



# **Health and Social Services Needs in Whitman County**

***2015 Community Needs Assessment  
Results – General Report***

## **COMMUNITY REPORT OF RESULTS**

This report contains an overview of the results collected by the Health and Social Services Needs in Whitman County Survey. A description of Whitman County, the survey process, and key results from the survey are included. For a more thorough analysis of the survey results, please see the Topic Areas Report.

Prepared by: Katherine Bittinger  
Contact: [kbittinger@wsu.edu](mailto:kbittinger@wsu.edu)

## **Executive Summary**

To help address the needs of Whitman County residents, in conjunction with the Social and Economic Sciences Research Center, the Community Action Center, Pullman Regional Hospital, and other stakeholder agencies (see “Organizations Involved”), created an extensive survey about life in Whitman County in the spring of 2015. The survey contained 266 questions about respondents’ quality of life, economic circumstances, employment, health, housing, food security, and use of social services. Over 1,000 Whitman County residents responded to the survey.

This report highlights key findings and/or overall trends from the random sample and convenience sample data. As such, not all questions that were asked in the survey are represented in this report. A full report, containing all aggregated responses, is available at <http://www.pullmanregional.org/transparency>. Tables, Figures, and Graphs with the abbreviation “RS” in the title denote data from the Random Sample. “CS” denotes data from the Convenience Sample. Conclusions made from the random sample are generalizable to the rest of Whitman County residents. However, conclusions made from the convenience sample are *not* generalizable to the rest of Whitman County. “CS” results are only applicable to those who completed the survey in the convenience sample.

There are a multitude of conclusions and insights that can be drawn from this report. The wealth of data produced from this questionnaire will be useful to all health and social service agencies in Whitman County. However, there are five areas for improvement that stand out:

- 1) Extreme need for affordable dental care
- 2) Transportation to services
- 3) Access to nutritious food
- 4) Access to preventative medical care
- 5) Access to social services for low-income non-Pullman residents

**Contents**

Executive Summary..... 1

About Whitman County ..... 3

    Population Demographics..... 3

    Poverty in Whitman County..... 4

Community Needs Assessment Survey ..... 7

    Organizations Involved ..... 7

    Survey Respondents Demographics..... 7

Findings ..... 8

    Overall Quality of Life ..... 8

    Employment and Economic Development..... 13

    Health and Well-Being..... 15

    Food Security..... 19

    Housing..... 20

    Need for Services ..... 22

    Services Needed in Community and by Household..... 22

Conclusions and Recommendations..... 28

References ..... 29

Appendix 1: Whitman County Demographic Information..... 30

Appendix 2: Random Sample Respondent Demographics ..... 33

Appendix 3: Convenience Sample Respondent Demographics..... 35

Appendix 4: Survey Methodology..... 37

## **About Whitman County**

The following data are from the 2009-2013 American Community Survey (unless otherwise specified). Three Whitman County report areas are highlighted: Whitman County (all); Pullman; and non-Pullman. Numbers from Washington State and the United States are also included for comparison purposes. Differentiating between Pullman and non-Pullman Whitman County is important as shown in some of the data below. The demographics of the population of Pullman and non-Pullman are, at times, extremely different and reflect the various, sometimes disparate needs of the populations in these two areas, and the difficulty in managing services that meet the needs of these communities.

### **Population/Population Change**

Reported population change between the 2000 U.S. Census and 2013 ACS estimated population is shown in the below figure. There is a substantial increase in population in Pullman (+23.17%). This change is considerably higher than the population increase in Washington and more than double the population change in the United States. However, non-Pullman Whitman County saw a decrease in population (-5.87%).

<i>Area</i>	<i>Total Population</i>	<i>Total Population (2000 U.S. Census)</i>	<i>Population Change</i>	<i>Percent Change</i>
Pullman	30,388	24,672	+ 5,716	+ 23.17%
Non-Pullman	15,124	16,068	- 944	- 5.87%
Whitman County	45,512	40,740	+ 4,722	+ 11.71%
Washington	6,819,579	5,894,121	+ 925,458	+ 15.7%
United States	311,536,591	281,421,906	+ 30,114,685	+ 10.7%

### **Population Density**

The difference in population density between Pullman and non-Pullman (3,076 people per square mile versus 7 people per square mile respectively) highlights the agricultural nature of the majority of Whitman County. The high population density in Pullman is likely attributed to Washington State University.

<i>Area</i>	<i>Total Population</i>	<i>Total Land Area in Sq. Miles</i>	<i>Population Density per Sq. Mile</i>
Pullman	30,388	9.88	3076
Non-Pullman	15,124	2,149.21	7
Whitman County	45,512	2,159.09	21
Washington	6,819,579	66,455.52	102.61
United States	311,536,591	3,531,905.43	88.2

### **Population Demographics**

A complete breakdown of the population demographics of Whitman County can be found in Appendix 1.

## **Age and Gender Demographics**

Population numbers and percentages by age and gender are shown below for the Pullman, non-Pullman, and Whitman County areas. Pullman has a greater percentage of 18-64 year olds for both males and females. This is undoubtedly due to the high concentration of WSU students in Pullman. Non-Pullman Whitman County has a substantially higher percentage of the population who are 64 and older. The gender ratio is very similar across the board: approximately 49.5% female, 51.5% male.

## **Race Demographics**

There is a substantial difference in the racial make-up of Pullman and non-Pullman Whitman County. While both areas are predominately Caucasian, Pullman has a much higher percentage of non-Caucasian residents (approximately 20% compared to less than 5% in non-Pullman areas). Whitman County has a lower percentage of African Americans and a higher percentage of Asian Americans than the state of Washington and the United States.

## **Ethnicity Demographics**

As with the race demographics, Pullman has a greater proportion of residents who identify as Hispanic. Pullman, non-Pullman, and Whitman County have a much lower percentage of the population who identify as Hispanic than in Washington or the U.S. as a whole.

## **Veterans Demographics (Age and Gender)**

5.55% of Pullman residents identify as veterans, lower than the national average. However, non-Pullman Whitman County has a higher percentage of veterans than the national average (9.88% and 6.83% respectively). Overall, Whitman County is home to over 2,500 veterans.

## **Educational Attainment**

Educational attainment is calculated for persons 25 and over. Pullman has a substantially higher percentage of Bachelors (31.6%) and Graduate/Professional degrees (30.1%) compared to the national average (18.1% and 10.8% respectively) and a substantially lower percentage of high school only (12.0% vs. 28.1%) or no high school diploma (3.4% vs. 13.98%). Non-Pullman Whitman County is fairly consistent with national averages.

## **Poverty in Whitman County**

Poverty in Whitman County is a highly discussed topic. As of 2015, Whitman County had the highest poverty rate in Washington State. A substantial portion of those in poverty in Whitman County, particularly in the city of Pullman, are college students. While college students residing with parents or relatives and those residing in college dormitories are not included in official poverty rate calculations, those living off-campus are. A 2013 report by Alemayehu Bishaw examined the effect of *off-campus* college students on poverty rates across the nation. Bishaw excluded off-campus college students (defined as those reporting being enrolled in a college or university within the last three months) from the poverty rate calculation. This exclusion of college students substantially reduces the poverty rate in Pullman from 44.8% to 20.9% and reduces the Whitman County poverty rate to 16.7% (the exclusion of off-campus college students has no perceptible impact on non-Pullman poverty rates).

The Bishaw (2013) report and the below figure illustrate the concentration of extremely high rates of poverty in three census tracts located within the Pullman city limits (darkest blue shading). These three census tracts also have a high concentration of college student housing. The persons living in these census tracts are likely to have a different poverty experience than those living in poverty elsewhere in the county. This should not discount the well documented negative impacts that poverty can have for all persons, college students or otherwise. However, it does suggest that the services needed by these persons in poverty may be very different than those living in poverty throughout the county.

Area	Total Population <sup>(1)</sup>	Population in Poverty <sup>(1)</sup>	% Population in Poverty <sup>(1)</sup>	% Non-Student Population in Poverty <sup>(2)</sup>
Pullman	24,338	10,899	<b>44.8%</b>	<b>20.9%</b>
Non-Pullman	14,832	1873	12.6%	--
Whitman County	39,170	12,772	<b>32.61%</b>	<b>16.7%</b>
Washington	6,686,172	893,211	13.36%	--
United States	303,692,064	46,663,432	15.37%	--

<sup>(1)</sup> 2013 American Community Survey

<sup>(2)</sup> Bishaw 2013

*Percent Poverty by Census Tract in Whitman County*



It is important to note, students do not make up the entire population in poverty and, as with the rest of the nation, poverty is not equally distributed among family types. In particular, female-headed households are at extreme risk of poverty. Within Whitman County, 40% of those in poverty have female-headed households (37% in non-Pullman and 51% in Pullman). Each of these poverty rates are above the state and national averages.

Area	Poverty Rate All Types	% Poverty Married Couples	% Poverty Female Head of Household
Pullman	17.8%	11.6%	<b>51.0%</b>
Non-Pullman	9.05%	5.7%	<b>37.37%</b>
Whitman County	13.3%	8.4%	<b>40.5%</b>
Washington	9.0%	4.6%	28.2%
United States	11.3%	5.6%	30.6%

Poverty is also unequally distributed by age. Seniors (and children) tend to be more vulnerable to being in poverty. Given the high concentration of people aged 65 and up in Whitman County, this is a population service providers must account for in program design. For this category, Whitman County has poverty rates that are slightly lower than the state and national average. However, when broken into Pullman and non-Pullman areas, Pullman's senior poverty rate is higher than the state and national average, while non-Pullman's is lower.

<i>Area</i>	<i>Seniors Total</i>	<i>Seniors in Poverty</i>	<i>Senior Poverty Rate</i>
Pullman	1,146	116	10.1%
Non-Pullman	2,812	151	5.4%
Whitman County	3,958	267	6.7%
Washington	851,875	66,755	7.8%
United States	40,544,640	3,793,577	9.4%

## **Community Needs Assessment Survey**

In conjunction with the Social and Economic Sciences Research Center, the Community Action Center, Pullman Regional Hospital, and other stakeholder agencies (see below, “Organizations Involved”), an extensive survey was created about life in Whitman County. The survey contained 266 questions about respondents’ quality of life, economic development, employment, health, housing, food security, and use of social services. An online and a paper/pencil version of the final questionnaire were developed. Appendix 4 details the methodology for the random and convenience samples.

### **Organizations Involved**

The Social and Economic Sciences Research Center designed, distributed, and collected the data from this questionnaire. In addition, a multitude of organizations took part in the development and implementation of this questionnaire. The support of the following organizations was invaluable and greatly appreciated:

#### Cost Sharing Organizations

- Pullman Regional Hospital
- Community Action Center in Pullman
- Council on Aging and Human Services in Colfax
- Palouse Alliance for Healthy Individuals, Families, and Communities
- Palouse River Counseling
- Pullman School District
- Pullman United Way
- Whitman County Public Health
- Washington State University Center for Civic Engagement

#### Other Organizations Involved

- |   |   |
|---|---|
| - Family Promise of the Palouse           | - City of Colfax  |
| - Alternatives to Violence of the Palouse | - City of Palouse   |
| - Whitman Hospital and Medical Center     | - City of Pullman   |
| - Friends of Hospice                      | - Washington State Department of Social and Health Services |
| - BOOST Collaborative                     |   |

### **Survey Respondents Demographics**

Each survey respondent was asked to respond to a series of questions asking about their demographics. In comparing the *random sample* demographics (shown in Appendix 2), the respondents match fairly well with the 2013 American Community Survey percentages. This was expected as the random sampling procedures were designed to produce a representative look at people living within the area. Sex of respondents is the only category in the random sample where respondents did not match the ACS data. However, this is not surprising as research has shown that females are more likely to respond to surveys than males.



The *convenience sample* demographics (shown in Appendix 3) are fairly representative as well. However, there are a few areas where the differences between the 2013 American Community Survey and the respondent demographics are more pronounced. Given the sampling procedures, the results from the convenience sample can only be generalized to the respondents who took the survey. However, valuable information can still be gained from the convenience sample, as it emphasizes issues in the community and the need for some services, as discussed later.

## **Findings**

The results presented in this report highlight key findings and/or overall trends from the random sample and convenience sample data. As such, not all questions asked in the survey are represented in this report. A full report, containing all aggregated responses, will be available separately at a later date. Tables, Figures, and Graphs with the abbreviation “RS” in the title denote data from the Random Sample. “CS” denotes data from the Convenience Sample. Conclusions made from the random sample are generalizable to the rest of Whitman County residents. However, conclusions made from the convenience sample are *not* generalizable to the rest of Whitman County. The “CS” results are only applicable to those who completed the survey in the convenience sample.

Given the importance of place of residence to this study, only responses that contained information about the respondent’s place of residence were included in this analysis. The final sample size for the random sample was 346 respondents and the convenience sample contained 618 respondents.

In addition, as many health and social service agencies serve low-income respondents, average household monthly income was used to generate a “low-income” category of respondents. Respondents who reported having a monthly household income less than \$2,000 were considered to be “low-income.” While this does not take into account the number of individuals in a household (an essential component of the federal poverty line), households who fall into this categorization are almost certain to be below the poverty line. A single person household with an annual income of less than \$12,000 (or \$1,000 a month) is considered to be below the poverty line. Indeed, it is likely there are households who are not in this category that do fall below the federal poverty line. However, household size information was not consistently reported in either sample, making an approximate variable necessary.

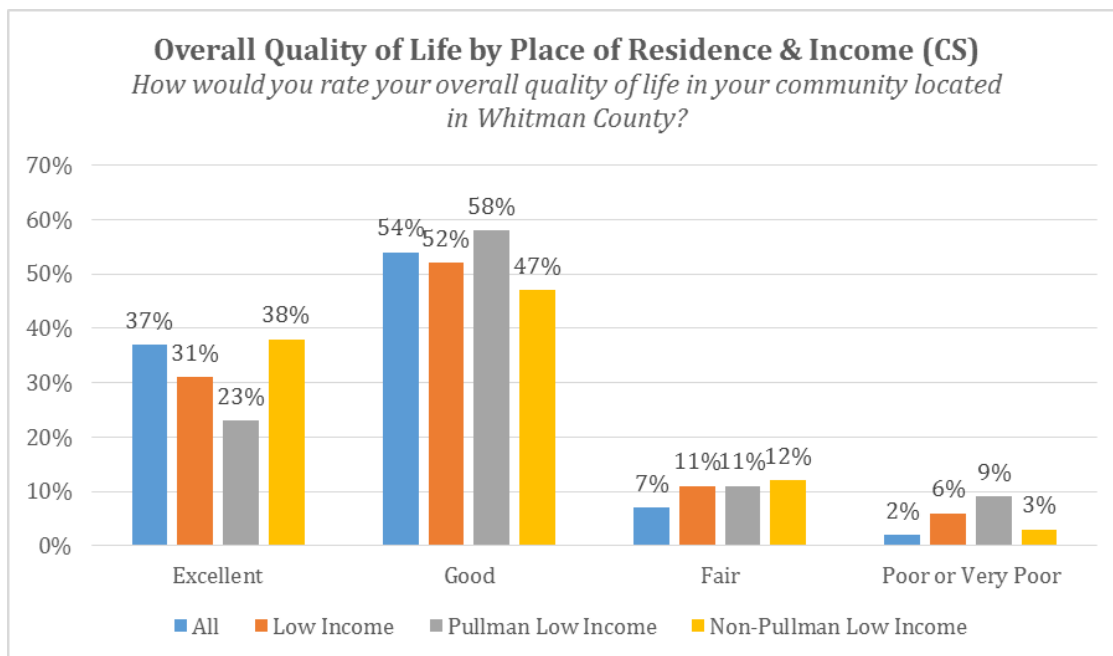
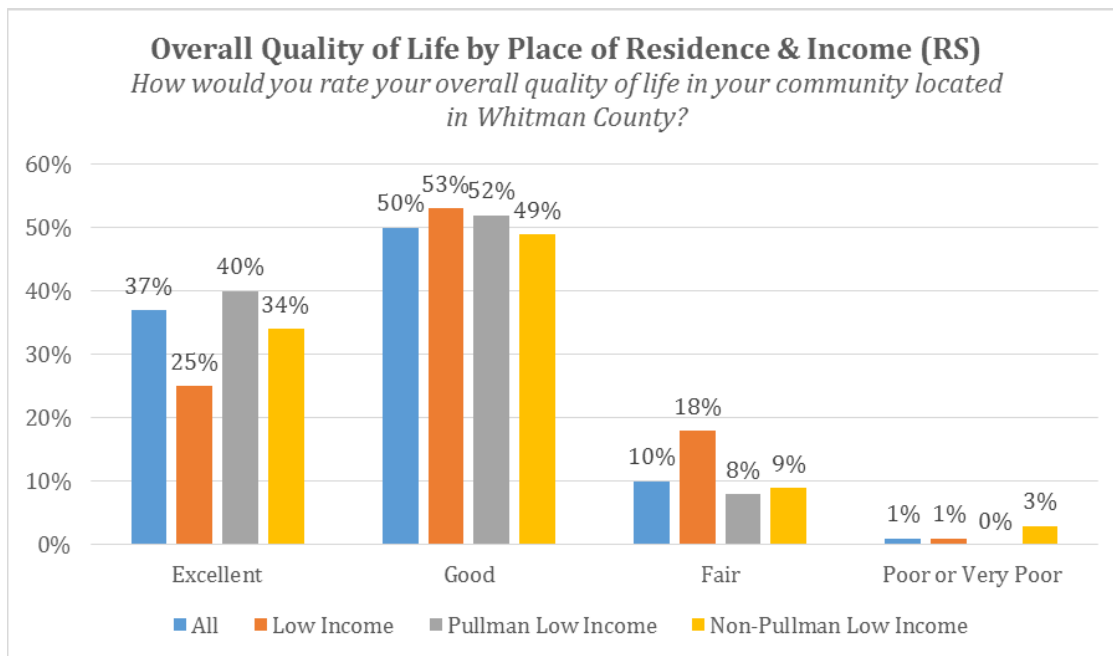
## **Overall Quality of Life**

Respondents were asked a series of questions about their overall quality of life, state of their finances, and their overall health compared to the previous year. In addition, respondents answered questions about their community and neighborhood quality.

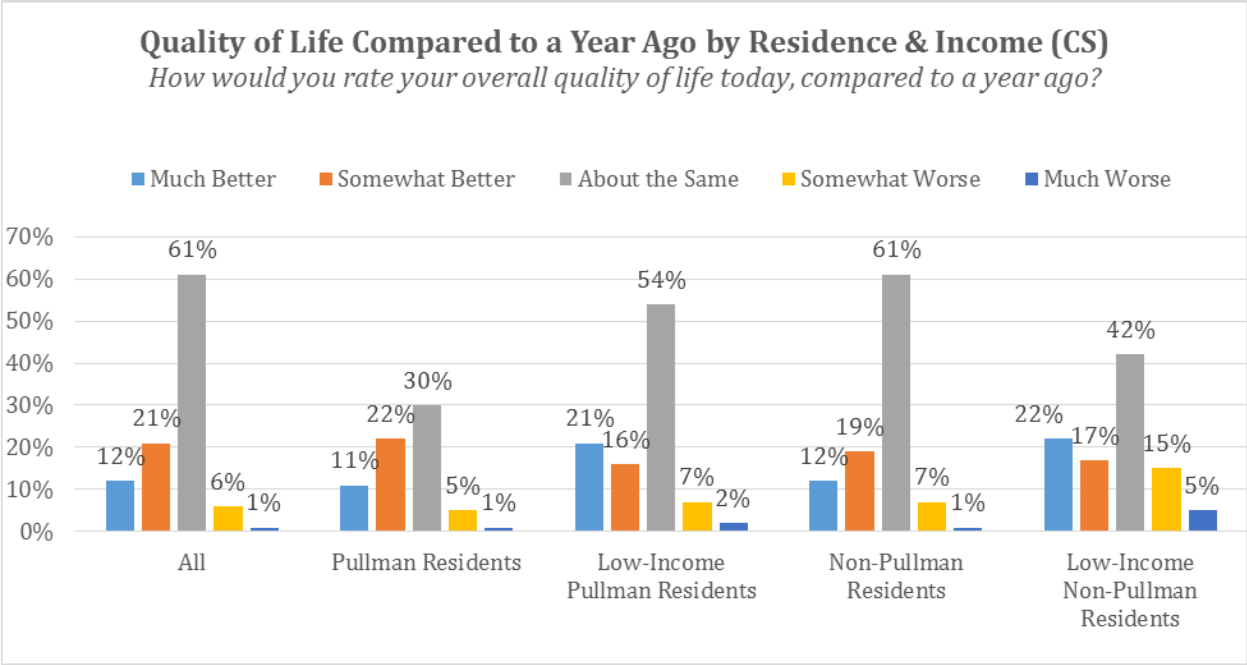
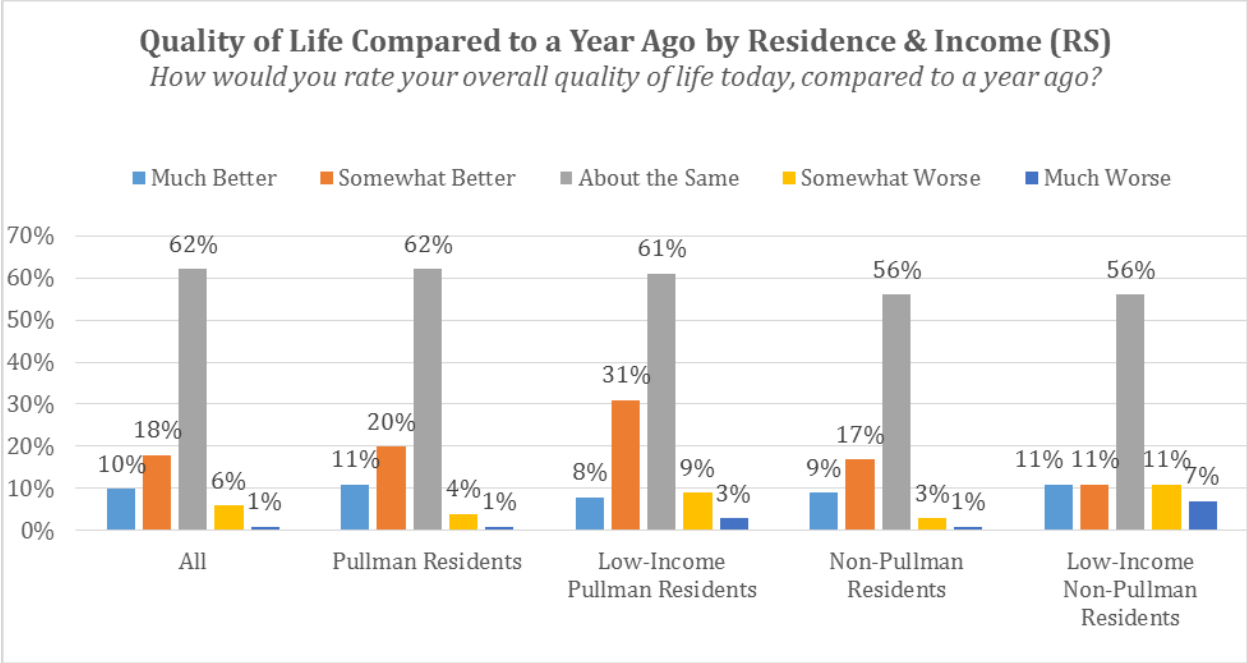
Overall, people in Whitman County report they are doing well. The majority of respondents in both the random and convenience samples reported that their overall quality of life was “good” or “excellent.” However, when asked about their health and finances compared to the previous year, low income respondents more frequently reported that their finances and health were worse than last year, particularly those living outside of Pullman.

This is a recurring theme throughout this study: low income residents are more likely to encounter difficulties and living outside of Pullman seems to compound those difficulties.

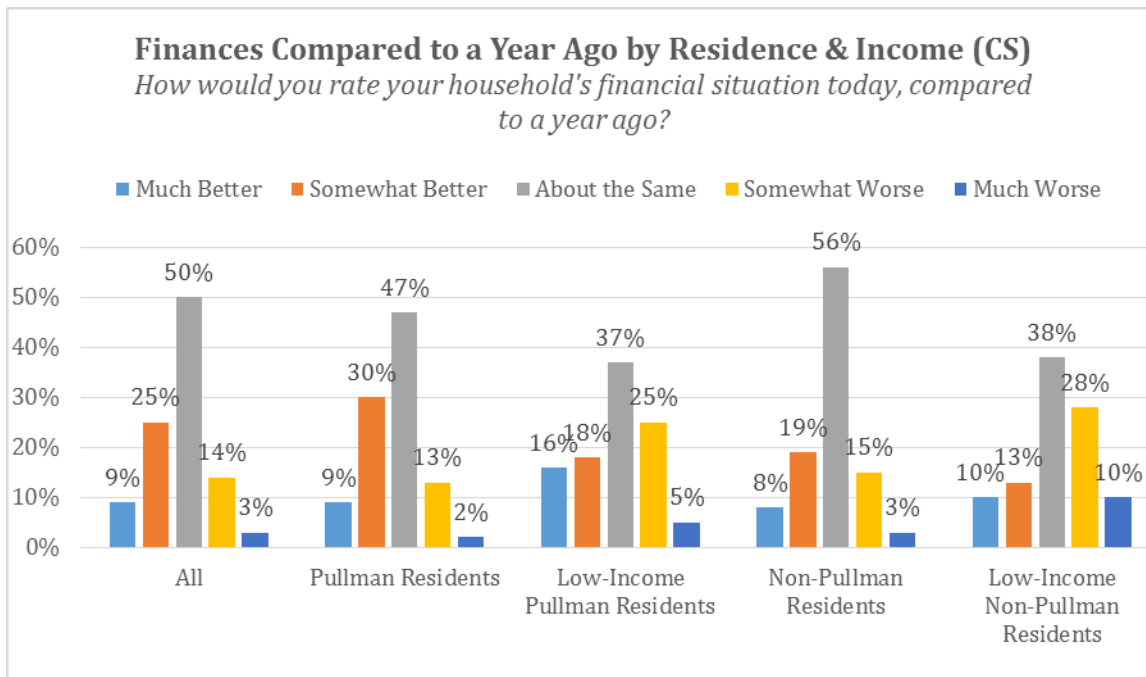
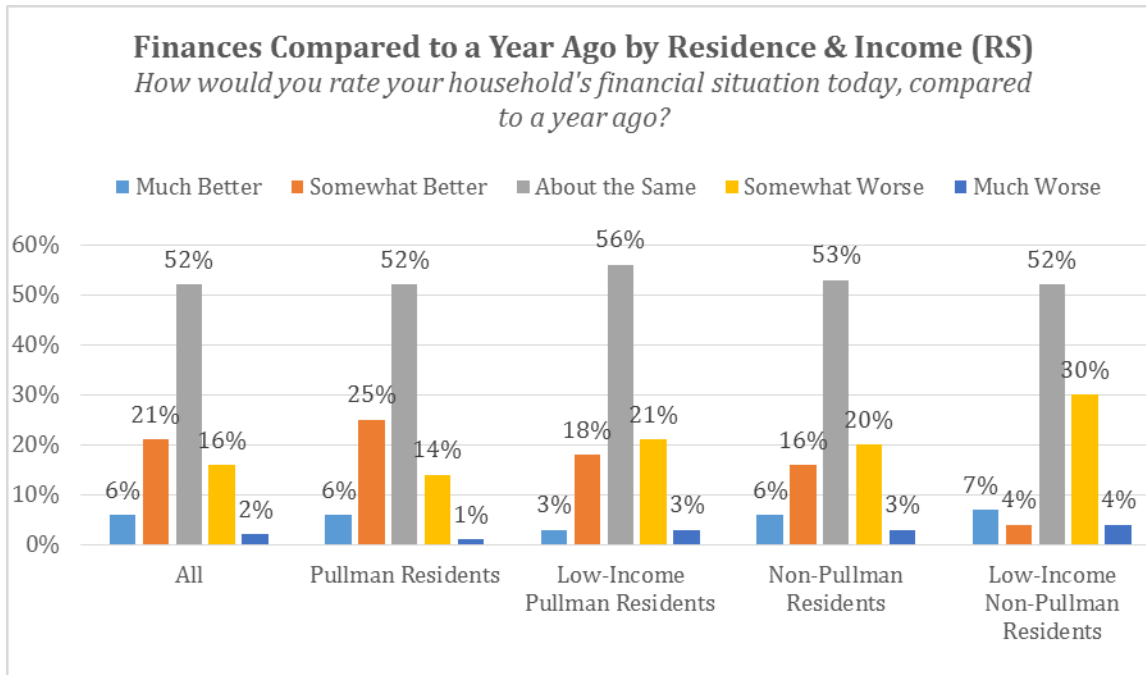
For example, low-income residents of Whitman County were less likely to rate their overall quality of life as “excellent” and more likely to rate their overall quality of life as “fair.” In particular, low-income residents outside of Pullman were more likely to rate their overall quality of life as “poor” or “very poor.” However, the majority of Whitman County residents rated their overall quality of life as “good” or “excellent.”



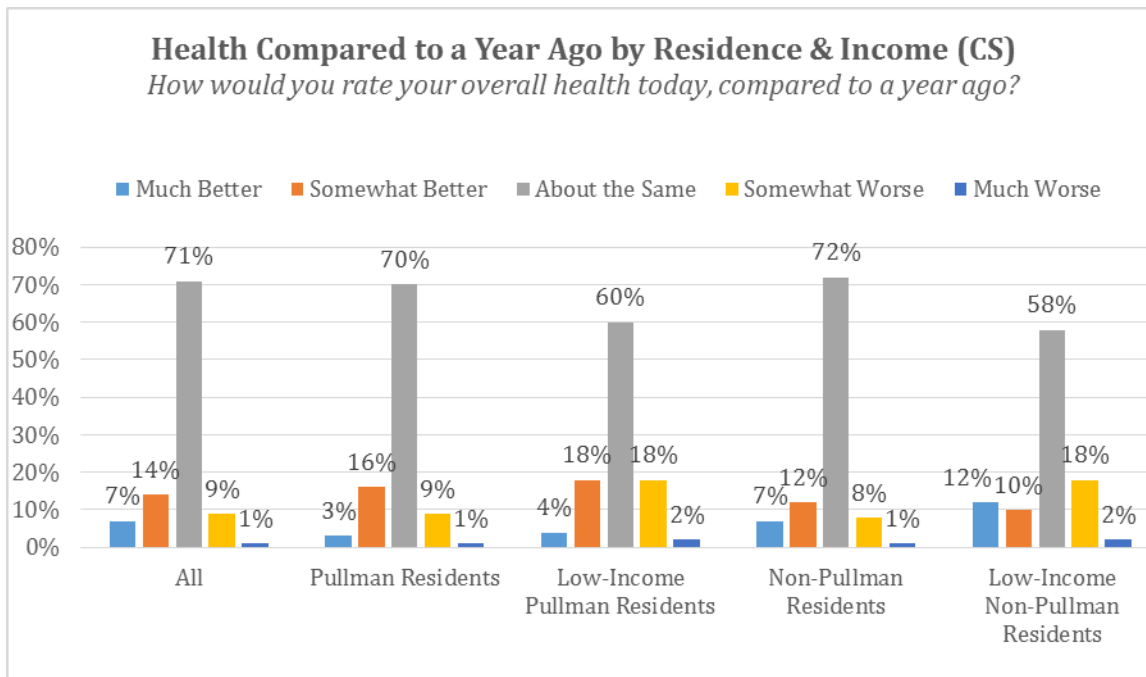
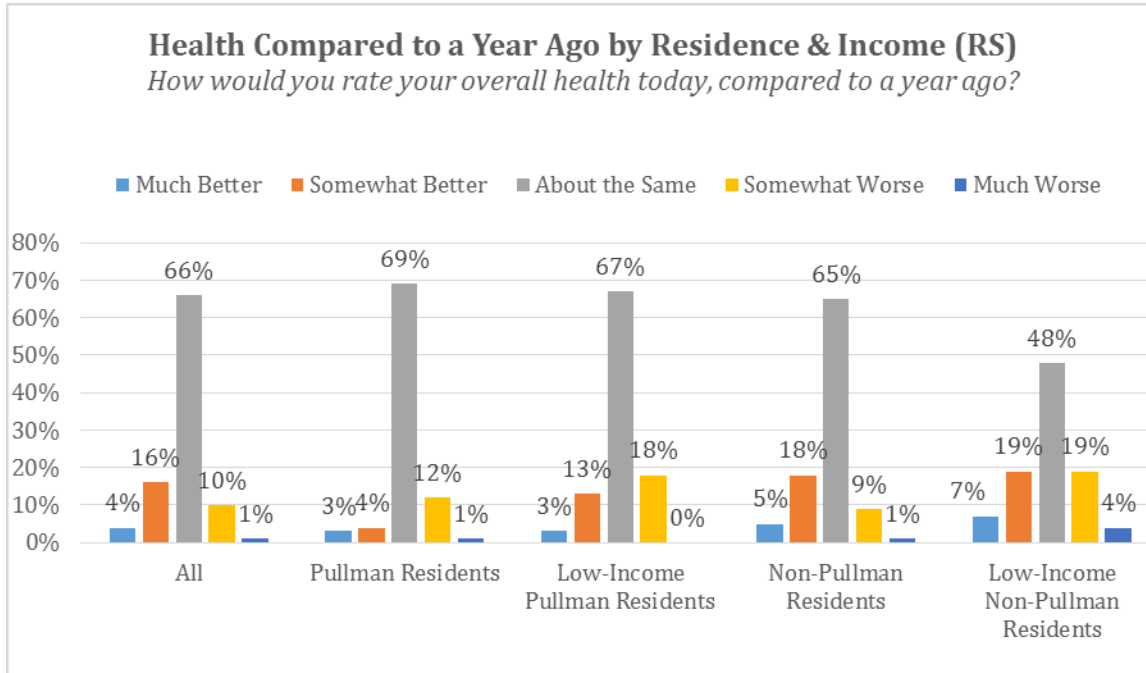
The majority of Whitman County residents reported their quality of life was about the same or better compared to a year ago. However, low-income residents in all areas across the county more frequently reported their quality of life as somewhat worse or much worse than the past year.



Low-income residents, non-Pullman residents, and in particular, low-income non-Pullman residents more frequently reported their household's financial situation as worse than a year ago. 34% of non-Pullman low-income residents reported a worsening financial situation in their household in the random sample.



A significant portion of low-income, non-Pullman residents (23%) reported worse health than the past year and had a much smaller proportion of respondents reporting a similar or improved health situation. However, all other categories of respondents primarily reported steady or improved health.



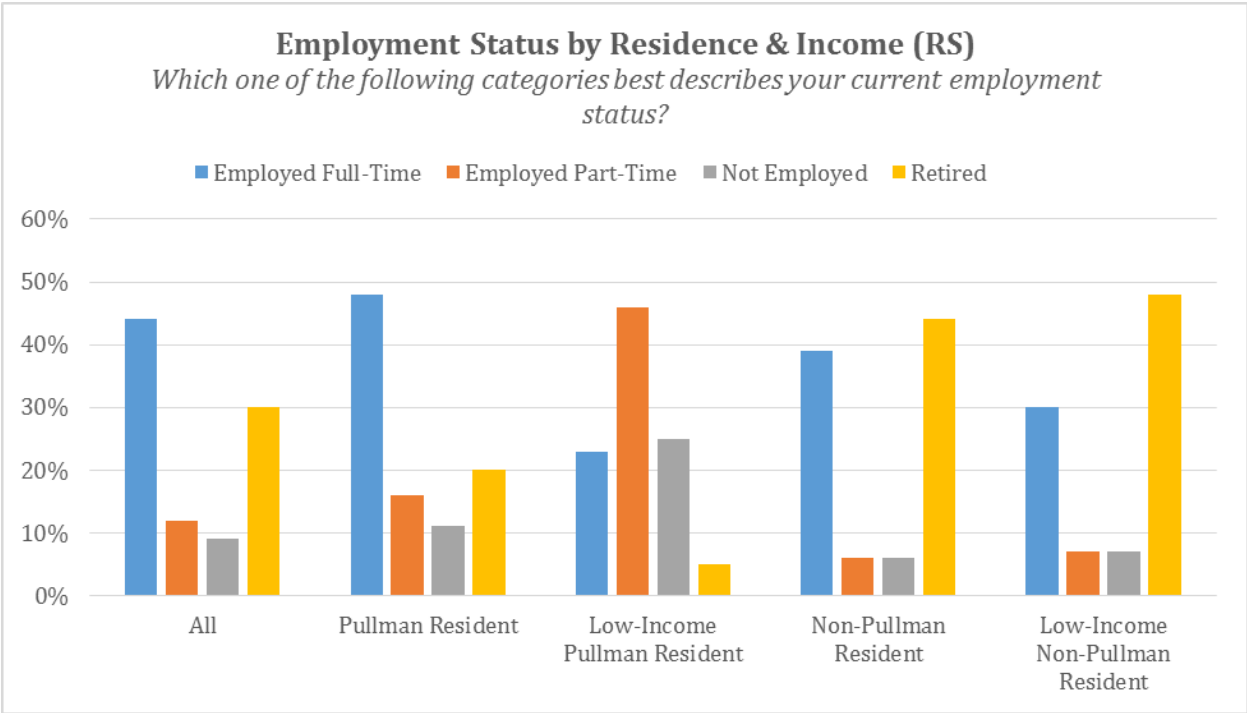
**Employment and Economic Development**

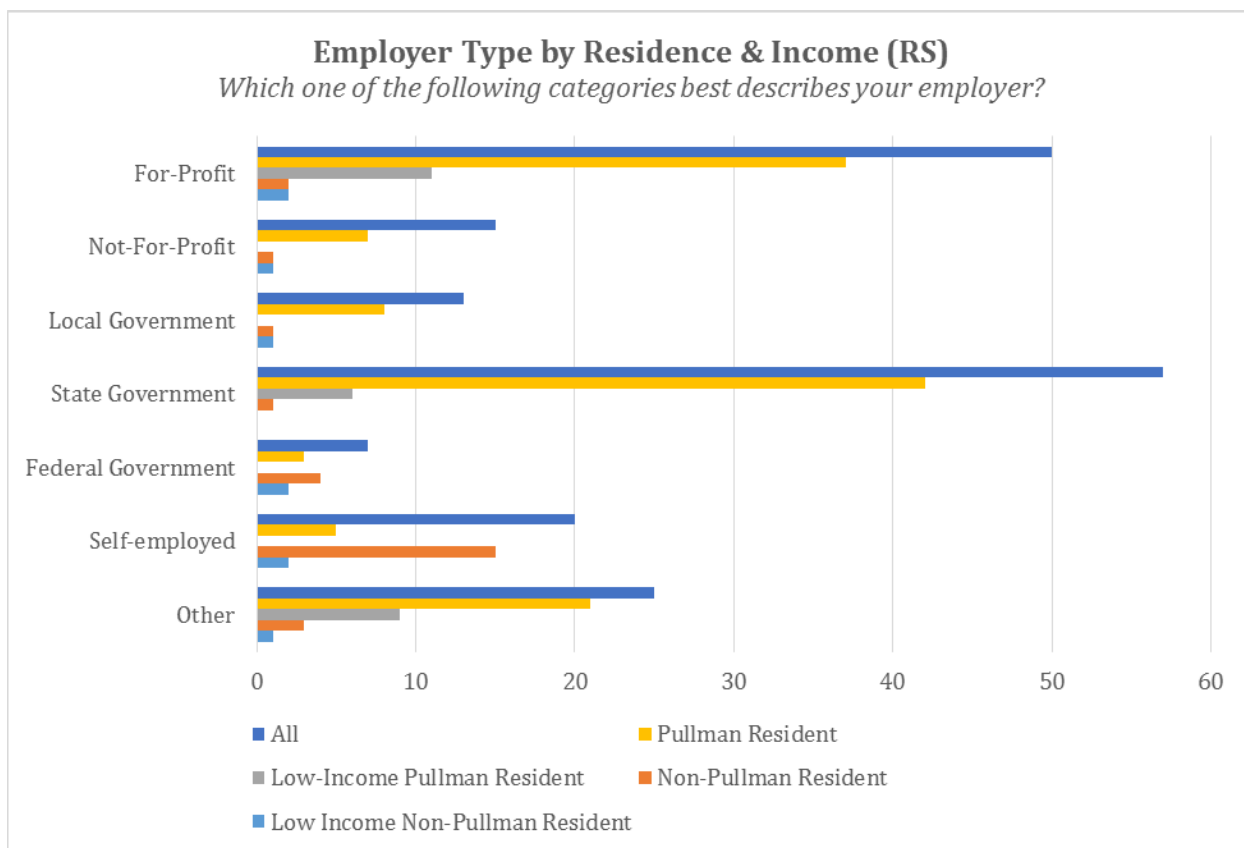
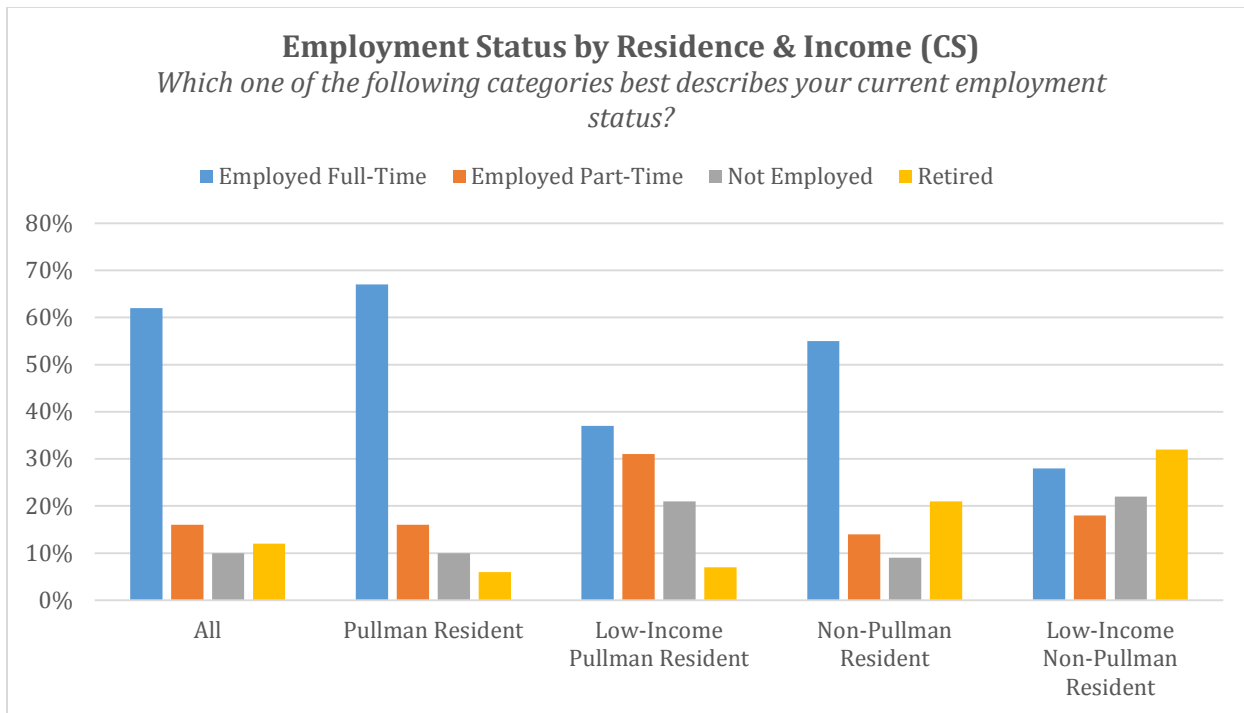
Questions about the respondents’ employment status, employer type, military service status, and benefits or public assistance were asked to gain an understanding of employment in Whitman County and to identify places for economic development.

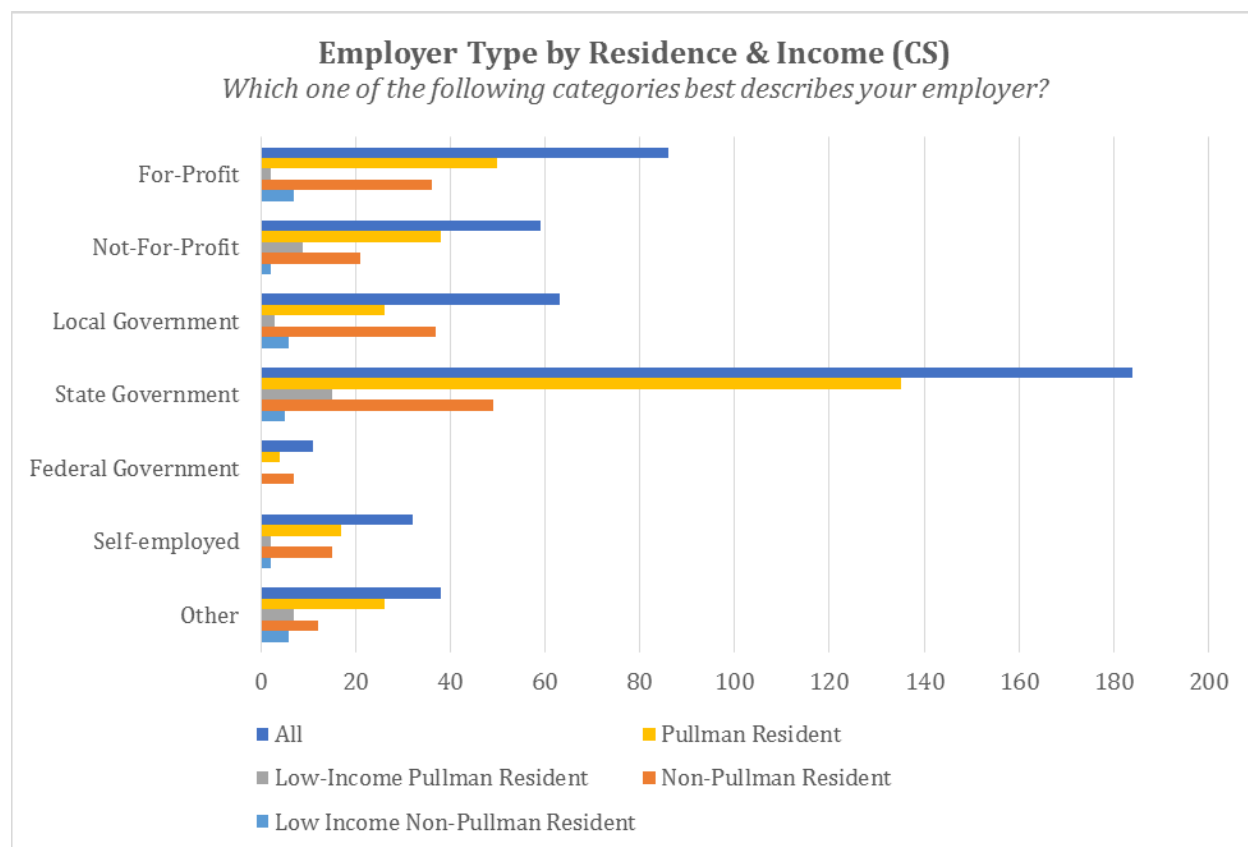
Whitman County has a higher than average number of veteran’s compared to the rest of Washington State. In the random sample, 13% of respondents have served or are actively serving in the U.S. Armed Forces and 10% of respondents had members of their household who have served or are actively serving in the U.S. armed forces.

A high percentage of those living outside of Pullman are retired (approximately 45%), with low-income respondents being slightly more likely to be retired than non-low-income respondents. Pullman low-income respondents were more likely to be employed part-time or not employed than non-low-income Pullman respondents. Pullman respondents were also primarily employed in two sectors: for-profit and state government. This is likely due to the presence of Washington State University (state government) and Schweitzer Engineering Laboratories (for-profit) as the larger employers in Pullman.

Another finding of note is that 15% of low-income non-Pullman respondents who received income from benefits or public assistance had their benefits reduced or stopped in the past year. Also, of those who are unemployed, 40% have been unemployed for less than a year, while 60% have been unemployed for more than a year.







## Health and Well-Being

Questions about insurance coverage, access to health care, and most common health conditions reveal opportunities to increase service access. While 94-96% of residents are covered by a health insurance plan, only 85% of low-income non-Pullman residents are covered by a health insurance plan in the random sample. In addition, 15% of households report someone in the household having a disability that limits one or more of their usual daily activities.

Low income residents in both Pullman and non-Pullman have more difficulty accessing physicians and indicated a lack of adequate access to medical care. A surprisingly high percentage of respondents across residence and income were unable to access preventative care in the past year (over 30%).

While allergies were the most prevalent health condition (with 49% of households reporting at least one person within the household having allergies), the next most common health condition varied by residence and income:

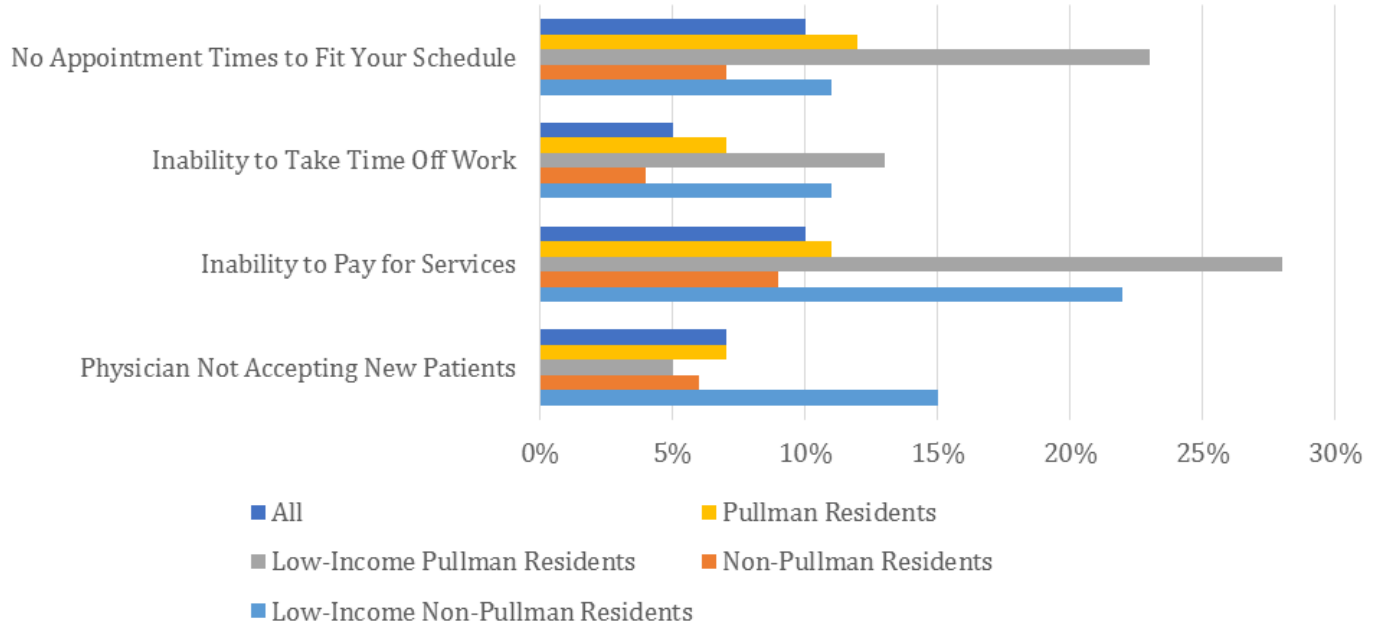
- Pullman: obesity
- Pullman low-income: mental health
- Non-Pullman: physical disability
- Non-Pullman low-income: dental disease.

The convenience sample respondents reported different health conditions, though mental health, obesity, and physical disabilities remain highly reported conditions.



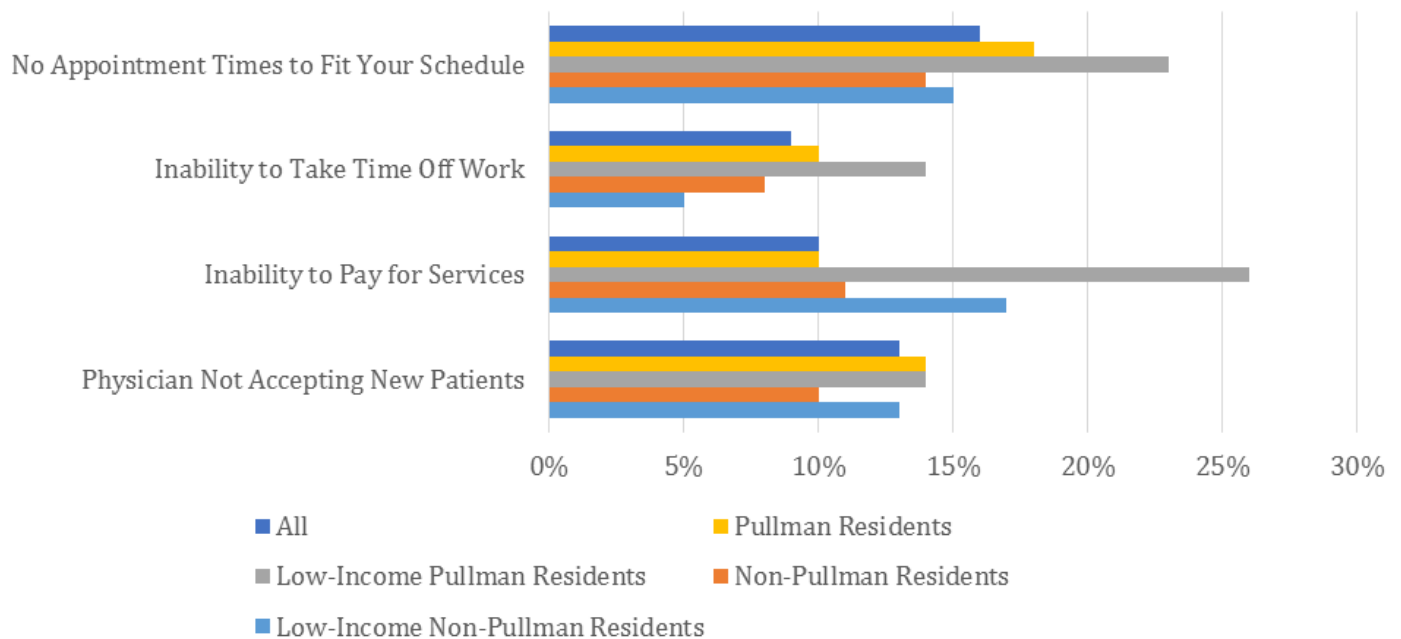
### Inability to See Physicians Due to... By Residence & Income (RS)

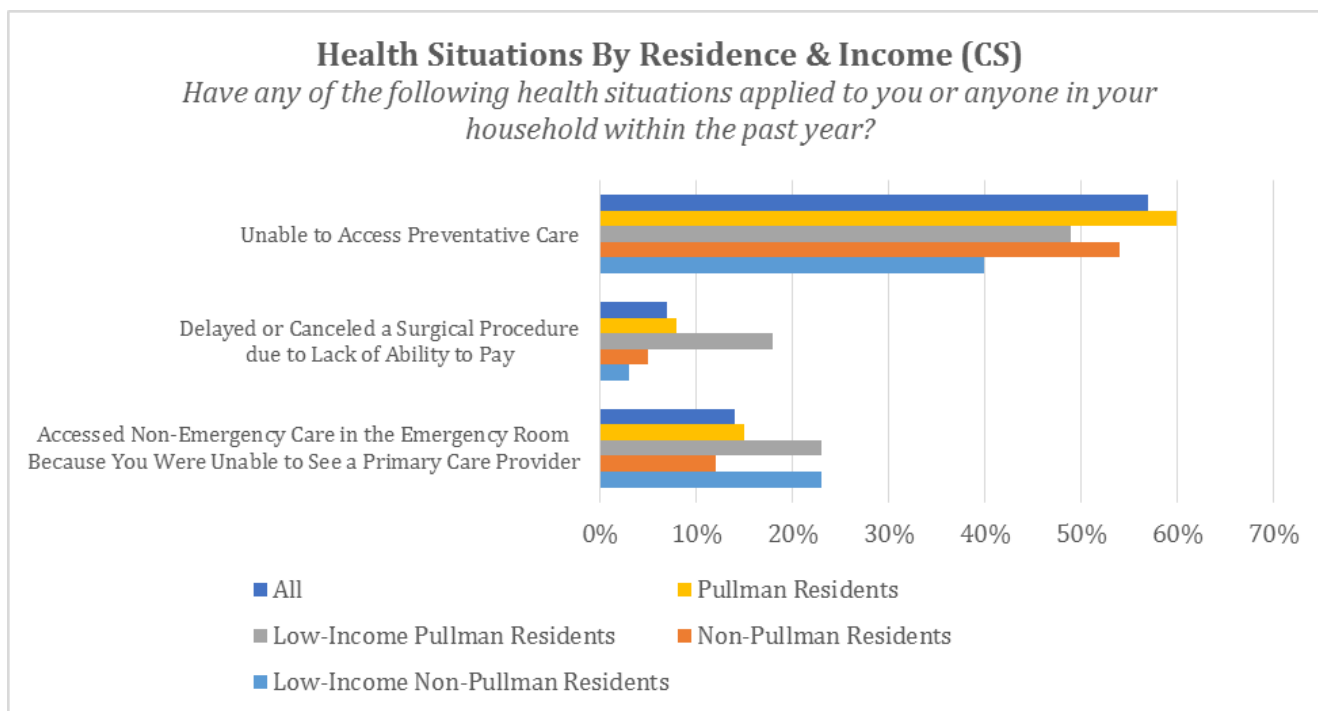
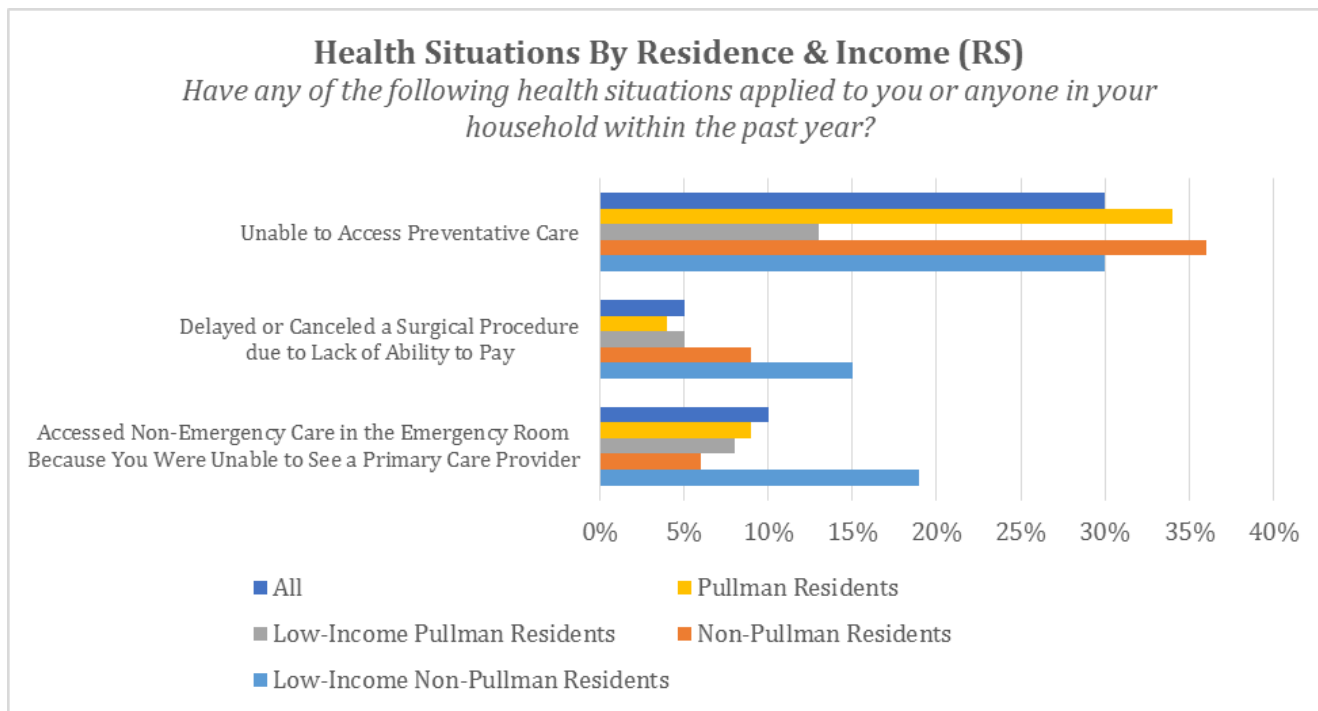
*In the past year, have you or any member of your household been unable to get in to see a physician due to any of the following reasons?*



### Inability to See Physicians Due to... By Residence & Income (CS)

*In the past year, have you or any member of your household been unable to get in to see a physician due to any of the following reasons?*





**Most Common Health Conditions in Households by Residence & Income (RS)**

Rank	All	Pullman Resident	Low-Income Pullman	Non-Pullman Resident	Low-Income Non-Pullman
1	Obesity (19%)	Obesity (21%)	Mental Health (21%)	Physical Disability (22%)	Dental Disease (30%)
2	Asthma (16%)	Asthma (18%)	Obesity (18%)	Diabetes (21%)	Physical Disability (26%)
3	Diabetes (16%)	Diabetes (12%)	Asthma (15%)	Dental Disease (17%)	Mental Health (19%)
4	Physical Disability (16%)	Mental Health (12%)	Dental Disease (13%)	Obesity (17%)	Diabetes (15%)
5	Dental Disease (14%)	Dental Disease (11%)	Behavioral Issues (10%)	Asthma (14%)	Obesity (15%)

**Most Common Health Conditions in Households by Residence and Income (CS)**

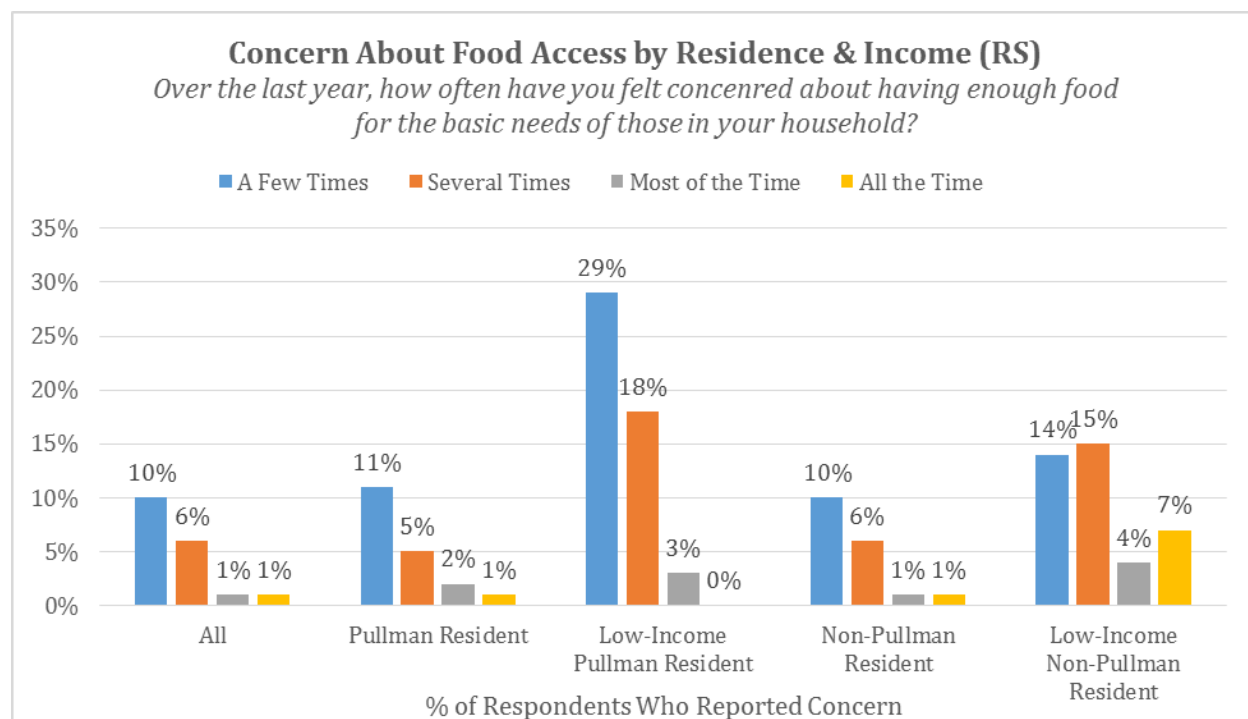
Rank	All	Pullman Resident	Low-Income Pullman	Non-Pullman Resident	Low-Income Non-Pullman
1	Obesity (30%)	Obesity (28%)	Mental Health (30%)	Asthma (22%)	Physical Disability (41%)
2	Asthma (25%)	Asthma (27%)	Obesity (28%)	Physical Disability (19%)	Obesity (33%)
3	Mental Health (17%)	Mental Health (18%)	Asthma (23%)	Diabetes (19%)	Dental Disease (25%)
4	Dental Disease (14%)	Dental Disease (12%)	Dental Disease (21%)	Dental Disease (17%)	Mental Health (22%)
5	Diabetes (14%)	Diabetes (11%)	Physical Disabilities (14%)	Mental Health (15%)	Special Needs (22%)

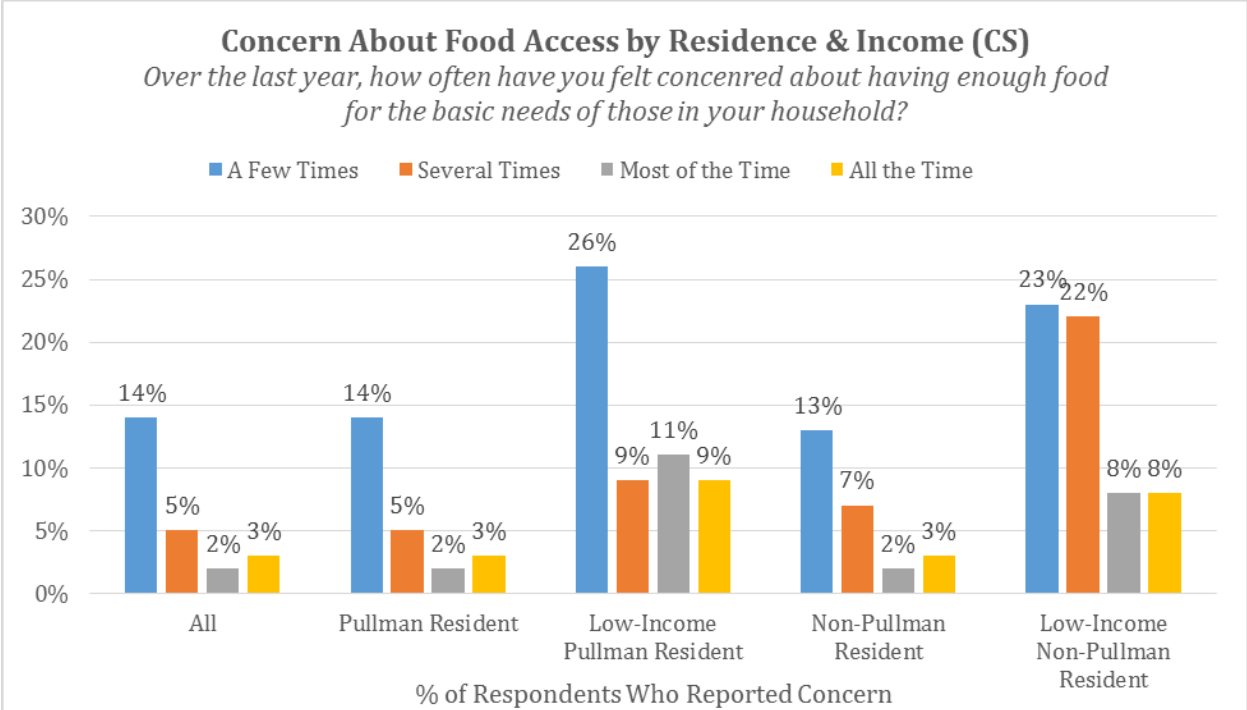
## Food Security

A substantial proportion of low-income residents in both Pullman and non-Pullman reported being concerned about having enough food for their family. 10% of low-income Pullman and 19% of low-income non-Pullman residents reported going hungry in the last year because they were not able to get enough food.

The most common source of food assistance was the food bank (9% of all respondents in the random sample). However, food banks are heavily relied on by low-income residents: in non-Pullman, 33% of respondents (compared to 55% in the convenience sample) and 22% of low-income respondents from Pullman in the convenience sample. Other sources of food include: family or friends, senior center meals, Meals on Wheels program, and churches or faith community members.

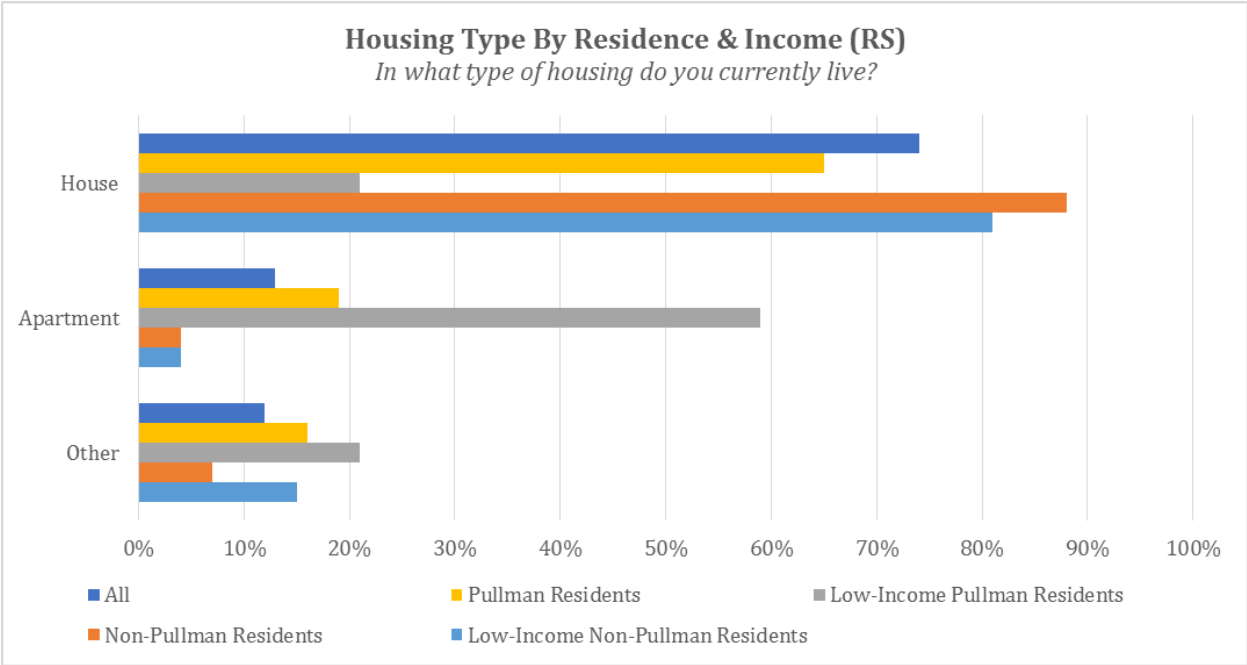
About 30% of the respondents said they would be somewhat likely or very likely to use a public or community garden if it was available to them. This percentage was higher among the low-income residents of Pullman, with 59% responding they would be somewhat or very likely to use a public or community garden.

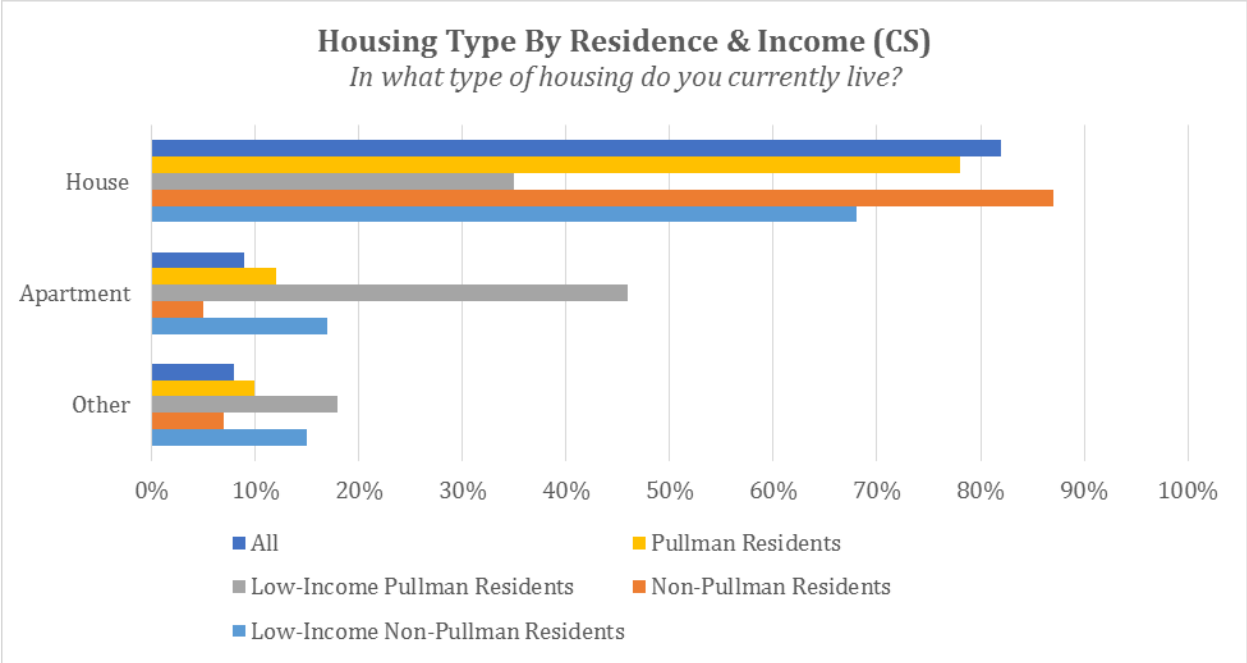




**Housing**

Low-income Pullman respondents were the most likely group to be living in apartments (affected by WSU student status). The majority of other respondents lived in houses, though the rates vary slightly by place of residence.





In the random sample, no respondents reported having their place of residence in foreclosure. A small percentage (1-2%) of respondents were one or more months behind in their rent or house payment. These percentages were similar in the convenience sample, with the exception of having less than 1% of respondents whose place of residence was in foreclosure. A small percentage of respondents (less than 1%) reported being homeless in the last three years in the random sample. A slightly large percentage of respondents in the convenience sample report being homeless in the last three years (2-3%).

Respondents were also asked about internet access in their home. As many services require internet access, an understanding of availability of internet access is important. Internet access in Pullman is higher than the state and national averages. However, low-income, non-Pullman residents have lower than average internet access.

Internet Access in the Residence	Random Sample	
	% Yes	% No
All	90%	10%
Low Income	87%	10%
Pullman	95%	5%
Low-Income Pullman	97%	3%
Non-Pullman	84%	15%
Low Income Non-Pullman	74%	22%

Convenience Sample	
% Yes	% No
95%	5%
88%	11%
96%	3%
95%	2%
92%	8%
82%	18%

Area	% Yes	% No
Washington	79.99%	20.01%
United States	74.4%	25.6%

## Need for Services

### Transportation

In the random sample, 8% of respondents expressed difficulty finding transportation to access services, with 30% of low-income non-Pullman residents expressing difficulty.

### Services Accessed

A count of the services indicated as being accessed by a household in the past year was used to determine how many different types of services were accessed per household. This does not indicate how many times a particular service was used – only if it was used at least once.

### Number of Services Accessed per Household in the Past Year by Residence & Income (RS)

	<i>Accessed 1 or 2 Services</i>		<i>Accessed 3 or More Services</i>		<i>No Services Accessed</i>		<i>Total</i>
All	70	20%	17	5%	259	75%	346
Low Income	16	24%	5	7%	47	69%	68
Pullman	41	21%	5	3%	151	77%	197
Low-Income Pullman	8	21%	2	5%	29	74%	39
Non-Pullman	29	21%	11	8%	100	71%	140
Low Income Non-Pullman	8	30%	3	12%	16	59%	27

### Number of Services Accessed per Household in the Past Year by Residence & Income (CS)

	<i>Accessed 1 or 2 Services</i>		<i>Accessed 3 or More Services</i>		<i>No Services Accessed</i>		<i>Total</i>
All	125	20%	56	9%	437	71%	618
Low Income	30	26%	32	27%	55	47%	117
Pullman	77	21%	29	8%	253	70%	359
Low-Income Pullman	13	23%	15	26%	29	51%	57
Non-Pullman	48	19%	27	10%	184	71%	259
Low Income Non-Pullman	7	28%	17	28%	26	43%	60

## Services Needed in Community and by Household

Respondents were also asked to identify social service needs for both their community and their own household. Access to affordable dental care was the primary need identified in almost every case, pointing to an extreme need for affordable dental care across Whitman County. Access to affordable medical care and childcare were also commonly cited needs. For non-Pullman respondents, and particularly for non-Pullman low-income respondents, transportation, help with heating/utility bills, and access to nutritious food are social service needs. For Pullman low-income

respondents, mortgage/rental assistance and access to nutritious food are frequently cited as needed social services. The following four tables are particularly clear examples of different needs across Whitman County.

Additional analyses (not included in this report), examining the needs of the student and non-student population in Whitman County, were also run. Contrary to expectations, the identified social service needs of students and non-students had few differences. Affordable dental care, medical care, and childcare were primary needs, as well as assistance with heating/utility bills and mortgage/rental assistance.



**Top 10 Identified Needs Within the Community by Residence & Income (RS)**

Rank	All	%	Pullman	%	Low-Income Pullman	%	Non-Pullman	%	Low-Income Non-Pullman	%
1	Affordable Dental Care	65%	Affordable Dental Care	72%	Affordable Dental Care	69%	Affordable Dental Care	72%	Affordable Dental Care	63%
2	Affordable Medical Care	63%	Affordable Medical Care	71%	Affordable Medical Care	69%	Affordable Child Care	68%	Affordable Medical Care	52%
3	Affordable Child Care	63%	Affordable Child Care	68%	Affordable Child Care	62%	Transportation	56%	Food (help getting enough food);	44%
4	Transportation	57%	Drug/alcohol treatment and/or counseling	66%	Drug/alcohol treatment and/or counseling	62%	Affordable Medical Care	54%	Mortgage/Rental Assistance	
5	Food (help getting enough food)	56%	Mental health services/family counseling	62%	Help finding a job/living wage job	59%	Help with heating, water, and/or utility bills	54%	Help with heating, water, and/or utility bills	41%
6	Drug/alcohol treatment and/or counseling	56%	Help finding a job/living wage job	61%	Family violence advocacy/treatment/counseling	56%	Food (help getting enough food)	51%	Affordable Child Care;	37%
7	Mental health services/family counseling	54%	Food (help getting enough food)	61%	Food (help getting enough food);	54%	Help finding a job/living wage job	47%	Mental health services/family counseling	
8	Help with heating, water, and/or utility bills	53%	Family violence advocacy/treatment/counseling	61%	Transportation;		Drug/alcohol treatment and/or counseling	45%	Transportation;	33%
9	Legal Help	51%	Legal Help	60%	Family Planning		Mortgage/Rental Assistance;	44%	Drug/alcohol treatment and/or counseling;	
10	Family violence advocacy/treatment/counseling	51%	Transportation	58%	Mental health services/family counseling	51%	Assistance; Mental Health Services; Preschool Educ.		Help finding a job/living wage job	

**Top 10 Identified Services Needs Within the Household by Residence & Income (RS)**

Single category of “need” is a combination of “slight”, “moderate”, and “strong” need categories

Much lower percentage of respondents identified a need in their own household (compared to needs in the community)

Rank	All	%	Pullman	%	Low-Income Pullman	%	Non-Pullman	%	Low-Income Non-Pullman	%
1	Affordable Dental Care	37%	Affordable Dental Care	38%	Affordable Dental Care	56%	Affordable Dental Care	37%	Affordable Dental Care	63%
2	Affordable Medical Care	32%	Access to Library System	36%	Affordable Medical Care	54%	Access to Library System	26%	Help with heating, water or utility bill	48%
3	Access to library services	31%	Affordable Medical Care	35%	Mortgage/Rental Assistance	31%	Affordable Medical Care	24%	Affordable Medical Care	44%
4	Legal Help	20%	Legal Help	20%	Food (help getting enough food)	28%	Legal Help	19%	Access to Library System	33%
5	Help finding a job/living wage job	15%	Help finding a job/living wage job	17%	Mental health services/family counseling;  Help finding a job/living wage job;  Access to Library System	26%	Help with heating, water or utility bill	16%	Food (help getting enough food)	30%
6	Mental health services/family counseling	14%	Mental health services/family counseling	16%			Transportation;	14%	Help buying fuel for transportation	26%
7	Food (help getting enough food)	12%	Mortgage/Rental Assistance	14%			Food (help getting enough food)		Mortgage/Rental Assistance;	22%
									Legal Help;	
8	Help with heating, water or utility bill	12%	Food (help getting enough food)	11%	Help with heating, water or utility bill	21%	Help finding a job/living wage job	13%	Mental health services/family counseling;	
9	Mortgage/Rental Assistance	12%	Affordable Child Care;	10%	Help buying fuel for transportation	18%	Mental health services/family counseling	12%	Help finding a job/living wage job	
10	Transportation	11%	Transportation		Legal Help	15%	Help buying fuel for transportation	11%		

**Top 10 Identified Needs Within the Community by Residence & Income (CS)**

Rank	All	%	Pullman	%	Low-Income Pullman	%	Non-Pullman	%	Low-Income Non-Pullman	%
1	Affordable Child Care	80%	Affordable Child Care	80%	Food (help getting enough food); Transportation	77%	Affordable Child Care	81%	Affordable Dental Care;	82%
2	Affordable Dental Care;	75%	Food (help getting enough food)	78%			Affordable Dental Care	74%	Affordable Medical Care	
3	Food (help getting enough food)		Affordable Medical Care;	76%	Affordable Dental Care;	75%	Food (help getting enough food);	70%	Food (help getting enough food);	80%
4	Affordable Medical Care	73%	Affordable Dental Care;		Affordable Medical Care;		Affordable Medical Care		Help with heating, water, and/or utility bills	78%
5	Mental health services/family counseling;	71%	Mental health services/family counseling		Affordable Child Care		Help finding a job/living wage job	69%	Affordable Child Care	77%
6	Help finding a job/living wage job		Drug/alcohol treatment and/or counseling;	72%	Mental health services/family counseling	73%	Transportation	68%	Help finding a job/living wage job	75%
7	Transportation	69%	Help finding a job/living wage job		Family violence advocacy/treatment/counseling	70%	Help with heating, water, and/or utility bills	66%	Transportation	72%
8	Drug/alcohol treatment and/or counseling	68%	Family violence advocacy/treatment/counseling	71%	Drug/alcohol treatment and/or counseling;	68%	Mental health services/family counseling	64%	Parenting Support	70%
9	Help with heating, water, and/or utility bills;	67%	Transportation	70%	Preschool Education		Drug/alcohol treatment and/or counseling	63%	Mental health services/family counseling	68%
10	Family violence advocacy/treatment / counseling		Preschool Education	69%	Legal Help; Help with bills; Help finding a job: Family Planning	67%			Drug/alcohol treatment; Family violence advocacy	67%

**Top 10 Identified Services Needs Within the Household by Residence & Income (CS)**

Single category of “need” is a combination of “slight”, “moderate”, and “strong” need categories.

Much lower percentage of respondents identified a need in their own household (compared to needs in the community).

Rank	All	%	Pullman	%	Low-Income Pullman	%	Non-Pullman	%	Low-Income Non-Pullman	%
1	Affordable Dental Care;	35%	Affordable Medical Care;	35%	Affordable Dental Care	56%	Affordable Dental Care	36%	Affordable Dental Care	53%
2	Affordable Medical Care		Affordable Dental Care;		Affordable Medical Care	47%	Affordable Medical Care	35%	Affordable Medical Care bill	48%
3	Access to library services	33%	Access to Library System		Help with heating, water or utility bill	42%	Access to Library System	29%	Food (help getting enough food)	45%
4	Mental health services/family counseling;	18%	Mental health services/family counseling	21%	Mortgage/Rental Assistance	40%	Legal Help	22%	Help with heating, water or utility	42%
5	Legal Help		Affordable Child Care	20%	Food (help getting enough food)	39%	Help with heating, water or utility bill	17%	Mortgage/Rental Assistance	35%
6	Affordable Child Care	17%	Mortgage/Rental Assistance	16%	Mental health services/family counseling	37%	Mental health services/family counseling;	14%	Help buying fuel for transportation;	33%
7	Help with heating, water or utility bill;	15%	Legal Help;	15%	Access to Library System	33%	Mortgage/rental assistance;		Access to library system	
8	Mortgage/Rental Assistance		Transportation		Transportation	32%	Help buying fuel for transportation		Legal Help	30%
9	Transportation;	14%	Parenting Support;	14%	Help buying fuel for transportation	28%	Help finding a job/living wage job;	13%	Transportation	28%
10	Help finding a job/living wage job		Help finding a job/living wage job		Legal Help	25%	Transportation		Help finding a job/living wage job	25%

## **Conclusions and Recommendations**

There is a multitude of conclusions and insights to be drawn from this report, and the wealth of data drawn from responses to the questionnaire will be useful to health and social service agencies in Whitman County. Initial review of the responses indicates there are five areas for improvement that stand out:

- 1) **Extreme need for affordable dental care:** Affordable dental care was reported as the highest need within households and communities across both random and convenience samples and across income and other demographic groupings. Currently in Whitman County, there is a large gap in affordable coverage, particularly for low-income, non-Pullman residents and patients with Medicaid coverage only.
- 2) **Transportation to services:** A substantial proportion of respondents reported having difficulty finding transportation to services, particularly those living outside of Pullman. While some transportation infrastructure exists outside of Pullman, it is limited and may be creating a barrier to accessing services for some.
- 3) **Access to nutritious food:** Between the number of residents who reported concern about having enough food for their family, those who reported going hungry in the past year, and those who would utilize community gardens if access was available, access to nutritious food continues to be an area needing growth.
- 4) **Access to preventative care.** A surprising percentage of respondents reported not being able to access preventative health care services in the past year. While medical services have expanded in the past year (notably the creation of a free clinic in Pullman), there appears to be a gap in medical coverage access when it comes to preventative care.
- 5) **Access to social services for low-income non-Pullman residents:** Throughout this report, there is a multitude of examples where low-income non-Pullman residents are at a significant disadvantage for accessing all types of social services. Thus, it is clear that working towards extending/improving social service access for those in the more rural parts of Whitman County should be a topic of concern for all community members and social service agencies.

## **References**

2009-2013 American Community Survey (<https://www.census.gov/programs-surveys/acs/data.html>)

Bishaw, Alemayehu. 2013. "Examining the Effect of Off-Campus College Students on Poverty Rates." *U.S. Census Bureau, Social, and Economic & Housing Statistics Division, Poverty Statistics Branch.*

Social and Economic Sciences Research Center. 2015a. *Whitman County Health and Social Service Needs Assessment (Scientific Sample).*

Social and Economic Sciences Research Center. 2015b. *Whitman County Health and Social Service Needs Assessment (Convenience Sample).*

2000 U.S. Census (<http://www.census.gov/main/www/cen2000.html>)

U.S. Census Bureau. American FactFinder (<http://factfinder2.census.gov>)

## **Appendix 1: Whitman County Demographic Information**

### **Age and Gender Demographics**

Population numbers and percentages by age and gender are shown below for the Pullman, non-Pullman, and Whitman County areas. Pullman has a greater percentage of 18-64 year olds for both males and females. This is undoubtedly due to the high concentration of WSU students in Pullman. Non-Pullman Whitman County has a substantially higher percentage of their population who are 64 and older. The gender ratio is very similar across the board: approximately 49.5% female to 51.5% male.

<i>Area</i>	<i>0 – 4 Male</i>	<i>% of Pop.</i>	<i>5 – 17 Male</i>	<i>% of Pop.</i>	<i>18 – 64 Male</i>	<i>% of Pop.</i>	<i>64+ Male</i>	<i>% of Pop.</i>
Pullman	505	1.66%	995	3.27%	13,274	43.68%	535	1.76%
Non-Pullman	450	2.98%	1,433	9.48%	4,332	28.64%	1,222	8.08%
Whitman County	955	2.10%	2,428	5.33%	17,606	38.68%	1,757	3.86%
Washington	226,020	3.31%	585,323	8.58%	2,198,819	32.24%	350,510	5.14%

<i>Area</i>	<i>0 – 4 Female</i>	<i>% of Pop.</i>	<i>5 – 17 Female</i>	<i>% of Pop.</i>	<i>18 – 64 Female</i>	<i>% of Pop.</i>	<i>64+ Female</i>	<i>% of Pop.</i>
Pullman	573	1.89%	1342	4.42%	12,411	40.84%	753	2.48%
Non-Pullman	462	3.05%	1,058	7.00%	4,312	28.51%	1,644	10.87%
Whitman County	1,035	2.27%	2,400	5.27%	16,723	36.74%	2,397	5.27%
Washington	215,514	3.16%	558,043	8.18%	2,164,541	31.74%	479,942	7.04%

<i>Area</i>	<i>0 – 4 Total</i>	<i>% of Pop.</i>	<i>5 – 17 Total</i>	<i>% of Pop.</i>	<i>18 – 64 Total</i>	<i>% of Pop.</i>	<i>64+ Total</i>	<i>% of Pop.</i>
Pullman	1078	3.55%	2337	7.69%	25,685	84.52%	1288	4.24%
Non-Pullman	912	6.03%	2491	16.47%	8644	57.15%	2866	18.95%
Whitman County	1,990	4.37%	4,828	10.61%	34,329	75.43%	4,154	9.13%
Washington	441,534	6.47%	1,143,366	16.77%	4,363,360	63.98%	830,452	12.18%

<i>Area</i>	<i>Median Age</i>	<i>Male Total</i>	<i>% of Pop.</i>	<i>Female Total</i>	<i>% of Pop.</i>
Pullman	21.9	15,309	50.38%	15,079	49.62%
Non-Pullman	45.6	7,437	49.17%	7,476	49.43%
Whitman County	21.0	22,746	49.98%	22,555	49.56%
Washington	37.3	3,360,672	49.28%	3,418,040	50.12%

### **Race Demographics**

There is a substantial difference in the racial make-up of Pullman and non-Pullman Whitman County. While both areas are predominately Caucasian, Pullman has a much higher percentage of non-Caucasian residents (approximately 20% compared to less than 5%). Whitman County has a

lower percentage of African Americans and a higher percentage of Asian Americans than the state of Washington and the United States.

<i>Area</i>	<i>Caucasian</i>	<i>% of Pop.</i>	<i>African American</i>	<i>% of Pop.</i>	<i>American Indian</i>	<i>% of Pop.</i>
Pullman	24,138	79.43%	873	2.87%	124	0.41%
Non-Pullman	14,399	95.21%	55	0.36%	236	1.56%
Whitman County	38,537	84.67%	928	2.04%	360	0.79%
Washington	5,350,938	78.46%	245,041	3.59%	94,194	1.38%
United States	230,592,584	74.02%	39,167,010	12.57%	2,540,309	0.82%

<i>Area</i>	<i>Asian</i>	<i>% of Pop.</i>	<i>Native Hawaiian</i>	<i>% of Pop.</i>	<i>Mixed Race</i>	<i>% of Pop.</i>
Pullman	3,222	10.60%	96	0.32%	1,671	5.50%
Non-Pullman	118	0.78%	22	0.15%	201	1.33%
Whitman County	3,340	7.34%	118	0.26%	1,872	4.11%
Washington	489,941	7.18%	40,695	0.60%	324,471	4.76%
United States	15,231,962	4.89%	526,347	0.17%	8,732,333	2.80%

### **Ethnicity Demographics**

As with the race demographics, Pullman has a greater proportion of residents who identify as Hispanic. Pullman, non-Pullman, and Whitman County have a much lower percentage of the population who identify as Hispanic than in Washington or the U.S. as a whole.

<i>Area</i>	<i>Hispanic</i>	<i>% of Pop.</i>
Pullman	1,855	6.1%
Non-Pullman	375	2.48%
Whitman County	2,230	4.90%
Washington	783,693	11.49%
United States	51,786,591	16.62%

### **Veterans Demographics (Age and Gender)**

5.55% of Pullman residents identify as veterans, lower than the national average. However, non-Pullman Whitman County has a higher percentage of veterans than the national average.

<i>Area</i>	<i>Veterans Total</i>	<i>% of Pop.</i>	<i>Veterans Male</i>	<i>% of Pop.</i>	<i>Veterans Female</i>	<i>% of Pop.</i>
Pullman	1,031	3.39%	916	3.01%	115	0.38%
Non-Pullman	1495	9.88%	1375	9.09%	120	0.79%
Whitman County	2,526	5.55%	2,291	5.03%	235	0.52%
Washington	582,265	8.54%	532,242	7.80%	50,023	0.73%
United States	21,263,780	6.83%	19,709,452	6.33%	1,554,327	0.50%



<i>Area</i>	<i>Veterans, Age 18 – 64</i>	<i>% of Pop.</i>	<i>Veterans, Age 64+</i>	<i>% of Pop.</i>
Pullman	686	2.26%	345	1.14%
Non-Pullman	669	4.42%	826	5.46%
Whitman County	1,355	2.98%	1,171	2.57%
Washington	353,909	5.19%	228,356	3.35%
United States	10,719,656	3.44%	9,286,123	2.98%

### **Educational Attainment**

Education attainment is calculated for persons aged 25 and over. Pullman has a substantially higher percentage of Bachelors and Graduate/Professional degrees compared to the national average, with a substantially lower percentage of “high school only” or “no high school diploma.” Non-Pullman Whitman County is fairly consistent with national averages.

<i>Area</i>	<i>% No High School Diploma</i>	<i>% High School Only</i>	<i>% Some College/ A.A. Degree</i>	<i>% Bachelor’s Degree</i>	<i>% Graduate/ Professional Degree</i>
Pullman	3.4%	12.0%	23.1%	31.6%	30.1%
Non-Pullman	5.3%	28.3%	38.3%	18.5%	8.8%
Whitman County	3.78%	18.5%	28.8%	26.1%	22.8%
Washington	9.98%	23.6%	34.6%	20.4%	11.5%
United States	13.98%	28.1%	29.1%	18.1%	10.8%

**Appendix 2: Random Sample Respondent Demographics**

Note: Demographic totals may not add up to 100% due to non-response

<i>Random Sample Group</i>	<i>Number of Respondents</i>	<i>Male Total</i>	<i>% of Pop.</i>	<i>Female Total</i>	<i>% of Pop.</i>
All Respondents	346	125	36.13%	215	62.14%
Low Income	67	20	29.41%	47	69.12%
Pullman	197	67	34.01%	130	65.99%
Non-Pullman	140	56	40.00%	82	58.57%
Pullman, Low Income	39	3	23.08%	30	76.92%
Non-Pullman, Low Income	27	10	37.04%	17	62.96%
Student	41	12	29.27%	29	70.73%
Non-Student	296	113	38.18%	181	61.15%

<i>Random Sample Group</i>	<i>Caucasian</i>	<i>% of Pop.</i>	<i>African American</i>	<i>% of Pop.</i>	<i>American Indian</i>	<i>% of Pop.</i>
All Respondents	312	90.17%	6	1.73%	4	1.16%
Low Income	59	86.76%	2	2.94%	2	2.94%
Pullman	173	87.82%	6	3.05%	2	1.02%
Non-Pullman	135	96.42%	0	0.00%	2	1.43%
Pullman, Low Income	35	89.74%	2	5.13%	1	2.56%
Non-Pullman, Low Income	24	88.89%	0	0.00%	1	3.70%
Student	35	85.37%	2	4.885	1	2.44%
Non-Student	274	92.57%	4	1.355	3	1.01%

<i>Random Sample Group</i>	<i>Asian</i>	<i>% of Pop.</i>	<i>Native Hawaiian</i>	<i>% of Pop.</i>	<i>Other</i>	<i>% of Pop.</i>
All Respondents	13	3.76%	0	0%	13	3.76%
Low Income	2	2.94%	0	0%	5	7.35%
Pullman	12	6.09%	0	0%	10	5.08%
Non-Pullman	0	0.00%	0	0%	3	2.14%
Pullman, Low Income	1	2.56%	0	0%	3	7.69%
Non-Pullman, Low Income	0	0.00%	0	0%	2	7.41%
Student	4	9.76%	0	0%	2	4.88%
Non-Student	3	3.04%	0	0%	11	3.72%

<i>Random Sample Group</i>	<i>Hispanic (Self)</i>	<i>% of Pop.</i>	<i>Hispanic (In Household)</i>	<i>% of Pop.</i>
All Respondents	10	2.89%	22	6.36%
Low Income	3	4.41%	6	8.82%
Pullman	9	4.57%	19	9.64%
Non-Pullman	1	0.71%	3	2.14%
Pullman, Low Income	3	7.69%	5	12.82%
Non-Pullman, Low Income	0	0.00%	1	3.70%
Student	2	4.88%	5	12.20%
Non-Student	7	2.36%	17	5.74%

Whitman County Community Needs Assessment - November 2015

<i>Random Sample Group</i>	<i>No High School Diploma</i>	<i>% of Pop</i>	<i>High School Only</i>	<i>% of Pop</i>
All Respondents	2	0.58%	51	15.03%
Low Income	1	1.47%	16	23.53%
Pullman	0	0.00%	16	8.13%
Non-Pullman	2	1.43%	33	23.57%
Pullman, Low Income	0	0.00%	4	10.26%
Non-Pullman, Low Income	1	3.70%	12	44.45%
Student	0	0.00%	6	14.63%
Non-Student	2	0.68%	42	14.18%

<i>Random Sample Group</i>	<i>Some College / A.A. Degree</i>	<i>% of Pop</i>	<i>Bachelor's Degree or More</i>	<i>% of Pop</i>
All Respondents	79	22.83%	209	60.40%
Low Income	12	17.65%	38	55.88%
Pullman	30	15.23%	151	76.65%
Non-Pullman	49	35.00%	56	40.00%
Pullman, Low Income	6	15.38%	29	74.36%
Non-Pullman, Low Income	6	22.22%	8	29.63%
Student	4	9.76%	31	75.61%
Non-Student	74	25.00%	178	60.14%

<i>Random Sample Group</i>	<i>Internet Access</i>	<i>% of Pop</i>	<i>No Internet Access</i>	<i>% of Pop</i>
All Respondents	309	89.31%	32	9.25%
Low Income	59	86.76%	7	10.29%
Pullman	188	95.43%	9	4.57%
Non-Pullman	117	83.57%	21	15.00%
Pullman, Low Income	38	97.44%	1	2.56%
Non-Pullman, Low Income	20	74.07%	6	22.22%
Student	41	100.00%	0	0.00%
Non-Student	265	89.53%	3	10.14%

### **Appendix 3: Convenience Sample Respondent Demographics**

Note: Demographic totals may not add up to 100% due to non-response

<i>Convenience Sample Group</i>	<i>Number of Respondents</i>	<i>Male Total</i>	<i>% of Pop.</i>	<i>Female Total</i>	<i>% of Pop.</i>
All Respondents	618	166	26.86%	449	72.65%
Low Income	117	22	18.80%	94	80.34%
Pullman	359	100	27.86%	256	71.31%
Non-Pullman	259	66	25.48%	193	74.52%
Pullman, Low Income	57	10	17.54%	46	80.70%
Non-Pullman, Low Income	60	12	20.00%	48	80.00%
Student	46	12	26.09%	34	73.91%
Non-Student	567	151	26.63%	413	72.84%

<i>Convenience Sample Group</i>	<i>Caucasian</i>	<i>% of Pop.</i>	<i>African American</i>	<i>% of Pop.</i>	<i>American Indian</i>	<i>% of Pop.</i>
All Respondents	562	90.94%	8	1.29%	12	1.94%
Low Income	98	83.76%	1	0.85%	6	5.13%
Pullman	320	89.14%	6	1.67%	7	1.95%
Non-Pullman	242	93.44%	2	0.77%	5	1.93%
Pullman, Low Income	45	78.95%	1	1.75%	3	5.26%
Non-Pullman, Low Income	53	88.33%	0	0.00%	3	5.00%
Student	40	86.96%	1	2.17%	0	0.00%
Non-Student	519	91.53%	7	1.23%	12	2.12%

<i>Convenience Sample Group</i>	<i>Asian</i>	<i>% of Pop.</i>	<i>Native Hawaiian</i>	<i>% of Pop.</i>	<i>Other</i>	<i>% of Pop.</i>
All Respondents	28	4.53%	3	0.49%	17	2.75%
Low Income	7	5.98%	0	0.00%	7	5.98%
Pullman	24	6.69%	3	0.84%	8	2.23%
Non-Pullman	4	1.54%	0	0.00%	9	3.47%
Pullman, Low Income	6	10.53%	0	0.00%	3	5.26%
Non-Pullman, Low Income	1	1.67%	0	0.00%	4	6.67%
Student	5	10.87%	0	0.00%	1	2.17%
Non-Student	23	4.06%	3	0.53%	16	2.82%

<i>Convenience Sample Group</i>	<i>Hispanic (Self)</i>	<i>% of Pop.</i>	<i>Hispanic (In Household)</i>	<i>% of Pop.</i>
All Respondents	15	2.43%	33	5.34%
Low Income	6	5.13%	11	9.40%
Pullman	12	3.34%	28	7.80%
Non-Pullman	2	0.77%	5	1.93%
Pullman, Low Income	5	8.77%	9	15.79%
Non-Pullman, Low Income	1	1.67%	2	3.33%
Student	6	13.04%	8	17.39%
Non-Student	9	1.59%	25	4.41%

Whitman County Community Needs Assessment - November 2015

<i>Convenience Sample Group</i>	<i>No High School Diploma</i>	<i>% of Pop</i>	<i>High School Only</i>	<i>% of Pop</i>
All Respondents	3	0.49%	50	8.09%
Low Income	2	1.71%	15	12.82%
Pullman	0	0.00%	14	3.90%
Non-Pullman	3	1.16%	36	13.90%
Pullman, Low Income	0	0.00%	4	7.02%
Non-Pullman, Low Income	2	3.33%	11	18.33%
Student	0	0.00%	0	0.00%
Non-Student	3	0.53%	49	8.64%

<i>Convenience Sample Group</i>	<i>Some College / A.A. Degree</i>	<i>% of Pop</i>	<i>Bachelor's Degree or More</i>	<i>% of Pop</i>
All Respondents	123	19.90%	437	70.71%
Low Income	35	29.91%	63	53.85%
Pullman	44	12.26%	299	83.29%
Non-Pullman	79	30.50%	138	53.28%
Pullman, Low Income	11	19.30%	41	71.93%
Non-Pullman, Low Income	24	40.00%	22	36.67%
Student	4	8.70%	42	91.30%
Non-Student	119	20.99%	395	69.66%

<i>Convenience Sample Group</i>	<i>Internet Access</i>	<i>% of Pop</i>	<i>No Internet Access</i>	<i>% of Pop</i>
All Respondents	583	94.34%	30	4.85%
Low Income	103	88.03%	12	10.26%
Pullman	346	96.38%	10	2.79%
Non-Pullman	237	91.51%	20	7.72%
Pullman, Low Income	54	94.74%	1	1.75%
Non-Pullman, Low Income	49	81.67%	11	18.33%
Student	46	100%	0	0.00%
Non-Student	532	93.83%	30	5.29%

## **Appendix 4: Survey Methodology**

### *Random Sample*

“The study population for this survey included the estimated 38,035 adults living in Whitman County during the winter months of 2015. A random sample of 1,500 addresses, from across the county was drawn from the United States Postal Service database of active mailing addresses” (SESRC 2015a). Respondents were first sent information about accessing the questionnaire via the web, with follow-up reminders and a paper copy of the questionnaire sent to non-responding households (see timeline below).

<i>Random Sample Timeline</i>	
February 12, 2015	Invitation describing the study and instructions on how to access the survey online with their assigned ID number was mailed to residences
February 25, 2015	Reminder postcard was mailed to all non-responding households
March 6, 2015	Reminder letter and paper/pencil copy of questionnaire (and return envelope) was mailed to non-respondents
April 1, 2015	Final reminder postcard sent to non-respondents

“The response rate is the ratio of completed and partially completed questionnaires to the total eligible survey group... For the random sample, 369 out of 1,500 households completed or partially completed the survey resulting in a 24.6% response rate” (SESRC 2015a). This response rate far exceeded expectations, and over half the respondents completed the survey on the web (see below).

<i>Random Sample</i>	<i>Frequency</i>	<i>Percent</i>
Completed survey on web	188	50.9%
Partially completed survey on web	23	6.2%
Completed mail survey (paper)	158	42.8%

### *Convenience Sample*

A convenience sample was also used to increase the information gained from the non-Pullman portions of Whitman County, as well as from low-income respondents throughout Whitman County. “Invitations to complete the survey online were given to people visiting various service organizations and events in Whitman County during the months of May and June of 2015 [after the random sample had been closed]. Paper versions of the survey were also made available. The results of this phase of the survey can only be examined in terms of the individuals who completed it and cannot be extended or generalized to any larger population” (SESRC 2015b).

<i>Convenience Sample</i>	<i>Frequency</i>	<i>Percent</i>
Completed survey on web	592	68.7%
Partially completed survey on web	233	27%
Completed mail survey (paper)	37	4.3%