics

	West County		East County		Multnomah County
	Tract 70	Tract 71	Tract 104.2	Tract 105	--
Median Household Income	\$148,832 (+/- \$19,429)	\$78,894 (+/- \$14,306)	\$76,630 (+/- \$9,464)	\$65,938 (+/- \$10,090)	\$51,582 (+/- \$739)
Unemployed	7.4% (+/- 2.8%)	6.1% (+/- 4.3%)	14.8% (+/- 6.5%)	12.1% (+/- 6.1%)	10.4% (+/- 0.4%)
Individuals below poverty level in past 12 months	4.5% (+/- 3.8%)	3.4% (+/- 2.8%)	9.7% (+/- 2.8%)	13.4% (+/- 7.3%)	17.1% (+/- 0.6%)

Source: 2008-2012 ACS Data

Over the past decade, planners and public health professionals have become increasingly aware of the connections between the planning and development of our communities and the health of the people that live, work, and play in these communities. Decisions related to land use, urban design and transportation can affect a variety of public health related issues.

The update of the County's Comprehensive plans offers both the opportunity to reduce unintended negative health consequences of policy decisions and enhance opportunities to improve public health. A key first step in addressing health in the development of a Comprehensive plan is identifying the baseline health status of the community that the Comprehensive plan applies to. Table 8 lists some of the primary health determinants² and health outcomes³ that researchers have identified as being related to Comprehensive plans.

Table 8. Key Planning Related Health Determinants and Health Outcomes

Health Determinants	Health Outcomes
<ul style="list-style-type: none"> Opportunities for physical activity Access to healthy food Access to health care services Exposure to air pollution Exposure to water pollution Exposure to environmental hazards Traffic safety Access to cultural resources Exposure to noise Access to jobs Access to education Access to safe, affordable housing Opportunities for social cohesion Emergency preparedness 	<ul style="list-style-type: none"> Heart disease Cancer Obesity Asthma Physical injury Stress Depression Life expectancy Communicable diseases Stroke

Many of the health determinants listed in Table 8 are already routinely considered as part of many Comprehensive planning processes. Other health determinants such as access to jobs, education, and cultural resources are also often considered to a certain extent in many planning processes, while others such as opportunities for physical activity and access to health care and services are relatively new. To facilitate consideration of these issues in the update of the Multnomah County Comprehensive Plan, this memo briefly summarizes available information

² A "health determinant" is defined as the range of personal, social, economic and environmental factors which determine the health status of individuals or populations. Examples include behavioral determinants such as consumption of fruits and vegetables, physical activity, and smoking, and environmental determinants such as convenient access to healthy food retail, air quality, and traffic infrastructure.

³ A "health outcome" refers to the health status of an individual, group or population which is attributable to a number of determining factors such as behaviors, social and community environments, health care services, and genetics. Examples include: depression, diabetes, physical injury, asthma, and premature death.

about many of the planning-related health issues facing the parts of Multnomah County impacted by the Comprehensive Plan.

“MULTNOMAH COUNTY COMMUNITY HEALTH ASSESSMENT: MOBILIZING FOR ACTION THROUGH PLANNING AND PARTNERSHIPS (MAPP) TO IDENTIFY HEALTH-RELATED PRIORITIES, SUMMARY REPORT” (2011)⁴

The primary purpose of the Multnomah County Community Health Assessment (CHA) is to identify health issues and develop recommendations for improving public health throughout the county. No effort was made to identify specific issues for different parts of the county. Identification of health issues was based on data analysis as well as input from community members and stakeholders from community-based organizations, advocacy organizations and government. In the end, the CHA identified 11 key health issues for the county health department to focus on in coming years. These issues are listed in Table 9. The items in bold font (emphasis added) are those that could be impacted by comprehensive land use planning. As this list indicates, six of the 11 issues could be impacted by planning.

Table 9. Key Health Issues Identified in the Multnomah County Community Health Assessment

1. **Access to affordable and healthy food**
2. Community health promotion activities
3. Education
4. **Elimination of institutional racism and health disparities**
5. Infant mortality
6. **Involvement in public decision-making**
7. **Poverty, economic support and opportunities**
8. Promote healthy sexuality across the lifespan
9. **Promote physical activity**
10. **Strong sense of community**
11. Universal health care

However, while six of the identified issues are related to land use planning, only two of the broad set of 53 recommendations explicitly identifies planning as a potential solution. One of the recommendations for improving access to affordable and healthy food includes “Continue to focus on the healthy built environment and how this work can promote food accessibility.” Similarly, one of the recommendations for promoting physical activity includes “Continue to focus on the healthy built environment and how this work can promote physical activity.”

⁴ Available on-line at: <https://multco.us/health/about-health-department/data-reports> Accessed 9/11/14.

BUILT ENVIRONMENT ATLAS: ACTIVE LIVING, HEALTHY EATING, MULTNOMAH COUNTY, OREGON (2011)⁵

The Built Environment Atlas provides a spatial analysis of the county, with a focus on identifying and assessing features of the built, or planned, environment that influence opportunities for active living and healthy eating. These opportunities are important health determinants because they impact numerous health outcomes such as diabetes, obesity, heart disease, stroke, stress, depression, and others. Unlike the CHA and the Disparities Report Card, the Atlas assesses differences in opportunities for active living and healthy eating across the county, based on multiple metrics for each issue. These metrics are listed in Table 10 below.

Table 10. Built Environment Atlas Metrics for Assessing Opportunities for Active Living and Healthy Eating in Multnomah County Neighborhoods

Healthy eating	Active living
Grocery store density	Population within .25 miles of a park or trail
Population within .5 miles of a grocery store	Density of recreation facilities
Access to grocery stores via public transport	Mixed-use residential zoning
Fast food per capita	Tree canopy
Retail Food Environment Index (good vs. bad food)	Population within .25 miles of active transport
Proximity of fast food to schools	Sidewalks
	Bike paths

Unfortunately, while the Atlas initially identifies the unincorporated areas of the county, it focuses its assessment on the more urbanized incorporated areas and does not present information about these issues for the portions of the county covered by the Comprehensive plan.

EXISTING CONDITIONS FOR KEY PLANNING-RELATED HEALTH DETERMINANTS AND OUTCOMES

Since the publication of the Multnomah County Health Department reports briefly described above, the Coalition for a Livable Future (CLF) produced a web-based “Regional Equity Atlas” that provides Census Tract level data for Multnomah County for many of the planning related health determinants and outcomes considered by the health department reports. What follows is a summary of this data, beginning with health determinants, followed by health outcomes.

⁵ Available on-line at: <https://multco.us/health/about-health-department/data-reports> Accessed 9/11/14.

HEALTH DETERMINANTS:

The Equity Atlas provides information on the following planning-related health determinants:

- Access to opportunities for physical activity
- Access to healthy and unhealthy food
- Access to opportunities for social cohesion
- Access to health supportive goods and services

For health determinants, the Equity Atlas provides information on a related set of individual issues, and then produces a composite score for each determinant. As the Tables indicate below, the scores for each individual issue range from 0 to 5, with lower scores indicating relatively poor access and higher scores indicating relatively good access. Since proximity to resources can vary greatly across a particular tract, each tract was overlaid with a 264' x 264' grid and a score of 0-5 was assigned to each cell. The scores for each individual issue for each tract are calculated as the average of the scores for each cell within that tract. The composite score for each area was produced by Metro's Context Tool which sums the scores for each individual issue and converts it to a 1 to 100 scale. Higher scores indicate more health supportive conditions.⁶

It is important to note that the indicators discussed and summarized below are rough indicators and do not generally account for many of the differences between urban and rural communities. For example, the larger lots in rural areas themselves provide more opportunities for physical activity than urban and suburban lots, and larger lots provide more opportunities for vegetable gardening and animal husbandry, thus increasing potential access to healthy foods.

Additionally, rural zoning is primarily intended to preserve and protect resource lands, and therefore does not permit most non-farm and non-forest uses. Consequently, persons residing in these rural areas will not have the same degree of access to health-supportive goods and services as urban residents. Similarly, the low residential density caused by rural zoning typically cannot support locating these uses in outlying rural areas from a market perspective.

OPPORTUNITIES FOR PHYSICAL ACTIVITY:

In general, when people have easy access to opportunities for physical activity, they are more likely to be more physically active. Table 11 provides a summary of the relative accessibility of multiple different opportunities for physical activity, based on proximity to areas or facilities that provide opportunities to engage in physical activity. As the individual and composite scores indicate, the plan areas have uniformly lower access to opportunities for physical activity than

⁶ Detailed information about the data and methodology used to construct the Equity Atlas is available on CLFs website: <https://clfuture.org/programs/regional-equity-atlas>.

the rest of the county, with the exception of proximity to natural areas where the West Hills and East of the Sandy River have relatively better access. Within the plan areas themselves, Sauvie Island has the worst access, and the West Hills has the best.

Table 11. Proximity to Physical Activity Spaces

Plan Area (Tract)	Parks ^a	Natural Areas ^b	Green-spaces ^c	Water Access ^d	Recreation Facilities ^e	Transit ^f	Bikability ^g	Sidewalks ^h	Composite
East of Sandy River (105)	1.11	4.08	0.99	0.98	0.95	0.95	1.94	0.95	23
West of Sandy River (104.02)	1.3	2.1	2.02	1.08	1.05	0.98	2.71	1.07	24
West Hills (70)	2.09	2.9	3.31	1	1.01	1.01	1.98	1.17	32
Sauvie Island (71)	1.01	1.39	1.03	1.05	0.92	0.92	2.27	0.92	14
Multnomah County	4.23	2.82	4.23	1.10	2.19	1.68	4.04	3.08	65
^a Publicly accessible parks are defined as active or passive recreation areas where facilities exist primarily intended for recreational uses by the public;									
^b Publicly accessible natural areas are managed primarily for the value of natural resources as buffers, conservation and/or habitat protection;									
^c Publicly accessible greenspaces are a general category that is not specifically a park or natural area; greenspaces generally have limited public access and include common areas of a subdivision or condominium complex, cemeteries, golf courses and school grounds that are not specifically designated for general public use									
^d The Water Access indicator shows proximity to points where motorized and non-motorized boats can be launched. These sites have parking areas for cars and include boat ramps managed by both public agencies and private organizations									
^e Recreation facilities were compiled from the Metro RLIS data and include pools, tennis courts, sports fields, community centers, stadiums, and fairgrounds									
^f The Transit Access indicator is a measure of the proximity to public transit stops and the frequency of trips through those transit stops (bus, streetcar, MAX and Vancouver transit). For example, a bus stop that serves two high-frequency bus lines will have a higher weighting than a stop that serves a single, more limited frequency line.									
^g The Bikeability indicator is a density raster that shows suitability for biking and is based on Metro's "Bike There!" map designations.									
^h The Walkability indicator shows the density of sidewalk coverage as a measure of the walkability of a particular area.									

ACCESS TO HEALTHY AND UNHEALTHY FOOD OUTLETS

In general, when people have access to healthy food, they are more likely to have healthy diets. When they have greater access to unhealthy food, they are more likely to have poor diets. Table 12 summarizes the relative accessibility of healthy and unhealthy food outlets in different parts of Multnomah County. It should be noted that the scores for unhealthy food access are reversed from the other scores, with higher scores indicating lower access to unhealthy foods. This was done because lower access is considered better for health. As Table 12 indicates, while the

plan areas have significantly less access to unhealthy foods, they also have relatively significant less access to sources of healthy food compared to the County as a whole.

Table 12. Proximity to Healthy and Unhealthy Food Outlets

Plan Area (Tract)	Unhealthy Food ^a	Grocery Stores ^b	Food Pantries ^c	Farmers Markets ^d	Composite
East of Sandy River (105)	4.05	0.98	0.95	0.95	28
West of Sandy River (104.02)	3.94	1.54	1.01	0.98	30
West Hills (70)	3.89	1.48	1.03	1	30
Sauvie Island (71)	4.08	0.97	0.92	0.96	28
Multnomah County	1.28	3.62	3.01	2.32	41
^a The Unhealthy Food indicator is compiled from a list of NAICS codes (North American Industry Classification System) that includes Fast-Food Restaurants (722211), Convenience Stores (445120), Beer, Wine, and Liquor Stores (445310), and Gasoline Stations with Convenience Stores (447110).					
^b The Supermarkets and Grocery Store indicator is compiled from a list of NAICS codes (North American Industry Classification System) that includes supermarkets and other grocery stores (445110)					
^c The Supplemental Food Programs indicator includes sites that provide access to supplemental food (food pantries) and summer food programs for children					
^d The Farmers' Market indicator provides information on access to fresh foods and was manually compiled from the national list maintained by the U.S. Department of Agriculture and other sources including Portland Farmers' Markets and the Oregon Environmental Council. The list of farmers' markets was combined with produce stands retrieved from a list of NAICS codes (North American Industry Classification System) that includes fruit and vegetable markets (permanent) (445230)					

OPPORTUNITIES FOR SOCIAL COHESION

Social cohesion, or social capital, refers to the degree to which people know, trust, and interact with other members of their community, and the degree to which people are involved in organizing or influencing their community. High levels of social cohesion can contribute to positive health outcomes by enabling the dissemination of health-related information such as medical care options, establishing and maintaining social norms and practices associated with healthful behaviors, and by discouraging unhealthful behaviors such as smoking and drug use. In addition, higher levels of social cohesion have been correlated with increased rates of physical activity, including walking and biking among both children and adults.

Numerous features of a community can contribute to social cohesion, including faith-based institutions, community centers, the presence of arts and cultural organizations and civic and community organizations, and public libraries. In general, the more opportunities for social cohesion there are in a community, the more cohesive a community is likely to be. As Table 13 indicates, all of the plan areas have relatively few of these features compared to the county as a whole.

Table 13. Proximity to Opportunities for Social Cohesion, by Plan Area

Plan Area (Tract)	Faith Based Institutions ^a	Community Spaces ^b	Arts and Culture Orgs. ^c	Civic and Community Orgs. ^d	Public Libraries ^e	Composite
East of Sandy River (105)	1.01	0.95	0.99	0.98	0.95	8
West of Sandy River (104.02)	1.57	1.11	1	1.19	0.98	13
West Hills (70)	1.33	1.38	1.73	1.54	1.01	19
Sauvie Island (71)	0.97	0.95	0.96	1.02	0.92	8
Multnomah County	4.07	3.70	3.46	3.63	1.78	65
^a The Faith-Based Institutions indicator is compiled from a list of NAICS codes (North American Industry Classification System) that includes (1) establishments primarily engaged in operating religious organizations, such as churches, religious temples, and monasteries, and/or (2) establishments primarily engaged in administering an organized religion or promoting religious activities (813110).						
^b The Community Spaces and Indoor Gathering Places indicator is compiled from a list of NAICS codes (North American Industry Classification System) that includes civic and social organizations (813410) and coffee shops (722213) as well as schools, community centers and grange associations.						
^c The Arts and Culture indicator is compiled from a list of NAICS codes (North American Industry Classification System) that includes Theater Companies and Dinner Theaters (711110), Dance Companies (711120), Musical Groups and Artists (711130), Other Performing Arts Companies (711190), Museums (712110), Historical Sites (712120), and Zoos and Botanical Gardens (712130) as well as a list of arts and culture organizations in Oregon provided by the Oregon Cultural Trust and a list of the location of street art provided by the Regional Arts and Culture Council (RACC). A list of additional arts and culture organizations in Clark County, Washington, was compiled by Arts of Clark County. Duplicates resulting from aggregation of these various data sources were removed in the dataset.						
^d The Civic and Community Organizations indicator is compiled from a list of NAICS codes (North American Industry Classification System) that includes civic and social organizations (813410), human rights organizations (813311), other social advocacy groups (813319), and other similar organizations (813990).						
^e The Public Libraries indicator is compiled from the Metro RLIS dataset.						

ACCESS TO ESSENTIAL RETAIL AND SERVICES

Access to basic goods and services, including health and social services, can impact a person's ability to meet their daily needs and maintain good health. As Table 14 indicates, the plan areas have uniformly lower access to these goods and services than the county as a whole, with Sauvie Island and East of the Sandy River having the least access.

Table 14. Proximity to Essential Retail and Services

Plan Area (Tract)	Primary Care ^a	Essential Retail ^b	Public Services ^c	Health and Human Services ^d	Services Composite
East of Sandy River (105)	0.95	0.97	0.98	0.96	8
West of Sandy River (104.02)	0.99	1.62	0.98	1.04	12
West Hills (70)	1.57	1.59	1.21	1.46	19
Sauvie Island (71)	1.03	1.00	0.96	0.96	8
Multnomah County	3.49	4.18	2.18	3.52	64
^a The Proximity to Primary Care Facilities indicator shows distance to primary medical care facilities including family/general medicine, pediatrics and obstetrics.					
^b The Key Retail Services indicator is compiled from a list of NAICS codes (North American Industry Classification System). The industries included in the indicator were chosen based on an index created by the Healthy Development Measurement Tool , which includes: <ul style="list-style-type: none"> • General Automotive Repair (811111) • Barber & Beauty Shops (812111) • Beauty Salons (812112) • Sporting Goods Stores (451110) • Laundries & Dry Cleaners (812310) • Drycleaning & Laundry Services (812320) • Fitness & Recreational Sports Centers (713940) • Hardware Stores (444130) • Pharmacies & Drug Stores (446110) • Motion Picture Theaters (512131) • Drive-In Motion Picture Theaters (512132) • Video Tape & Disk Rental (532230) 					
^c The Public Services indicator is compiled from point data in the Metro RLIS dataset (city halls, fire stations, hospitals) supplemented by a list of NAICS codes (North American Industry Classification System) that includes Courts (922110), Police Protection (922120), Fire Protection (922160), Government Executive Offices (921110), and Postal Service (491110).					
^d The Human and Social Services indicator is compiled from a list of NAICS codes (North American Industry Classification System) that includes Individual and Family Services (624190), Child and Youth Services (624110), Services for Elderly and Persons with Disabilities (624120), Temporary Shelters (624221), and Other Community Housing Services (624229)					

HEALTH OUTCOMES

While data on most health outcomes is available only at the county or state level, the Equity Atlas provides Census block group level data on overweight and obesity, and Census tract level data on diabetes, heart disease, and asthma, all of which are associated with how communities are planned and developed.

OVERWEIGHT AND OBESITY

Overweight and obesity are commonly defined by the metric, Body Mass Index (BMI). BMI reflects a proportional relationship and provides a measure of how much an individual's body weight varies from what is normal for a person of a particular height. A person with a BMI below 18.5 is defined as underweight, a BMI between 18.5 and 24.9 is considered normal, a BMI between 25 and 29.9 is considered overweight, and a BMI of 30 or greater is considered obese. As the data in Table 15 indicates, with the exception of the West Hills, residents in each of the other plan areas have an average BMI slightly higher than the county as a whole (less than 4% at most).

Table 15. Body Mass Index^a by Plan Area

Plan Area	Average BMI
Multnomah County	24.8
East of Sandy River	25.6
<i>Tract 105, BG 1</i>	<i>25.8</i>
<i>Tract 105, BG 2</i>	<i>25.8</i>
<i>Tract 105, BG 3</i>	<i>25.1</i>
<i>Tract 105, BG 4</i>	<i>25.4</i>
West of Sandy River	25.4
<i>Tract 99.07, BG 3</i>	<i>25.1</i>
<i>Tract 104.02, BG 1</i>	<i>25.8</i>
<i>Tract 104.02, BG 2</i>	<i>25.8</i>
<i>Tract 104.02, BG 3</i>	<i>25.1</i>
<i>Tract 104.09, BG 3</i>	<i>25.6</i>
West Hills	23.8
<i>Tract 70, BG 1</i>	<i>23.5</i>
<i>Tract 70, BG 2</i>	<i>23.7</i>
<i>Tract 70, BG 3</i>	<i>24.2</i>
<i>Tract 70, BG 4</i>	<i>23.3</i>
<i>Tract 71, BG 1</i>	<i>25.0</i>
Sauvie Island	25.1
^a This data is derived from Oregon driver's license information (OR DMV) and is thus self-reported. While it is likely that weight is under-estimated, research indicates that the rate of under-reporting of weight in DMV records is relatively consistent, so the dataset is still useful for describing patterns.	

Table 16 lists the rates of three key planning-related chronic health issues asthma, heart disease, and diabetes for each of the plan areas. While the areas east and west of the Sandy River are fairly similar to the county as a whole, the West Hills and Sauvie Island are somewhat healthier than the county as a whole.

Table 16. Rates of Asthma, Heart Disease, and Diabetes by Plan Area^a

Plan Area (Tract)	Asthma	Heart Disease	Diabetes
East of Sandy River (105)	15.6%	2.1%	7.6%
West of Sandy River (104.02)	12.1%	1.6%	7.4%
West Hills (70)	11.6%	1.0%	3.6%
Sauvie Island (71)	12.1%	2.0%	4.7%
Multnomah County	14.3%	1.5%	7.5%
^a Data on the indicators for Rates of Asthma, Diabetes and Heart Disease are compiled from insurer claims data submitted to Oregon Health Care Quality Corporation. Data include administrative claims (billing) data from eight commercial health plans, two Medicaid managed care plans and the Oregon Health Authority Division of Medical Assistance Programs (Medicaid)			

IMPLICATIONS FOR PLANNING

The conditions described in this report have a number of potential implications for the Multnomah County Comprehensive Plan Update.

- The rural areas of the County have a very low population density, with only approximately 25,000 residents living in a very large area. This will impact the average cost and ability to deliver public services and the proximity to centralize public services, as well as shopping areas or other amenities. Additionally, rural resource protection zoning does not permit service and retail uses, posing another obstacle to locating these types of amenities in proximity to many rural residents.
- The population of the rural parts of the county have increased at a greater rate than that of the county as a whole, though increases are still low in absolute terms.
- The rural areas of the county have a higher proportion of white residents than the county as a whole. One notable exception is a high proportion (11%) of Asian residents in the West Hills area. This may mean a relatively lower need for Spanish or possibly other translation services for public engagement efforts compared to other portions of Multnomah County.
- The study tracts have a higher proportion of family households than the county as a whole and a higher median age as well. Sauvie Island has a median age of 50. Higher median ages have implications related to access to health and social services, issues associated with aging in place and need for and ability to access transit services (combined with the dispersed nature of population and the cost of providing such services).

- The study tracts are generally better off economically than the county as a whole, with a higher median income, lower poverty levels, and lower unemployment rate (though margins of error are high in this case).
- Relative to other portions of the County, the rural areas in the County lack access to a number of features that can help improve public health, including access to healthy food, access to certain types of physical activity opportunities, proximity to essential retail services, and access to opportunities for social cohesion. Planning and policies to enhance access to these opportunities should be considered during the Comprehensive Plan Update process. However, state requirements associated with rural zoning present an obstacle to doing this to some degree.
- Despite the relative lack of access to features that can improve public health, measured health indicators for residents of the rural areas such as body mass index and rates of asthma, heart disease and diabetes do not differ markedly than for residents in the County as a whole.