

STREETCAR IN THE CITY:  
AN ANALYSIS OF HOW STREETCARS AFFECT GENTRIFICATION

A Thesis

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California State University, Sacramento

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by

Renée Funston

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by

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Abstract  
of  
STREETCAR IN THE CITY:  
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Development often causes gentrification. Some groups purposefully seek gentrification to improve the social and economic status of an area. Other groups oppose gentrification because of its social impacts on the community and existing residents. Modern-era streetcars demonstrate the double-edged sword of gentrification. Local governments across the U.S. are developing streetcars to promote economic development. However, development of a streetcar can increase the desirability of an area, which may displace long-time residents. This thesis addresses the question: Do modern-era streetcars cause gentrification?

Using U.S. Census and American Community Survey data, this thesis employs logistic regression analysis to determine if streetcars cause gentrification. The data compares the cities of Little Rock, Tacoma, Tampa, Portland, Seattle, and Memphis because these cities have modern-era streetcars. The areas “treated” by proximity to a modern-era streetcar are the census tracts that intersect the streetcar line. The “control” is the city. This thesis uses different dependent variables in three separate models to assess

the effects of gentrification: median household income, percent of college graduates, and median contract rent.

This thesis found that a few years after operation of a streetcar begins there are signs of gentrification, as evidenced by a rise in median household income, proportion of college graduates, and median rent. I found that each year after a streetcar opens the indicators of gentrification increased. However, I cannot be certain that the streetcar caused the changes in the dependent variables or has a correlation with it. There could be an overall trend in development in the area and the streetcar was one of many large-scale developments at a given time.

This thesis considers the impact of a capital project (i.e., streetcar) on gentrification because of the prominence of issues related to gentrification in public policy today. There are important lessons for local governments to consider to ease tensions over development. Local governments need to focus on growing a diverse housing stock and embracing the characteristics that make their jurisdiction distinctive. Local governments also needs to improve opportunities for higher density housing in the downtown area to prevent an increase in housing supply pressure because this pressure can lead to a rapid increase in rent. Finally, local governments need to insure an adequate affordable housing stock to prevent housing displacement.

Conclusions Reached

\_\_\_\_\_, Committee Chair  
Robert W. Wassmer, Ph.D.

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## **I. INTRODUCTION**

The pursuit of economic development often causes gentrification. For some, gentrification is method to “revitalize” and “transform” a neighborhood into a higher-status area. Local government agencies frequently pursue gentrification through capital projects that upgrade the face of the neighborhood. Gentrification is beneficial because it increases amenities and attracts people to live, work, and spend money in the area, which promotes economic development and desirability. For others, gentrification is an unintended consequence of development that has harmful social impacts, such as housing displacement. Housing displacement is an act of socioeconomic segregation in which higher-status newcomers involuntarily displace lower-income long-time residents. Gentrification changes the dynamics of a neighborhood, often without the weigh-in of existing residents.

Modern-era streetcars demonstrate the double-edged sword of gentrification. Local government agencies are building modern-era streetcars to promote economic development. Streetcars demonstrate dedication to growth and development of an area because the fixed guideway cannot change. Streetcars strengthen the central business district by bringing a continual wave of customers along the alignment. These benefits also pose social consequences of changing the dynamics of a neighborhood. Landowners can capitalize on demand for proximity to amenities and raise rents because their properties will have a higher assessed value. Long-time residents who are unable to afford the higher rents may experience involuntarily housing displacement. The streetcar

might serve only a small portion of the total population, namely affluent residents adjacent to the line, white-collar professionals, and tourists. As local governments consider streetcar projects, a comprehensive analysis will include attention to gentrification and housing displacement.

The Cities of Sacramento and West Sacramento are in the process of securing funding for development of a modern-era streetcar, known as the Downtown/Riverfront Streetcar Project. While decision-makers have been carefully analyzing many facets of the Downtown/Riverfront Streetcar Project, including financing, economic development, transit utility, operating and maintenance costs, and ridership forecast, there is a large gap in the analysis. The purpose of this thesis is to assess the gentrification effects of existing modern-era streetcars to inform decision-making of streetcar projects because this project may result in gentrification and housing displacement. The lessons learned from this thesis can apply to other cities that are considering a streetcar or other fixed-alignment transportation options. This introductory chapter provides background on the Downtown/Riverfront Streetcar Project to frame the analysis of resulting gentrification and policy recommendations.

## **The Downtown/Riverfront Streetcar Project**

### ***Brief History of Streetcars in Sacramento***

Streetcars played an integral role in the development of Sacramento. Electric streetcars commenced in Sacramento in 1890 and continued to run passenger service through 1947 (Burg, 2006; City of Sacramento, 2012). Sacramento did not develop streetcars to be a profitable investment, but rather to promote the success of other

developments (Burg, 2006). They were a critical tool that supported the growth of the city into the present suburbs of Curtis Park, Oak Park, East Sacramento, and Land Park (Burg, 2006; Nauman, 2014). At the height of streetcar service in Sacramento, city limits were largely limited to a distance of two blocks from streetcar alignment (Burg, 2006).

**FIGURE 1**  
**STREETCAR ENTERING OAK PARK**  
 Sacramento  
 1987



*Source: Playle, n.d.*

Figure 1 shows a 1987 postcard, which highlights the prominence of streetcars in the development of Sacramento.

### ***Overview of the Downtown/Riverfront Streetcar Project***

A modern-era streetcar in the Sacramento region has been in the works for over two decades (City of Sacramento, 2012; URS Corporation, 2015). Planning documents,

including the Downtown Sacramento Historic Trolley Study (1994), the SACOG Metropolitan Transportation Plan for 2035 (2008), the Sacramento Regional Transit Long Range Plan (2009), and the City of Sacramento and City of West Sacramento General Plans, highlighted the concept of a streetcar in the core of Sacramento (City of Sacramento, 2012). The City of Sacramento, City of West Sacramento, Sacramento Regional Transit District, and Yolo County Transportation District have been working in partnership since 2006 to study the feasibility of a streetcar in the urban core. These agencies are pursuing the Downtown/Riverfront Streetcar Project to achieve the following objectives:

- Improve mobility and connectivity;
- Alleviate roadway congestion;
- Reduce air quality issues;
- Connect employment centers, commercial corridors, residential neighborhoods, future development areas, and visitor destinations;
- Enhance city identity;
- Augment transit service; and
- Support local and regional development (City of Sacramento, 2012; URS Corporation, 2015).

The Downtown/Riverfront Streetcar Project is estimated to cost from \$125 to \$135 million for capital costs (City of Sacramento, 2012). Federal grant funding is available for new streetcar projects through the Federal Transit Administration (FTA) Small Starts program. The project must also have a demonstrated local financial



commitment of at least half of the total project costs to apply for Small Starts.

Sacramento County allocated \$3 million to the streetcar reinstallation project in April 2015. The City of West Sacramento also plans to pay \$25 million and the City of Sacramento will provide \$7 million (Branan, 2015).

To close the remaining funding gap, supporters proposed a Mello-Roos District called Measure B: Sacramento Streetcar Community Facilities District. A Mello-Roos District requires two-thirds of voter approval and is a special tax assessed to property owners within the district to fund infrastructure and services within the district. Measure B aimed to tax residents within three blocks of the proposed streetcar line to provide a maximum of \$38 million (Dawid, 2015). Measure B focused on residents neighboring the proposed route because supporters argued the main beneficiaries of the streetcar were most likely to be those who reside right next to it. The measure failed in a June 2, 2015 special election, with approximately 1,200 residents voting against the proposition (Bizjak, 2015).

Following rejection of the Mello-Roos District, public officials are exploring the potential for a benefit assessment district. A benefit assessment district requires a detailed professional engineer's report outlining the economic benefit for each property owner along the route (Hose, 2015). The report must outline the proposed project costs, annual cost to each property, and the methodology used to determine economic benefit. The calculated economic benefit to each owner's property is the basis for the annual property owner contributions to the benefit assessment district. Each property owner within the proposed benefit assessment must receive a public hearing notice and voting ballot

through the mail at least 45 days before the public hearing. If the majority of ballots oppose the benefit assessment district, then the proposal does not pass. If the majority supports the proposal the governing board will consider whether to approve the district (California Tax Data, 2015). As of January 2016, decision-makers are waiting for the professional engineer's report to decide whether to pursue this financing mechanism and schedule a spring vote (Bizjak, 2015).

### ***Role of the Project to Address Growth***

The area surrounding the proposed streetcar alignment is undergoing considerable housing development, which will cause significant social change for existing residents. In August 2015, the Sacramento City Council approved the Downtown Housing Initiative to support the central city development of 10,000 new housing units from 2015 to 2025 (City of Sacramento, n.d.). There are six major infill development areas planned to develop housing in Sacramento and West Sacramento: the Railyards, the River District, the R Street Corridor, the Bridge District, the Washington District, and the Docks. Development plans of these areas will create approximately 18,600 new residential units and approximately 23 million square feet of new commercial space (URS Corporation, 2015). These infill development areas neighbor the 3.3-mile proposed streetcar alignment (see Figure 2) (Downtown/Riverfront Streetcar Project, 2015).

**FIGURE 2**  
**PROPOSED STREETCAR ALIGNMENT**  
 Sacramento and West Sacramento  
 2016



Source: *Downtown/Riverfront Streetcar Project, 2015.*

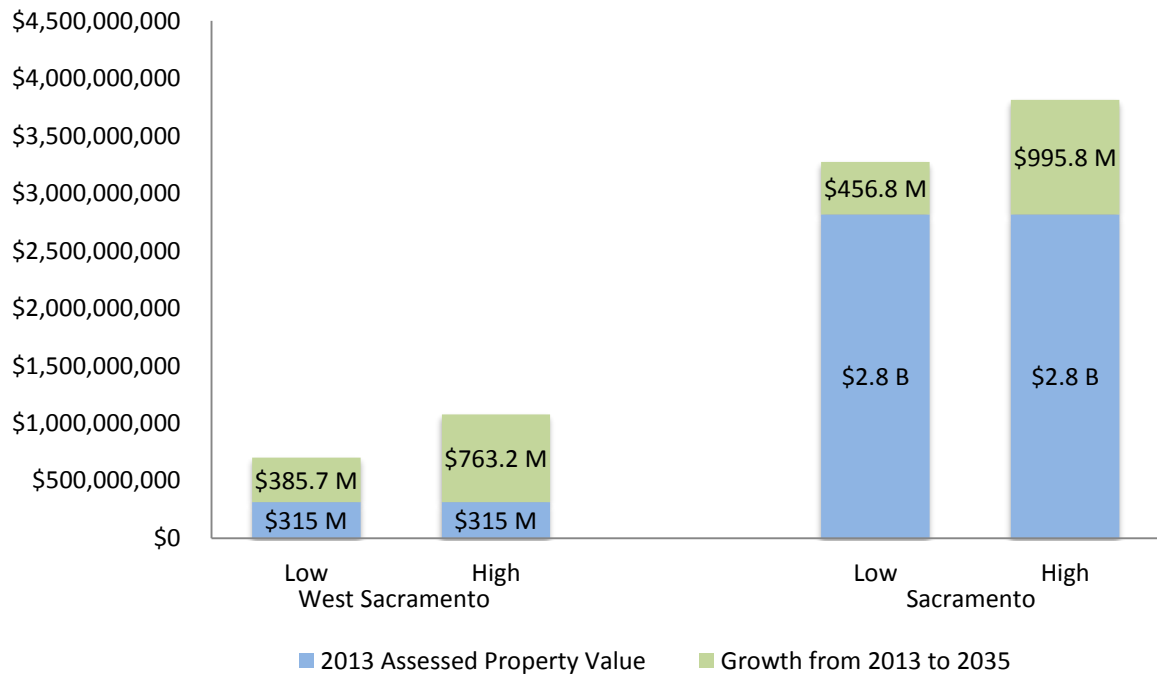
### ***Projected Economic Benefit***

Despite relatively high capital costs, the Economic Benefits Analysis report projects that from 2013 to 2035, the streetcar will grow property values within three blocks of proposed streetcar alignment by \$456.8 million (low projection) to \$995.8 million (high) in Sacramento. The report projects property values to grow by \$385.7 million (low) to \$763.2 million (high) during the same period in West Sacramento (see Figure 3). This thesis will test of the validity of these assumptions by comparing income growth and rent increases (proxies for higher property values) around existing streetcars.

Note: In 2013, 12.3 percent of the existing property value within three blocks of proposed

alignment in Sacramento and 18.4 percent of West Sacramento is residential and the remaining is commercial, entertainment, industrial, parking, or vacant (Strategic Economics, 2013).

**FIGURE 3**  
**PROJECTED PROPERTY VALUE**  
 West Sacramento and Sacramento  
 2013<sup>1</sup> to 2035<sup>2</sup>



Note:

<sup>1</sup> 2013 assessed property value is based on property within three blocks of proposed streetcar alignment.

<sup>2</sup> Projected growth from 2013 to 2035 is the projected value of existing property and new development within three blocks of proposed streetcar alignment.

Source: Sacramento County Assessor’s Office, 2012; Strategic Economics, 2013; Yolo County Assessor’s Office, 2012.

The projected increase in property values is concerning for lower-income renters because of the high potential for housing costs increases. The two census tracts that overlap with the majority of the proposed streetcar alignment in Sacramento (Sacramento County census tracts 7 and 11.01) have a substantially lower median household income and considerably higher renter-occupied rate. According to the 2010-2014 American

Community Survey, these two census tracts had a median household income of \$11,833 and \$17,209 compared to \$50,013 citywide. These two census tracts also had a renter-occupied rate of 100 percent and 83.7 percent compared to 52.4 percent citywide. Note: Due to the small sample size of these two census tracts, there is a large margin of error of +/- \$907 and +/- \$9,728 for the 90 percent confidence interval of median household income, and 10.5 percent and 7.9 percent for percentage renter-occupied.

### **Thesis Roadmap**

The Cities of Sacramento and West Sacramento are pursuing the Downtown/Riverfront Streetcar Project to transform the city center. Revitalizing urban centers often entails an increase in economic activity that brings more amenities and jobs to an area. Gentrification is the double-edged sword of urban revitalization that many think of as an inevitable result of development. For some, gentrification is the goal to transform an area and for others it is a threat to the community. The following chapters will address the question: Do modern-era streetcars cause gentrification? The next chapter will review academic literature on transit-induced gentrification highlighting publications on the role of modern-era streetcars. Thereafter, this thesis will discuss the methodology for measuring the effect of modern-era streetcars on gentrification. Next, this thesis will describe data and findings from the regression analysis. Finally, this thesis will provide policy recommendations for the Downtown/Riverfront Streetcar Project to mitigate potential social effects of gentrification and housing displacement.

## II. LITERATURE REVIEW

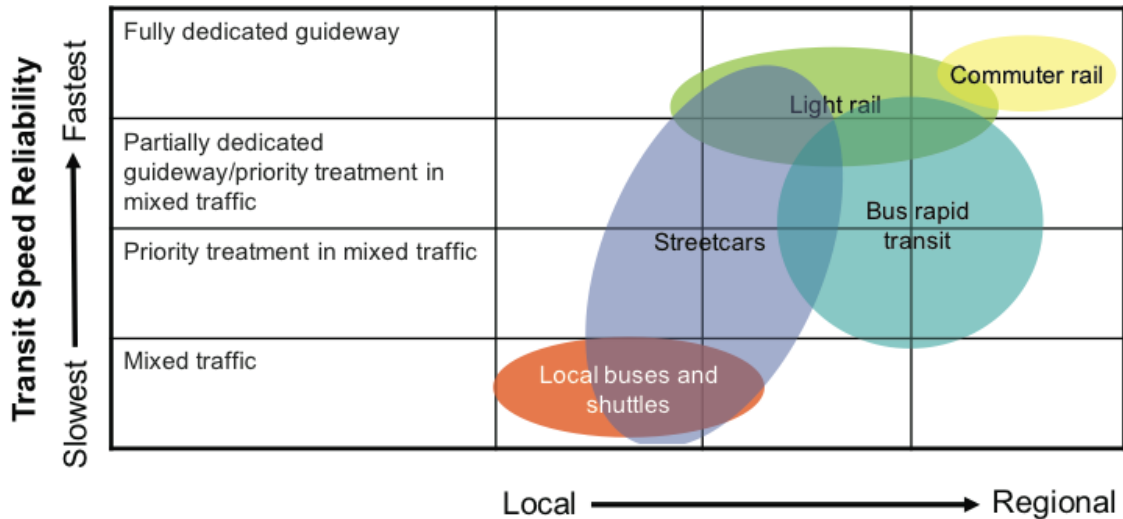
This chapter reviews the body of literature on gentrification effects of modern-era streetcars. Because there is limited academic literature on modern-era streetcars, this literature review highlights the relationship between fixed-guideway transit and gentrification. The first section discusses the defining features of streetcars and gentrification, followed by an examination of the relationship between fixed-guideway transit and gentrification, and concludes with a review of research methods and key indicators to identify transit-induced gentrification.

### **Defining Features**

#### *Streetcars*

Despite widespread disappearance from the transit scene in the mid-20<sup>th</sup> century, local governments throughout the country are reviving streetcars. While streetcars closely resemble trolleys, modern-era streetcars represent a contemporary convenience and are a tool for economic development, hence the resulting gentrification. The characteristics of streetcars are short (one- or two-car) trains that stop every couple of blocks, have frequent headways, are powered electrically, travel at similar speeds to pedestrians, and focus on moving people within the city center (Brown, 2013; Brown, Nixon, & Ramos, 2015; Golem & Smith-Heimer, 2010; Ramos-Santiago & Brown, 2015). Streetcars improve local area accessibility because they are the “last mile” transit link (Brown et al., 2015). Streetcars expand the range of a walkable neighborhood from 20-minute radius to approximately one to four miles. Streetcars are the connection between local buses and light rail within the hierarchy of public transit (see Figure 4) (City of Sacramento, 2012).

**FIGURE 4**  
**HIERARCHY OF PUBLIC TRANSIT**



Source: City of Sacramento, 2013.

### ***Gentrification***

From 1960 to 1990, cities across the U.S. experienced urban middle-class flight and disinvestment (Hyra, 2015; Zuk, et al., 2015). The back-to-the-city movement is the reversal of this pattern in which population and capital investments arrive in urban cores (Hyra, 2015). Middle- to high-income households drive the back-to-the-city movement by relocating to neighborhoods that households of lower socioeconomic status inhabit (Freeman, 2005; Grube-Cavers & Patterson, 2015; Pollack et al., 2010; Zuk et al., 2015). Urban middle-class flight and the back-to-the-city movement highlight racial tension between blacks and whites (Freeman, 2005; Hyra, 2015). Some literature highlights that decision-makers purposefully seek gentrification (Zuk et al., 2015) as a tool to revitalize neighborhoods in decline and attract middle- to higher-class residents to an area (Freeman, 2005; Zuk et al., 2015).

Gentrification is the process of neighborhood change in which middle- to high-income households migrate to central city neighborhoods predominantly populated by lower-income households (Freeman, 2005; Grube-Cavers & Patterson, 2015; Pollack, Bluestone, Billingham, 2010; Zuk et al., 2015). Gentrification results in neighborhood transformation into a higher status area at a faster rate than surrounding areas (Freeman, 2005; Grube-Cavers & Patterson, 2015; Pollack, et al., 2010; Zuk et al., 2015). The neighborhood must have a large proportion of lower-income residents, and have previously experienced disinvestment for gentrification to occur (Freeman, 2005; Grube-Cavers & Patterson, 2015).

Different segments of the population unevenly experience the effects of gentrification (Hyra, 2015; Pollack et al., 2010). Gentrification is desirable because it is increased investment in formerly neglected neighborhoods, which often brings increased amenities, improved public services, and rehabilitated housing (Freeman, 2005). Lower-income households that depend on public services, such as public transit accessibility, particularly benefit from gentrification (Pollack et al., 2010). However, the increase in desirability leads to a rise in housing costs (Bluestone et al., 2008; Dawkins & Moeckel, 2014; Freeman, 2005; Grube-Cavers & Patterson, 2015; Pollack et al., 2010; Zuk, et al., 2015). This makes political figures and real estate professionals the winners of gentrification because they benefit from property value and municipal tax base increases (Freeman, 2005; Hyra, 2015). The consistent losers are working class households because a considerable portion of this group consists of lower-income renters. Lower-income renters are susceptible to change because they do not own their homes so they are at the



will of property owners who have the ability to raise prices (Bluestone et al., 2008; Dawkins & Moeckel, 2014; Freeman, 2005; Pollack et al., 2010). Lower-income renters are particularly notable because research identifies these demographic characteristics as the most likely to use and live near public transit (Pollack et al, 2010). Lower-income households that cannot afford increasing housing costs find themselves priced out of the market (Bluestone et al., 2008; Dawkins & Moeckel, 2014; Freeman, 2005; Grube-Cavers & Patterson, 2015; Pollack et al., 2010).

Housing price changes are based on competition over location (Bluestone et al., 2008; Dawkins & Moeckel, 2014). Alonso’s bid-rent curve demonstrates the process of gentrification and housing

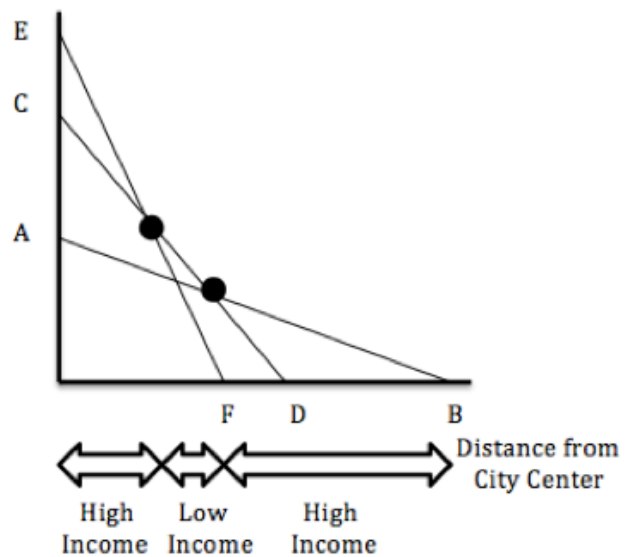
displacement (see Figure 5).

Higher-income households have the means to outbid lower-income households for preferred land in the center of the city (bid-rent curve EF in the figure) or in the city periphery (bid-rent curve AB)

(Bluestone et al., 2008; Dawkins & Moeckel, 2014). Because of

increased demand for proximity to the city center, lower-income households may have trouble finding housing that they can afford in the city center (Bluestone et al., 2008; Freeman, 2005; Grube-Cavers & Patterson, 2015) and continue to be unable to afford

**FIGURE 5  
BID-RENT CURVE OF GENTRIFICATION**



Source: Bluestone et al., 2008.

housing in expensive suburbs (Bluestone et al., 2008; Grube-Cavers & Patterson, 2015). As a result, they find themselves pushed into less desirable areas just beyond the central city (bid-rent curve CD). Relocation of middle- to high-income households into the urban core results in high-rent housing in the city center, a ring of lower-income tenants on the periphery of the city center, and high-cost homes in surrounding suburbs (Bluestone et al., 2008).

While gentrification and displacement often appear synonymous, gentrification does not always result in displacement (Freeman, 2005; Pollack et al., 2010). Housing displacement is a potential effect of gentrification, which occurs when higher-income households displace long-time lower-income residents in the central city because of constrained housing supply (Freeman, 2005; Hyra, 2015; Pollack et al., 2010; Zuk et al., 2015). One study found housing displacement plays a minor role in the demographic changes of gentrifying neighborhoods (Freeman, 2005). An adequate supply of housing that is affordable to low- and middle-income households can prevent housing displacement (Dawkins & Moeckel, 2014; Pollack et al., 2010).

## **Fixed-Guideway Transit and Gentrification**

### ***The Role of Capital Investments***

While streetcars are inherently a mode of public transit that can promote equity, many local governments make the capital investment in streetcars for economic benefits and urban revitalization. Streetcars enhance accessibility by enabling people to reach jobs, healthy food, and housing choices without automobile ownership (Dawkins & Moeckel, 2014; Levinson & Istrate, 2011). However, public transit can also have

unintended consequences that causes these social problems (Dawkins & Moeckel, 2014). Property owners can capitalize on demand for transit proximity by raising housing and land prices (Dawkins & Moeckel, 2014; Hyra, 2015; Pollack et al., 2010), as evidenced by the “value premium” or increase in property value and economic activity related to development of a streetcar (Golem & Smith-Heimer, 2010). The increase in property value from streetcars can result in gentrification and housing displacement (Dawkins & Moeckel, 2014; Hyra, 2015; Pollack et al., 2010).

The effects of capital investments are so profound that for many communities the development of new amenities is the manifestation of newcomer dominance (Hyra, 2015). While long-time residents are appreciative of neighborhood improvements, they may become resentful of new amenities because it results in social destabilization and change (Freeman, 2006; Hyra, 2015). Some authors argue decision-makers develop new amenities with the purpose of attracting high status residents to spur revitalization (Freeman, 2005; Hyra, 2015). Another perspective is decision-makers undertake capital investments when there is an influx of white residents because this demographic has greater political power and demands better infrastructure (Freeman, 2006; Hyra, 2015). Regardless of which came first, public investment in amenities is associated with an influx of newcomers (Hyra, 2015; Pollack et al., 2010; Zuk et al., 2015). Newcomers establish new norms that align with their tastes and politically, socially, and often physically displace long-time residents (Hyra, 2015; Zuk et al., 2015). The loss of identity and decreased attachment to place contributes to departure of lower-income residents (Hyra, 2015; Zuk et al., 2015).

Streetcars are a new amenity that generates interest in an area that can attract development and enhance revitalization efforts (Brown et al., 2015; E. D. Hovee & Company, LLC, 2008). Local governments use streetcars to signal to the private sector that the area along the streetcar alignment has strong development potential to the extent that local governments are willing to make a permanent commitment through rail. Streetcars are anchors for development because they are capital infrastructure, unlike a bus line that can easily change. An interview with a business leader in Portland found the “streetcar was never primarily a transportation tool”—the goal was “assisting and reviving intercity neighborhoods” and “encouraging intercity development” (Brown et al., 2015). Since property values increase from the benefits of transit proximity, land value capture of the increase in property values can offset the capital costs and reduce risk for increasing housing costs (Brown et al., 2015; Levinson & Istrate, 2011).

To understand the resurgence of streetcars, the literature considers the role of Federal capital investments. Capital grant funding available under the Federal Transit Administration (FTA) Small Starts program largely led to the reemergence of the streetcar (Brown, 2013; Brown et al., 2015; E. D. Hovee & Company, LLC, 2008). There is greater availability of capital funding for less expensive rail projects, such as streetcars, compared to more expensive rail projects, such as light rail trains (Brown, 2013; E. D. Hovee & Company, LLC, 2008).

## **Research Methods and Key Indicators to Measure Transit-Induced Gentrification**

### ***Research Methods***

Studies that focus on displacement are more complex because it is difficult to isolate one reason for households moving from a neighborhood. Lower-income households may depart a neighborhood for numerous reasons, such as normal housing turnover or changing life circumstances, which have no direct relationship with gentrification or involuntary housing displacement (Freeman, 2005; Pollack et al., 2010). A focus on displacement requires additional analysis to determine if the cause was gentrification, such as examination of the characteristics of those who move into an area in contrast to those moving out (Freeman, 2005). Another approach is to retroactively ask people why they moved from one area to another (Freeman, 2005).

Alternatively, regression analysis is a method to measure the effects of fixed-guideway transit on gentrification (Freeman, 2005; Grube-Cavers & Patterson, 2015; Zuk et al., 2015). Regression analysis allows the researcher to analyze the characteristics of a gentrified neighborhood and isolate the effect of capital transit investments.

Neighborhoods must meet a series of criteria to have the potential to gentrify.

Gentrification occurs in central cities, therefore non-urban and fringe areas are not gentrifiable (Freeman, 2005; Grube-Cavers & Patterson, 2015). If non-urban and fringe areas were included, the regression analysis would show a positive relationship because urbanization occurred (Grube-Cavers & Patterson, 2015). The unit of analysis is census tracts because they are sufficiently small to capture the differences between neighborhoods (Freeman, 2005; Grube-Cavers & Patterson, 2015; Kahn, 2007).

Numerous authors use U.S. Census data to determine the effects of fixed-guideway transit on gentrification (Freeman, 2005; Grube-Cavers & Patterson, 2015; Kahn, 2007; Pollack et al., 2010). Because gentrification is a relative process, gentrification occurs when a census tract's key variables are increasing at a faster rate compared to the surrounding area (Grube-Cavers & Patterson, 2015).

### ***Key Indicators of Gentrification***

#### *Household Socioeconomic Status*

Changes in household socioeconomic status demonstrate the effects of gentrification because gentrification is the neighborhood change of *who* is moving into a neighborhood (Freeman, 2005; Pollack et al., 2010). A study highlights the impact of in-movers compared to out-movers as the drivers of gentrification. Neighborhood affluence is a consideration when a household is moving rather than a driver for a household to move out (Freeman, 2005). Key markers of changes in socioeconomic status include median household income (Dawkins & Moeckel, 2014; Freeman, 2005; Grube-Cavers & Patterson, 2015; Kahn, 2007; Pollack et al., 2010; Zuk et al., 2015), and percentage college graduates (Dawkins & Moeckel, 2014; Freeman, 2005; Kahn, 2007; Pollack et al., 2010; Zuk et al., 2015).

One study of 42 transit-rich neighborhoods in 12 metropolitan areas compared relative change in a neighborhood to the metropolitan area before and after a transit station began service. The study found 88 percent of the neighborhoods (37 neighborhoods) had a greater increase in median household income compared to their respective metropolitan statistical area (MSA). The distinguishing characteristic of the

transit-rich neighborhood is at least one new rail transit station. This study found a 57 percent (24 neighborhoods) experienced a growth in median household income within 20 percent of the MSA, and 31 percent (13 neighborhoods) saw income rise by more than 20 percent of the MSA (Pollack et. al, 2010).

### *Housing*

Another key indicator of gentrification is increases in housing costs and housing tenure. Rents and housing values are likely to increase faster in the gentrified neighborhood compared to citywide because of demand for transit accessibility (Dawkins & Moeckel, 2014; Freeman, 2005; Grube-Cavers & Patterson, 2015; Kahn, 2007; Pollack et al., 2010). One study found rapid housing costs within a few years of the transit station opening (Pollack et al., 2010), particularly in neighborhoods dominated by renters (Freeman, 2005; Pollack et al., 2010; Zuk et al., 2015). Lower-income renters are the most vulnerable to the effects of gentrification because they do not own their homes and have a limited income to compete with rising housing costs (Bluestone et al., 2008; Dawkins & Moeckel, 2014; Freeman, 2005; Pollack et al., 2010).

### ***Key Broad Causal Factors of Gentrification***

#### *Time*

Another key factor to measure the effect of transit infrastructure is a “pre/post studies” of housing costs in an area before transit service begins to after (Zuk, et al., 2015). Studies that seek to measure whether gentrification has occurred compare change in a given neighborhood to the average change of the metropolitan region (Grube-Cavers

& Patterson, 2015). Panel data of census tracts is useful for measuring the pre/post effects of transit proximity over time (Kahn, 2007).

### *Place*

A key factor to measure the effect of transit proximity is the distance of a census tract to the transit alignment or a transit stop (Grube-Cavers & Patterson, 2015; Kahn, 2007; Zuk, et al., 2015). The “treated” communities are closer to a transit stop compared to further areas or citywide (Kahn, 2007). One study found development of a subway station within 550 meters of a census tract that previously did not have access to a transit stop, made the census tract five times more likely to gentrify (Grube-Cavers & Patterson, 2015).

### *Type of Transit Infrastructure*

One study highlights the different impacts on gentrification based on whether the station is a “walk and ride” or “park and ride.” The difference is park and ride stations have a parking lot. The presence of a parking lot could lower quality of life because of increased noise, traffic, and congestion. The author used percent college graduate and median household income as key indicators of gentrification. The study found across a 14-city sample from 1970 to 2000, addition of a “park and ride” station lowered the proportion of college graduates by 1.9 percent and lowered median household income by 2 percent. In comparison, addition of a “walk and ride” station increased median household income by 4 percent. In a census tract with higher median income and greater population density, addition of a “walk and ride” station increased the proportion of college graduates by 5.1 percent. As a proxy for housing costs, the author compared



effects of different station types on home prices and found a census tract near a “park and ride” station for 10 years had a 1.9 percent reduction in home prices, compared to a “walk and ride” (Kahn, 2007).

## **Conclusion**

Based on existing research, changes in the demographic makeup of residents demonstrate whether a neighborhood has undergone gentrification. The underlying theme is capital investments can lead to unintended social outcomes including gentrification and housing displacement. From the theoretical basis developed in this literature review, the key indicators to demonstrate the effects of a streetcar on gentrification are median household income, college graduates, and housing costs. Further analysis of literature can determine other key indicators that can bolster a research model.

A major flaw in literature review included studies that lacked a direct nexus between gentrification and streetcars. The studies either focused specifically on gentrification, the relationship between fixed-guideway transit and gentrification, or streetcars. The matter is significant because a prominent research method for gentrification is regression analysis whereas common methods for researching streetcars were case studies, survey, and interviews. The body of literature needs regression analyses because it is an effective method to empirically measure the pre/post relationship between development of a streetcar and gentrification. This thesis will contribute to the body of knowledge on the effects of streetcars on gentrification because I will use regression analysis.

### **III. METHODOLOGY**

The previous chapter reviewed the body of literature on gentrification and the relationship with capital rail investments to provide the theoretical framework for the methodology used in my own study. The key facets of gentrification are an influx of relatively affluent households and reinvestment, which changes the makeup of a community (Freeman, 2005). My study aims to quantify the influence of a modern-era streetcar on gentrification of a neighborhood.

#### **Regression Equation**

I use regression analysis as the tool for analyzing the impact of modern-era streetcars on gentrification. My model will measure changes in the affluence of a neighborhood after development of a modern-era streetcar to determine if gentrification occurred and, if so, the magnitude of its effects. The unit of analysis is census tracts because they are sufficiently small to capture variation across neighborhoods (Kahn, 2007). Census tracts are small, relatively permanent statistical areas that generally have a population size between 1,200 to 8,000 people (U.S. Bureau of the Census, 2012). The theoretical framework hypothesizes that proximity to and time since operation of a modern-era streetcar will strongly influence gentrification of a neighborhood. The areas “treated” by proximity to a modern-era streetcar are the census tracts that intersect the streetcar line. The “control” is the city. The model also hypothesizes that differences in the infrastructure development will vary the effects of gentrification.

Gentrification is the shift in the make-up of a neighborhood that occurs at a faster rate compared to the city. My model will evidence gentrification through three models

because there are three key indicators of gentrification: median household income, percent of college graduates, and average monthly rents. The use of three regression models isolates the impacts of the independent variables on each indicator of gentrification. **Model 1** compares changes in median household income in the census tracts treated by presence of a streetcar compared to citywide. This model asserts the affluence of households inhabiting a neighborhood demonstrates gentrification. **Model 2** measures changes in the concentration of college graduates in an area, which also stresses that gentrification is evidenced by shifts in class of residents in an area. **Model 3** considers changes in average monthly rents because of proximity to a streetcar. Property owners may demand higher rents because of an increase in desirability of the area due to revitalization. Based on data availability, this study will compare the key indicators of gentrification between census tracts and citywide from the 2000 U.S. Census to the 2010-2014 ACS. The regression models explain the relationship between three broad causal factors of time, place, and infrastructure development. The regression model structure is:

**Gentrification =  $f$ (Streetcar Present, Time, Place, and Infrastructure Development)**

**General Causal Factor 1: Streetcar Present** =  $f$ (streetcar present (+))

The first general causal factor is isolating the core variable of whether a streetcar is present. “Streetcar present” is a dummy variable with “1” if the streetcar is in service and “0” if not to isolate the presence of a streetcar. Streetcar present is the key explanatory variable of interest.

**General Causal Factor 2: Time** =  $f(\text{years after streetcar } (+))$

The model seeks to measure the changes in the make-up of a neighborhood after development of a streetcar. The number of years after streetcar is based on the year a city's streetcar started operation. I expect the "years after streetcar" variable will capture the effect of the dependent variable that varies the farther the dependent variable's observation is from the opening of the streetcar. This could theoretically be positive if the effect of a streetcar grows over time, or negative if it diminishes.

**General Causal Factor 3: Place** =  $f(\text{citywide measure of dependent variable } (+))$

The citywide measure of the dependent variable (median household income, percent of college graduates, and median contract rents) controls for changes in the larger macro-area. If the city as a whole is experiencing an increase in economic activity, then the census tracts surrounding a streetcar will also experience these citywide effects.

**General Causal Factor 4: Infrastructure Development** =  $f(\# \text{ of "walk and ride" stations } (+), \# \text{ of "park and ride" stations } (-), \# \text{ of special generators } (+))$

The model also hypothesizes that the number and types of streetcar stations in a census tract will affect gentrification. Transit hubs across the U.S. experience the varying impacts based on whether they offer a free parking lot for transit riders. A "walk and ride" station forces people to walk past businesses, which increase the likelihood that they will patron the business. Having people present on the streets also increases the sense of liveliness and community in an area to attract people.

A streetcar is an infrastructure development that serves as an amenity to activate an area. Additional infrastructure developments in a neighborhood can contribute to

gentrification. The literature referred to these other infrastructure developments as “special generators” and they include sports complexes, convention centers, museums, college campuses, and other tourist attractions (Brown et al., 2015). Presence of special generators is significant because many local government agencies pursue streetcars to revitalize urban landscapes. In the case of downtown Sacramento, the attention to the new sports arena that will open by October 2016 (Sacramento Kings Limited Partnership LLC, n.d.) is adjacent to the planned streetcar. The sports arena is likely contributing to gentrification of downtown Sacramento and the model will isolate the impacts of a streetcar from these other types of development.

### **Model Specification**

Ordinary least-squares (OLS) regression is appropriate because the dependent variables in all three models are continuous.

### **Data**

The model uses data for Little Rock, Tacoma, Tampa, Portland, Seattle, and Memphis because these cities have modern-era streetcars, which are typical of the types of streetcar systems local governments around the nation are pursuing. Previous studies highlighted operation of modern-era streetcars in these cities. The City of Sacramento stated the Downtown/Riverfront Streetcar Project is comparable to existing streetcars in Portland, Seattle, Tacoma, and Tampa (2012). The existing streetcars in these four cities were built since 2000 and do *not* fall into the categories of serving as a heritage or tourist-oriented system (City of Sacramento, 2012). A 2015 Mineta Transportation Institute study on modern-era streetcars focused on Little Rock, Memphis, Portland, Seattle, and

Tampa because these cities have modern-era streetcars with year-round, everyday revenue service (Brown et al., 2015). To draw as large of a sample size as possible, I included all six cities from these two studies. Table 1 lists the cities that I included in this study and the year the streetcar opened in this city.

**TABLE 1  
CITIES & YEAR OPEN**

City	Year Open
Little Rock, AR	2004
Memphis, TN	1993
Portland, OR	2001
Seattle, WA	2007
Tacoma, WA	2003
Tampa, FL	2002

Due to data availability, the model includes demographic and housing data from the 1990 and 2000 U.S. Census, and the 2006-2010 through 2010-2014 American Community Survey (5-year estimates). Because the American Community Survey provides 5-year estimates, I used the mid-year of the estimate to code the data. For example, I coded the 2006-2010 estimate as 2008. The U.S. Census is a decennial count of every resident in the U.S. that provides demographic information (U.S. Census Bureau, 2016). The American Community Survey (ACS) is a program of the U.S. Census Bureau that provides up-to-date information on the demographic and economic characteristics of communities throughout the U.S. A small portion of the population completes the ACS survey annually and the results estimate the characteristics of the total population (U.S. Census Bureau, 2016). Because this thesis focuses on community dynamics, both the U.S. Census and the ACS are useful tools to provide information about demographic dynamics in neighborhoods (Kahn, 2007).

My study found significant data on the characteristics of each streetcar system from the transit system's main webpage. Information on the year streetcar service began was found on the transit's main webpage and verified by previous studies referenced in the literature review. This study found information on whether a census tract intersects or is adjacent to streetcar alignment from comparing a map of the streetcar alignment with a map of census tracts from the U.S. Census American Factfinder website. I found data on whether a streetcar stop had a public parking lot for transit riders from the transit system's web page. I categorized each streetcar station as "park and ride" if there is a public parking lot for transit riders, or "walk and ride" if there was no public parking lot.

Data on presence of neighboring special generators came from a Google search of "points of interest," which was then compared to a map of census tracts from the U.S. Census American Factfinder website to determine the number of "special generators" within the census tracts with streetcars. I included the number of "special generators" based on how many of the sites were in operation. I found the year that the special generator opened on the site's website or through newspaper articles. Appendix B shows each of the special generators that I included in this study and the opening year.

Together, the descriptive statistics paint a picture of the data set. Table 2 provides the descriptive statistics of the data. The mean is the average of all the observations of that variable. The standard deviation demonstrates the volatility of the variation in all of the observations from the mean. Approximately 95 percent of the observations should fall within plus/minus two times the standard deviation of a variable's mean. The plus/minus values form the 95 percent prediction interval (Princeton, 2007). The minimum is the

smallest value for an observation of that variable, and the maximum is the largest. The elasticity is the reaction from a given variable to the dependent variable (income, college graduates, or rent).

The third critical component to comprehensive understanding of the data set is pairwise correlations, or multicollinearity. Pairwise correlations measure the linear relationship between two variables, indicating the level of dependence. Pairwise correlation coefficients range from -1 to 1, with -1 signifying a total negative relationship, 0 is no relationship, and 1 is perfect dependence. A pairwise correlation greater than the absolute value of 0.8 may indicate the presence of multicollinearity. Multicollinearity is important because when high multicollinearity is present it biases standard errors of regression coefficients upward, raising the reported t-statistic, and increasing the possibility of finding a regression coefficient statistically insignificant.



**TABLE 2  
DESCRIPTIVE STATISTICS**

	<b>Mean</b>	<b>Standard Deviation</b>	<b>Minimum</b>	<b>Maximum</b>
<b>Dependent Variables</b>				
<b>Median Household Income (Census Tract)</b>	36855.23	21064.38	6157	85259
<b>% Bachelor's Degree or Higher (Census Tract)</b>	44.833	22.283	1.9	80.6
<b>Median Contract Rent (Census Tract)</b>	713.87	325.553	151	1549
<b>Explanatory Variables</b>				
<b>Streetcar Present</b>	0.783	0.414	0	1
<b>Years After Streetcar</b>	6.049	4.136	0	13
<b>Median Household Income (Citywide)</b>	43359.38	10753.27	22674	67365
<b>% Bachelor's Degree or Higher (Citywide)</b>	32.983	11.684	15.8	57.9
<b>Median Contract Rent (Citywide)</b>	656.554	177.833	273	1041
<b># of "Walk and Ride" Stations</b>	3.484	6.132	0	31
<b># of "Park and Ride" Stations</b>	0.571	1.016	0	3
<b># of Special Generators</b>	1.723	2.501	0	10

## **Regression Analysis**

In the previous two sections, I discussed the regression model and the data that I am testing. This section describes how I formed the regression model. Because the model considers neighborhood change over time, the regression model uses longitudinal/panel data. Longitudinal regression analysis measures a consistent set of variables in a geographic area over time to measure the effects of an indicator. Longitudinal/panel data is appropriate for this model because I seek to measure changes in a neighborhood that results from building and opening a streetcar. This thesis employs STATA 14 software.

### ***Fixed or Random Effects***

To begin creating a statistically significant model, I first checked for fixed or random effects. This step identifies if the individual specific influences upon each census tract relate to the dependent variable (income, college graduates, or rent). In contrast, random effects assume that the variation of census tract influences upon gentrification is random and unrelated. For Model 1: Income, Model 2: College Graduates, and Model 3: Rent the test for fixed effects produced the following result: *Probability > F = 0.000*. This finding signifies that with 99.9% confidence we can determine that the data has fixed effects for all three models.

### ***First-Order Autocorrelation***

Next, I checked the data for first-order autocorrelation, which means errors made in the regression prediction for one observation relate to the other observations over time. At the onset, I suspected autocorrelation was very likely to be present because neighborhood change occurs through time, and the American Community Survey data is

a five-year estimate. To check for first-order correlation in panel data, I used the Woolridge test for autocorrelation. For Model 1: Income STATA produced the following result: *Probability > F = 0.0012*, which signifies that with 99.88% there is autocorrelation in the data. For Model 2: College Graduates STATA found the following result: *Probability > F = 0.0005*, which signifies that with 99.95% there is autocorrelation in the data. For Model 3: Rent STATA determined the following result: *Probability > F = 0.0004*, which signifies that with 99.96% there is autocorrelation in the data. Autocorrelation was present in all three models and I corrected for it in all subsequent models using a STATA command.

### ***Multicollinearity***

After I corrected for autocorrelation, I checked for multicollinearity through Variance Inflation Factors and pairwise correlations. Multicollinearity exists when one of the explanatory variables is highly correlated with another explanatory variable. Multicollinearity biases the model because the values of one explanatory variable are able to perfectly predict the values of another explanatory variable (Winters, n.d.). Variance Inflation Factor (VIF) is a measure how much the estimated regression coefficient is inflated compared to the predictor variable because of multicollinearity. A VIF of 1.00 is not correlated, a level of 1.00 to 5.00 demonstrates moderate correlation, a VIF of 5.00 to 10.00 is highly correlated, and a level of 10.00 and higher is extremely correlated. A VIF value of 10.00 or higher is problematic if the regression coefficient is also statistically insignificant. A high VIF value can also explain why a regression coefficient is

statistically insignificant. Table 3 shows the VIF values for each of the explanatory variables.

**TABLE 3  
VARIANCE INFLATION FACTOR**

<b>Explanatory Variable</b>	<b>Variance Inflation Factor (VIF)</b>
<b>Model 1: Income</b>	
# of Special Generators	367.25
# of "Walk and Ride" Stations	295.07
Median Household Income (Citywide)	27.63
Streetcar Present	19.54
Years After Streetcar	12.60
# of "Park and Ride" Stations	7.32
<b>Model 2: College Graduates</b>	
% Bachelor's or Higher (Citywide)	1419.38
Years After Streetcar	247.25
# of "Park and Ride" Stations	71.86
# of "Walk and Ride" Stations	63.20
Streetcar Present	62.30
# of Special Generators	8.54
<b>Model 3: Rent</b>	
Median Contract Rent (Citywide)	13.77
Years After Streetcar	8.46
Streetcar Present	7.71
# of "Park and Ride" Stations	1.94
# of Special Generators	1.82

I continued testing for multicollinearity, now analyzing pairwise correlations (see Table 4). Pairwise correlations measure the linear relationship between two variables, indicating the level of dependence. Pairwise correlation coefficients range from -1 to 1, with -1 signifying a total negative relationship, 0 is no relationship, and 1 is perfect dependence. High pairwise correlations are concerning if the regression coefficient for that variable is not statistically significant. In Model 1: Income, a relationship that had one of the lowest indicators of exhibiting a relationship was between *Median Household Income* and *# of "Park and Ride" Stations* at -0.0048. On the other hand, that pair that demonstrated high negative dependence is *# of "Park and Ride" Stations* and *SQUARE Median Household Income (Citywide)* at -0.2678. This high pairwise correlation is concerning because referring to findings in the best model listed in Table 5, the *# of "Park and Ride" Stations* is not statistically significant. In Model 2: College Graduates a relationship that had one of the lowest indicators of exhibiting a relationship was between *# Park and Ride* and *# Special Generators* at -0.0325. Conversely, that pair that demonstrated high dependence is *Streetcar Present* and *Years After Streetcar* at 0.7729. This high pairwise correlation is not concerning because the regression coefficient for both of these variables are statistically significant, as shown in Table 6. In Model 3: Rent a relationship that had one of the lowest indicators of exhibiting a relationship was between *Median Contract Rent (Citywide)* and *# Special Generators* at -0.0080. Similar to Model 2: College Graduates, the high pairwise correlation is not concerning because both regression coefficients are statistically significant, as shown in Table 7.

**TABLE 4  
PAIRWISE CORRELATIONS**

	<b>Median Household Income (Census Tract)</b>	<b>% Bachelor's Degree or Higher (Census Tract)</b>	<b>Median Contract Rent (Census Tract)</b>	<b>Streetcar Present</b>	<b>Years After Streetcar</b>	<b>Median Household Income (City-wide)</b>	<b>% Bachelor's Degree or Higher (City-wide)</b>	<b>Median Contract Rent (City-wide)</b>	<b># of "Walk and Ride" Stations</b>	<b># of "Park and Ride" Stations</b>	<b># of Special Generators</b>
<b>Median Household Income (Census Tract)</b>	1.0000										
<b>% Bachelor's Degree or Higher (Census Tract)</b>		1.0000									
<b>Median Contract Rent (Census Tract)</b>			1.0000								
<b>Streetcar Present</b>	0.3931*	0.2946*	0.4825*	1.0000							
<b>Years After Streetcar</b>	0.2619*	0.2352*	0.3305*	0.7729*	1.0000						
<b>Median Household Income (Citywide)</b>	0.5323*	0.6361*		0.5942*	0.2223*	1.0000					

	<b>Median House- hold Income (Census Tract)</b>	<b>% Bach- elor's Degree or Higher (Census Tract)</b>	<b>Median Con- tract Rent (Census Tract)</b>	<b>Street- car Present</b>	<b>Years After Street- car</b>	<b>Median House- hold Income (City- wide)</b>	<b>% Bach- elor's Degree or Higher (City- wide)</b>	<b>Median Con- tract Rent (City- wide)</b>	<b># of "Walk and Ride" Stations</b>	<b># of "Park and Ride" Stations</b>	<b># of Special Gener- ators</b>
<b>% Bachelor's Degree or Higher (Citywide)</b>		0.6361*		0.2762*	-0.0353*		1.0000				
<b>Median Contract Rent (Citywide)</b>			0.7299*	0.6814*	0.3742*			1.0000			
<b># of "Walk and Ride" Stations</b>	0.2378*	-0.1547*		0.3003*	0.2781*	0.1635*	0.1272*		1.0000		
<b># of "Park and Ride" Stations</b>	-0.0048	-0.0981*	-0.1254*	0.2967*	0.3287*	-0.2224*	-0.3515*	-0.0984*	-0.2488*	1.0000	
<b># of Special Generators</b>	0.1392*	0.0955*	0.1649*	0.0841*	0.0885*	-0.0781*	-0.1676*	-0.0080	0.5842*	-0.0084	1.0000

### ***Heteroskedasticity***

After I corrected for autocorrelation and multicollinearity, I checked for heteroskedasticity. Heteroskedasticity exists when the variability of the dependent variable is unequal across a range of explanatory variable values. Heteroskedasticity is important because regression models assume the data is homoskedastic across the explanatory variables and that the model can accurately predict the dependent variable (StatisticsSolution, n.d.). Extensive analysis of heteroskedasticity is necessary because neglecting to correct for it will bias the standard error of the regression coefficient, which reduces the robustness of the model. I suspected that heteroskedasticity was present in all three models and checked using the Breusch-Pagan test.

The Breusch-Pagan Test checks the fluctuating variance of the residuals for dependence upon the independent variable. First, I isolated the data to a single year because you cannot run the Breusch-Pagan test on panel data. For Model 1: Income the STATA results were:  $Prob > chi2 = 0.8843$ . With 99.1157% certainty I can say there is heteroskedasticity in the data. For Model 2: College Graduates the STATA results were:  $Prob > chi2 = 0.0560$ . With 99.944% certainty I can say there is heteroskedasticity in the data. For Model 3: Rent the STATA results were:  $Prob > chi2 = 0.2027$ . With 79.73% certainty I can say there is heteroskedasticity in the data. I corrected for heteroskedasticity using a STATA command to produce a robust and statistically significant model.



## ***Regression Models***

### *Model 1: Income*

After I checked the data set for fixed effects, first-order autocorrelation, and heteroskedasticity, I was ready to test the different functional forms. The first functional form is Lin-Lin, which is the original linear model. The next functional forms I tested were Log-Lin, Log-Semilog, and Quadratic. I added quadratic terms to the Lin-Lin form if both the original term and the squared term were statistically significant. The only term that I did not consider adding the quadratic term of was *Streetcar Present* because this was a dummy variable. This form signifies that while many of the variables have a linear relationship to median household income in a census tract, others do not fit a straight-line and rather have a positive (or negative) impact to a given point then the relationship changes direction. Of the variables, *Median Household Income (Citywide)* demonstrated a nonlinear relationship. There was a significant difference in the number of significant results between the four forms, varying from two statistically significant terms for Log-Lin and Log-Semilog, three for Lin-Lin, to five statistically significant terms for Quadratic. Therefore, the Quadratic form was the best for Model 1: Income. Table 5 shows the functional forms for Model 1: Income.

**TABLE 5**  
**MODEL 1: INCOME**  
**FUNCTIONAL FORMS**

Explanatory Variable	Lin-Lin		Log-Lin	
	Dependent Variable: Median Household Income (Census Tract)		Dependent Variable: LN (Median Household Income (Census Tract))	
	Coefficient <sup>12</sup>	P >  z	Coefficient <sup>12</sup>	P >  z
<b>Constant</b>	-6690.011 (4461.777)	0.134	8.58362*** (0.1238665)	0.000
<b>Streetcar Present</b>	-757.738 (2965.656)	0.798	-0.69293 (0.865282)	0.423
<b>Years After Streetcar</b>	791.7738** (389.1477)	0.042	0.162819 (0.0108693)	0.134
<b>Median Household Income (Citywide)</b>	0.8679444*** (0.1017424)	0.000	0.0000363*** (2.84e-06)	0.000
<b># of “Walk and Ride” Stations</b>	-129.5772 (222.7154)	0.561	-0.0021265 (0.0058899)	0.718
<b># of “Park and Ride” Stations</b>	-612.1511 (1719.098)	0.722	0.0524812 (0.0472966)	0.267
<b># of Special Generators</b>	1876.871** (900.4326)	0.037	0.639429*** (0.0218406)	0.003
<b>LN (Median Household Income (Citywide))</b>	--	--	--	--
<b>SQUARE Median Household Income (Citywide)</b>	--	--	--	--
<b>R Squared</b>	0.2059		0.1694	
<b>Number of Observations (N)</b>	184		184	
<b>Number of Significant Results</b>	3		2	

Notes:

<sup>1</sup> \*p<10, \*\*p<5, \*\*\*p<01

<sup>2</sup> Robust standard errors in parenthesis.

**TABLE 5 Continued**  
**MODEL 1: INCOME**  
**FUNCTIONAL FORMS**

Explanatory Variable	Log-Semilog		Quadratic	
	Dependent Variable: LN (Median Household Income (Census Tract))		Dependent Variable: Median Household Income (Census Tract)	
	Coefficient <sup>12</sup>	P >  z	Coefficient <sup>12</sup>	P >  z
<b>Constant</b>	-2.888546** (1.131863)	0.011	18631.85** (7529.502)	0.013
<b>Streetcar Present</b>	0.0463351 (0.0901081)	0.607	-6539.531** (3196.584)	0.041
<b>Years After Streetcar</b>	0.0082095 (0.0114191)	0.472	1219.591*** (395.4765)	0.002
<b>Median Household Income (Citywide)</b>	--	--	-0.7934201* (0.4147367)	0.056
<b># of "Walk and Ride" Stations</b>	-0.0027687 (0.0064502)	0.668	-54.06733 (212.2963)	0.799
<b># of "Park and Ride" Stations</b>	0.0155277 (0.0491129)	0.752	1252.01 (1706.419)	0.463
<b># of Special Generators</b>	0.0584714*** (0.0214119)	0.006	2329.225** (926.4278)	0.012
<b>LN (Median Household Income (Citywide))</b>	1.225574*** (0.1084624)	0.000	--	--
<b>SQUARE Median Household Income (Citywide)</b>	--	--	0.0000229*** (5.41e-06)	0.000
<b>R Squared</b>		0.9667		0.2308
<b>Number of Observations (N)</b>		184		184
<b>Number of Significant Results</b>		2		5

Notes:

<sup>1</sup> \*p<10, \*\*p<5, \*\*\*p<01

<sup>2</sup> Robust standard errors in parenthesis.

*Model 2: College Graduates*

In Model 2: College Graduates, the Lin-Lin, Log-Lin, and Log-Semilog forms each had five statistically significant terms. I did not include a Quadratic form because none of the explanatory variable pairs were statistically significant when I had added the original term and the squared term to the Lin-Lin form. Because all three forms have five statistically significant terms, I determined the best form based on the R-squared value, which was the highest at 52.53% for Log-Semilog. Table 6 shows the functional forms for Model 2: College Graduates.

**TABLE 6**  
**MODEL 2: COLLEGE GRADUATES**  
**FUNCTIONAL FORMS**

	Lin-Lin		Log-Lin		Log-Semilog	
	Dependent Variable: % Bachelor's Degree or Higher (Census Tract)		Dependent Variable: LN (% Bachelor's Degree or Higher (Census Tract))		Dependent Variable: LN ((% Bachelor's Degree or Higher (Census Tract))	
	Coefficient <sup>12</sup>	P >  z	Coefficient <sup>12</sup>	P >  z	Coefficient <sup>12</sup>	P >  z
<b>Explanatory Variable</b>						
<b>Constant</b>	-8.121839* (4.911557)	0.098	1.725553*** (0.1977683)	0.000	-2.212658*** (0.5792918)	0.000
<b>Streetcar Present</b>	-8.898393*** (3.167417)	0.005	-0.3668575*** (0.1370394)	0.007	-0.3174741** (0.1269707)	0.012
<b>Years After Streetcar</b>	1.397218*** (0.4098399)	0.001	0.0478005*** (0.0159202)	0.003	0.0371839** (0.0154146)	0.016
<b>% Bachelor's Degree or Higher (Citywide)</b>	1.413486*** (0.1477542)	0.000	0.0494883*** (0.0053383)	0.000	--	--
<b># of "Park and Ride" Stations</b>	3.356024** (1.378312)	0.015	0.1560267** (0.0691232)	0.024	0.1331823** (0.0666117)	0.046
<b># of Special Generators</b>	1.626344** (0.6754612)	0.016	0.0828984*** (0.0190746)	0.000	0.077814*** (0.0195971)	0.000
<b>LN (Bachelor's Degree or Higher (Citywide))</b>	--	--	--	--	1.638114*** (0.1668114)	0.000
<b>SQUARE Median Household Income (Citywide)</b>	--	--	--	--	--	--
<b>R Squared</b>	0.2823		0.5039		0.5253	
<b>Number of Observations (N)</b>	184		184		184	
<b>Number of Significant Results</b>	5		5		5	

Notes:

<sup>1</sup> \*p<10, \*\*p<5, \*\*\*p<01

<sup>2</sup> Robust standard errors in parenthesis.

*Model 3: Rent*

In Model 3: Rent, the Lin-Lin and Log-Lin forms each had four statistically significant terms, and Log-Semilog form had two statistically significant terms. Similar to Model 2: College Graduates, I did not include a Quadratic form because none of the term pairs were statistically significant when I had added the original term and the squared term to the Lin-Lin form. Because the Lin-Lin and Log-Lin forms have four statistically significant terms, I determined the best form based on the R-squared value, which was the highest at 94.09% for Log-Lin. Table 7 shows the functional forms for Model 3: Rent.

**TABLE 7**  
**MODEL 3: RENT**  
**FUNCTIONAL FORMS**

	Lin-Lin		Log-Lin		Log-Semilog	
	Dependent Variable: Median Contract Rent (Census Tract)		Dependent Variable: LN (Median Contract Rent (Census Tract))		Dependent Variable: LN ((Median Contract Rent (Census Tract))	
	Coefficient <sup>12</sup>	P >  z	Coefficient <sup>12</sup>	P >  z	Coefficient <sup>12</sup>	P >  z
<b>Explanatory Variable</b>						
<b>Constant</b>	-124.215** (53.7587)	0.021	4.875228*** (0.0839184)	0.000	-1.139778** (0.4811244)	0.018
<b>Streetcar Present</b>	-77.16324* (40.93603)	0.059	-0.1456436** (0.0628236)	0.020	-0.0598471 (0.0681656)	0.380
<b>Years After Streetcar</b>	11.24834** (4.957123)	0.023	0.014258* (0.0074393)	0.055	0.0090476 (0.0077952)	0.246
<b>Median Contract Rent (Citywide)</b>	1.237386*** (0.0911069)	0.000	0.0023206*** (0.0001343)	0.000	--	--
<b># of "Park and Ride" Stations</b>	-18.3083 (17.35487)	0.291	0.0232614 (0.0310386)	0.454	-0.0247068 (0.0318504)	0.348
<b># of Special Generators</b>	22.93604** (11.16617)	0.040	0.0354485** (0.0839184)	0.043	0.0316189** (0.0160501)	0.049
<b>LN (Bachelors Degree or Higher (Citywide))</b>	--	--	--	--	-1.139778** (0.4811244)	0.018
<b>SQUARE Median Household Income (Citywide)</b>	--	--	--	--	--	--
<b>R Squared</b>	0.2556		0.9409		0.9178	
<b>Number of Observations (N)</b>	184		184		184	
<b>Number of Significant Results</b>	4		4		2	

Notes:

<sup>1</sup> \*p<10, \*\*p<5, \*\*\*p<01

<sup>2</sup> Robust standard errors in parenthesis.

### ***Omitted Variable Bias and Data Limitations***

My thesis aimed to include as comprehensive of a set of independent variables as possible. However, due to data availability and time constraints the model may suffer from omitted variable bias. Regarding the effects of time as a general causal factor, data for all indicators five years before streetcar service began to five years after can better describe the precise effect of streetcar development by limiting the time window to accurately measure influence of a streetcar. Since the U.S. Census is decennial and the ACS at the census tract level began with 2006-2010 estimates, the model accounted for the influence of time and added the time variables of number of years after operation of the streetcar.

Considering the general causal factor of place, the precise distance between the census tract and the central business district is a factor that could contribute to gentrification of a neighborhood. While this study did not include this variable, proximity to the central business district is a characteristic of streetcars because streetcars function to move people around the city center. The variable *intersecting or adjacent to the streetcar alignment* is a binary term in this thesis and future studies can measure it as a continuous term by measuring the precise distance between the centroid of the census tract to the nearest streetcar stop. Measuring distance as a continuous term is a more accurate measure of proximity to the streetcar because census tracts vary in geographical size.

Future studies can also include numerous dependent variables in addition to the three this study has identified. For example, ACS reports for average monthly rent based



on survey responses, which may be inaccurate of the true average monthly rent for the area. More data on housing can provide a comprehensive snapshot of the effects of gentrification, including median home sales price, housing tenure, and percentage of tenant turnover. Future studies can also consider zoning and other government constraints surrounding the streetcar alignment. The next chapter will discuss the findings.

#### **IV. FINDINGS**

The previous chapter described the theoretical model and its development as a direct result of the literature review. This chapter describes major findings, based on OLS regression models that I detailed previously.

The final regression results are in Table 8. This table describes the statistical significance of each variable; note that any P-value  $> 1.00$  is not significant at the 95% confidence level. I have also determined the elasticity of each variable to interpret the magnitude of effect upon the dependent variable, using the following formula: regression coefficient on variable X \* (mean of variable X / mean of your dependent variable). In Model 1: Income the R-squared term is 23.08%, indicating I can accurately predict median household income in the census tract when given values for all of the explanatory variables 23.08% of the time. In Model 2: College Graduates the R-squared term is 52.53%. In Model 3: Rent the R-squared term is 94.09%.

**TABLE 8**  
**FINAL REGRESSION RESULTS**

	MODEL 1: Income (Quadratic)	MODEL 2: College Graduates (Log-Semilog)	MODEL 3: Rent (Log-Lin)
	Coefficient <sup>12</sup>		
<b>Continuous Variables</b>			
<b>Constant</b>	18631.85** (7529.502)	-2.212658*** (0.5792918)	4.875228*** (0.0839184)
<b>Years After Streetcar</b>	1219.591*** (395.4765)	0.0371839** (0.0154146)	0.014258* (0.0074393)
<b># of Special Generators</b>	2329.225** (926.4278)	0.077814*** (0.0195971)	0.0354485** (0.0839184)
<b># of “Park and Ride” Stations</b>	1252.01 (1706.419)	0.1331823** (0.0666117)	0.0232614 (0.0310386)
<b># of “Walk and Ride” Stations</b>	-54.06733 (212.2963)	--	--
<b>Median Contract Rent (Citywide)</b>	--	--	0.0023206*** (0.0001343)
<b>Dummy Variables</b>			
<b>Streetcar Present</b>	-6539.531** (3196.584)	-0.3174741** (0.1269707)	-0.1456436** (0.0628236)
<b>Quadratic Terms</b>			
<b>Median Household Income (Citywide)</b>	-0.7934201* (0.4147367)	--	--
<b>SQUARE Median Household Income (Citywide)</b>	0.0000229*** (5.41e-06)	--	--
<b>Logarithmic Terms</b>			
<b>% Bachelor’s Degree or Higher (Citywide)</b>	--	1.638114*** (0.1668114)	--

Notes:

<sup>1</sup> \*p<10, \*\*p<5, \*\*\*p<01

<sup>2</sup> Robust standard errors in parenthesis.

The findings indicate that the explanatory variable with the greatest impact on the indicators of gentrification is *Years After Streetcar*. This explanatory variable may have a strong effect on income because it takes a few years for the area to recoup costs from the financial investment in the streetcar. Once the area recovers financial costs, the area is able to attract higher income residents because of economic stability and the increase in amenities. *Years After Streetcar* also demonstrates that it takes a few years to establish prestige of an area as home to many amenities. Once the area has established its status as having amenities it is able to attract residents of a higher social class. College graduates are a proxy for high social class, which is the dependent variable for Model 2. The increase in amenities leads to an increase in desirability of the area, which allows property owners to demand higher rents. My findings fit the theoretical model that I described in the literature review that neighborhood change is a process that occurs over time.

Among the three models, the results were the most robust for Model 2: College Graduates because each form had the most statistically significant terms in comparison to the other models. The findings indicate that an increase in college graduates is a consistent outcome of a streetcar. This could be because college graduates have undergone a personal journey where they likely lived in a new place and tried new things, and after graduating people enjoy living in places that have many novel activities. A streetcar is a novel experience. Model 3: Rent has somewhat robust results, which demonstrates that a streetcar does increase the demand for living in the area. However, the impact is not as strong as the increase in college graduates.

Model 1: Income had robust results for the quadratic form but weaker results for the linear forms, which demonstrates that a rise in income does not consistently happen as the result of a streetcar. A streetcar can have mixed results depending on the other conditions in the area. If there are ideal market conditions and other large developments in an area then the streetcar can build on the synergy of this energy. However, if there are not any other anchors, such as a sports complex or convention center, to make people feel like a streetcar is adding value then there may be less of a draw for higher income households to move to the area.

I found that each year after a streetcar opens the indicators of gentrification also increased. Model 1: Income demonstrates that for each 20% increase in *Years After Streetcar*, there is a 5% increase in *Median Household Income (Census Tract)* (see Table 9). Model 2: College Graduates demonstrates that for each 6% increase in *Years After Streetcar*, there is a 5% increase in *% of Bachelor's Degree or Higher (Census Tract)*. Model 3: Rent demonstrates that a 1% increase in *Years After Streetcar* can cause a 5% increase in *Median Contract Rent* in a census tract.

In sum, I found that a few years after operation of a streetcar begins there are signs of gentrification, and each year after a streetcar opens the signs of gentrification becomes more pronounced. The next chapter will provide concluding thoughts including policy implications for the City of Sacramento and other local governments considering capital projects.

**TABLE 9  
ELASTICITY**

	Elasticity		
	MODEL 1: Income (Quadratic)	MODEL 2: College Graduates (Log-Semilog)	MODEL 3: Rent (Log-Lin)
<b>Continuous Variables</b>			
Constant	--	--	--
Years After Streetcar	20.0% increase	6.2% increase	1.3% increase
# of Special Generators	10.9% increase	3.7% increase	0.9% increase
# of "Park and Ride" Stations	1.9% increase	2.1% increase	0.2% increase
# of "Walk and Ride" Stations	-0.5% decrease	--	--
Median Contract Rent (Citywide)	--	--	23.6% increase
<b>Dummy Variables</b>			
Streetcar Present	-13.9% decrease	-6.9% decrease	-1.8% decrease
<b>Quadratic Terms</b>			
Median Household Income (Citywide)	-93.3% decrease	--	--
SQUARE Median Household Income (Citywide)	124.2% increase	--	--
<b>Logarithmic Terms</b>			
% Bachelor's Degree or Higher (Citywide)	--	156.2% increase	--

## **V. Conclusion**

The narrative of growth and development in California often contains gentrification. Local governments may pursue a capital project with the goal of gentrifying an area. Gentrification often symbolizes neighborhood progress and advancement from a previously less desirable state. Gentrification has financial benefits for an area including an increase in consumer spending and housing desirability. Alternatively, groups who favor the existing working class status of a neighborhood may oppose gentrification. Gentrification may be a threat to housing affordability and existing communities who are at risk of displacement. While the costs and benefits of gentrification are up for debate, it is clear that capital projects have a large role in causing gentrification.

This thesis considered the impact of a capital project (i.e., streetcar) on gentrification on neighborhoods because of the prominence of issues related to gentrification in public policy today. Communities throughout California are changing because of rapid population growth; how local governments handle population growth will shape communities of tomorrow. Population growth elicits development. The streetcar is one type of development project that communities are considering to ease congestion and improve economic opportunities as population grows. My approach in this thesis can help to assess the impact of streetcars as amenities, and may be applicable to assessment of other capital projects as well.

This thesis found that a few years after operation of a streetcar begins there are signs of gentrification, as evidenced by a rise in median household income, proportion of

college graduates, and median rent. I found that each year after a streetcar opens the indicators of gentrification increased. However, I cannot be certain that the streetcar caused the changes in the dependent variables or has a correlation with it. There could be an overall trend in development in the area and the streetcar was one of many large-scale developments at a given time.

Additional research, such as a case study, could supplement the quantitative findings from this thesis to better determine the cause of gentrification. A case study could analyze the specific events, sentiment of public officials and developers, and changes in the community a few years prior and following arrival of a streetcar. Of particular interest is if another large-scale capital project, such as sports complex or convention center, opened up near and around the same time as the streetcar.

While the role of streetcars on gentrification is unclear, there are important lessons for local governments to consider to ease tensions over community growth and development. Sacramento is the focus of this section because of my relationship to the city. As Sacramento continues to pursue capital projects, such as a streetcar, the city can expect an increase in median household income, college graduates, and rental rates, which are indicators of gentrification. The City needs to focus on growing a diverse housing stock and embracing characteristics that make Sacramento distinctive. Sacramento leads in diversity and integration among cities throughout the U.S. Sacramento can capitalize on these unique facets, and continue attracting new residents and development. Sacramento will need to insure a diversity of housing types (higher density urban, lower-density suburban, and rural housing) and a mix of neighborhood



types (Midtown, East Sacramento, Oak Park, South Sacramento, and Rio Linda) to retain its unique diversity.

The City of Sacramento also needs to improve opportunities for higher density housing in the downtown area to prevent an increase in housing supply pressure because this pressure can lead to a rapid increase in rent. A rapid rise in housing cost is problematic because it is happening at a faster rate than the rise in wages, which signifies a decrease in total household wealth and purchasing power. A city that becomes unaffordable will lose attractiveness to entrepreneurs who have the potential to bring innovation to a city. Innovation is a critical for cities because it attracts long-term prosperity and makes a city resilient against harmful macro-changes. Sacramento's efforts to raise its status by investing in amenities will be lost if it displaces existing residents and prevents innovative residents from moving to the area. The City can improve housing opportunities by reducing governmental constraints against development in the city center. For example, the City can reduce the required distance between buildings, increase the maximum height regulation, and reduce parking requirements.

Another important policy consideration is housing displacement. The City of Sacramento needs to insure an adequate affordable housing stock to prevent housing displacement. Sacramento can bolster inclusionary housing policies that require developers of new multifamily projects to make at least 20 percent of the total units affordable to lower income households (up to 80% of the area median income). In exchange for including the affordable units, the City can provide additional zoning and

building regulation variances to provide the developer with flexibility to make building in Sacramento financially appealing.

Government agencies at all levels can also focus on affordable housing near public transit. Low- to middle-income households can benefit most from proximity to transit because it reduces transportation costs. State and Federal grant programs for affordable housing can prioritize projects that coordinate proximity to public transit with award allocations to improve the connection between workers and job centers. State and Federal programs can also extend the mandatory affordability period of grants to ensure long-term affordability of the housing units.

Capital projects have the power to transform cities. Local governments throughout the nation must consider how to preserve communities while pursuing capital projects through policies that leverage the benefits of gentrification while preventing social and economic threats to existing communities. While gentrification has the potential to threaten the thread of a community, it also has the ability to bring jobs and amenities to an area. By weaving equity into public policy, we can pursue capital projects that advance beautiful cities.

**APPENDIX A  
LITERATURE REVIEW**

<b>Publication Title</b>	<b>Publication Date, Authors</b>	<b>Research Focus</b>	<b>Sample</b>	<b>Research Methods</b>	<b>Key Findings</b>
The Urban Experience: Economics, Society, and Public Policy	(2008) Bluestone, Stevenson, & Williams	Changing role and function of U.S. metropolitan areas	U.S. metropolitan areas, cities, and suburban areas	Historical and comparative data	Urban and suburban communities are continually changing because of micro and macro processes.
The Modern Streetcar in the U.S.: An Examination of Its Ridership, Performance, and Function as a Public Transportation Mode	(2013) Brown	Public transit utility of streetcars	Streetcars reporting operating streetcar service to the National Transit Database: Little Rock, Memphis, New Orleans, Portland, Seattle, Tacoma, and Tampa	Multiple-case-study investigation	There is significant variation in the success of modern streetcars depending on integration of the streetcar with the rest of the transit system. Because many local agencies think of streetcars as an economic development tool rather than a transit service, funding for

					streetcars should <i>not</i> come from transit funds.
The Purpose, Function, and Performance of Streetcar Transit in the Modern U.S. City: A Multiple-Case-Study Investigation	(2015) Brown, Nixon, & Ramos	Factors for modern streetcar performance	Modern streetcars that operate year-round: Little Rock, Memphis, Portland, Seattle, and Tampa	Multiple-case-study investigation and one-on-one interviews with local informants	Portland had the highest ridership and service productivity because of decision-maker choices to use the streetcar as a development tool <i>and</i> transit service. Tampa and Little Rock performed the lowest because of the focus on tourism, and lack of regard for transit utility.
Transit-Induced Gentrification: Who Will Stay, and Who Will Go?	(2014) Dawkins & Moeckel	Effect of TOD-based affordable housing policies on the location of lower-income households over time	Washington D.C. metropolitan area	Simple Integrated Land-Use Orchestrator (SILO) land use model	Census tracts near transit stations experienced a greater increase in median household income compared to other census tracts.
Streetcar-Development Linkage: The	(2008) E. D. Hovee & Company, LLC	Relationship between transit	Portland	Pre/post study of the Portland streetcar	In Portland, the streetcar promoted high-density

Portland Streetcar Loop		and economic development			development and high returns on investments.
Displacement or Succession? Residential Mobility in Gentrifying Neighborhoods	(2005) Freeman	Relationship between gentrification and housing displacement	Head of households in “gentrifiable” U.S. central cities	Regression analysis	Housing displacement plays a minor role in the demographic changes of gentrifying neighborhoods. Gentrification is more so an effect of the relative affluence of newcomers.
There Goes the ‘Hood: View of Gentrification from the Ground Up	(2006) Freeman	Effects of gentrification on the residents of neighborhoods in the process of transition	Long-time residents of two long-time black neighborhoods undergoing gentrification: Harlem and Clinton Hill, Brooklyn	One-on-one interviews	There are positive and negative effects of gentrification, and long-time residents at-risk of displacement often feel mixed emotions about the impacts of gentrification.

Relationships Between Streetcars and the Built Environment	(2010) Golem & Smith-Heimer	Impact of streetcars on the built environment (physical construction impacts, changes to neighborhoods, and affect on public and private investment decisions)	Telephone survey of currently operating U.S. streetcar systems: Portland, Memphis, Tacoma, Seattle, Tampa, Little Rock, San Pedro, Lowell, Savannah, Kenosha, Astoria, Galveston, and Charlotte  Case study of: Kenosha, Savannah, Portland, Memphis, and Seattle	Telephone survey and case study	Despite the general notion among respondents that development of the streetcar promoted economic activity, there was little empirical evidence.
Urban rapid rail transit and gentrification in Canadian urban centres: A survival analysis approach	(2015) Grube-Cavers & Patterson	Effect of urban rapid rail transit on gentrification	“Gentrifiable” census tracts in Montreal, Toronto, and Vancouver	Survival analysis to analyze the time until an event (i.e. gentrification) occurs	Proximity to rail transit and to other gentrifying census tracts led to gentrification in two of the three cities.
The back-to-the-city movement: Neighbourhood	(2015) Hyra	Social effects of the back-to-the-city movement	Washington, D.C. Shaw/U Street neighborhood	Ethnographic case study	Affordable housing works to physically keep

redevelopment and processes of political and cultural displacement					lower-income in place, but cultural and political displacement continued to occur with the influx of newcomers.
Gentrification Trends in New Transit-Oriented Communities: Evidence from 14 Cities That Expanded and Built Rail Transit Systems	(2007) Kahn	Analysis of the effects of rail transit investments	Major cities that constructed new rail transit lines between 1970 and 2000: Los Angeles, Sacramento, San Diego, San Francisco, San Jose, Denver, Washington D.C., Miami, Atlanta, Chicago, Baltimore, Boston, Portland, and Dallas	Regression Analysis	Communities with a “walk and ride” station experienced more gentrification compared to communities with “park and ride” stations.
Maintaining Diversity in America’s Transit-Rich Neighborhoods: Tools for Equitable Change	(2010) Pollack, Bluestone, & Billingham	Effect of fixed-guideway transit on gentrification and housing displacement, and tools to create neighborhood equity	Census block groups in 42 neighborhoods in 12 MSAs that first received rail transit between 1990 and 2000: Chicago, San	Pre/post study of change before/after a new fixed-rail transit stations compared to their respective MSA	Capital transit investments frequently change neighborhoods through a rise in housing costs, wealthier residents, and

			Francisco, Cleveland, St. Louis, Los Angeles, Portland, Washington D.C., Atlanta, Baltimore, Dallas, San Diego, and Denver		increased vehicle ownership.
A comparative assessment of the factors associated with station-level streetcar versus light rail transit ridership in the United States	(2015) Ramos-Santiago & Brown	Factors distinguishing streetcar and light rail ridership	Streetcars that operate year-round: Memphis, New Orleans, Philadelphia, Portland, Seattle, Tacoma, and Tampa  Light rail in cities that do not have a heavy rail transit service: Buffalo, Charlotte, Dallas, Denver, Houston, Minneapolis-St. Paul, Norfolk-Virginia Beach, Phoenix, Portland, Sacramento, Salt Lake City, San Diego, Seattle-	Multivariate regression analysis	Light rail functions for a more utilitarian rider market (commute), while modern streetcars focus on connecting people to tourism and special activity centers.



			Tacoma, and St. Louis		
Gentrification, Displacement and the Role of Public Investment: A Literature Review	(2015) Zuk, Bierbaum, Chapple, Gorska, Loukaitou-Sideris, Ong, & Thomas	Reviewing the literature on gentrification, the role of public transit investments on neighborhood change, and methods for measuring gentrification and housing displacement	23 studies on racial transition and succession, 21 studies on the impact of rail transit on property values, 4 studies on TOD and gentrification, 6 studies on the TOD impacts in Los Angeles, 5 studies on simulation models of gentrification	Literature review	Gentrification is the result of flows of people and capital and, due in part to increasing macro inequality, results in more segregated neighborhoods. Fixed-rail transit generally led to increases in residential and commercial property values.

**APPENDIX B  
SPECIAL GENERATORS**

<b>City</b>	<b>Census Tract</b>	<b>Special Generator</b>	<b>Year Opened/ Established</b>
<i>North Little Rock</i>	25	<i>Dickey-Stephens Park</i>	2007
<i>North Little Rock</i>	25	<i>Arkansas Inland Maritime Museum</i>	2005
North Little Rock	25	Verizon Arena	1999
Memphis	39	Victorian Village	1800s
Memphis	42	Magevney House	1830s
<i>Memphis</i>	42	<i>Fire Museum of Memphis</i>	1998
Memphis	42	Calvary Episcopal Church	1832
Memphis	42	The Peabody Memphis	1869
Memphis	42	Mud Island	1982
<i>Memphis</i>	42	<i>The Cotton Museum</i>	2006
Memphis	42	Orpheum Theatre	1928
Memphis	42	Tom Lee Park	1954
Memphis	42	Beale Street Historic District	1966
<i>Memphis</i>	42	<i>National Civil Rights Museum</i>	1991
Memphis	43	Tom Lee Park	1954
<i>Memphis</i>	43	<i>Memphis Railroad and Trolley Museum</i>	2012
<i>Memphis</i>	113	<i>Pyramid Arena</i>	1991-2004
Memphis	113	Memphis Cook Convention Center	1974
<i>Memphis</i>	113	<i>The Cannon Center for the Performing Arts</i>	2003
<i>Memphis</i>	114	<i>Memphis Rock N' Soul Museum</i>	2000
<i>Memphis</i>	114	<i>FedEx Forum</i>	2004
<i>Memphis</i>	114	<i>AutoZone Park</i>	2000
Tampa	39	Ybor City Museum State Park	1980
Tampa	51.01	Tampa Convention Center	1990
<i>Tampa</i>	<i>51.01</i>	<i>Tampa Museum of Art</i>	2010
Tampa	51.01	Glazer Children's Museum	1986
Tampa	51.01	Amalie Arena	1996
Tampa	51.01	David A. Straz Jr. Center for the Performing Arts	1987
<i>Tampa</i>	<i>51.01</i>	<i>Curtis Hixon Waterfront Park</i>	2010
Tampa	51.01	Floridian Palace Hotel	1926
Tampa	51.01	Tampa Theatre	1926
<i>Tampa</i>	<i>51.01</i>	<i>Florida Museum of Photogenic Arts</i>	2001
<i>Tacoma</i>	602	<i>Museum of Glass</i>	2002
Tacoma	602	Tacoma Dome	1983
Tacoma	602	Foss Waterway Seaport	1996

<b>City</b>	<b>Census Tract</b>	<b>Special Generator</b>	<b>Year Opened/ Established</b>
Tacoma	602	Tacoma Art Museum	1935
Tacoma	616.02	Broadway Center for the Performing Arts	1918
Tacoma	616.02	University of Washington, Tacoma	1990
<i>Tacoma</i>	<i>616.02</i>	<i>Greater Tacoma Convention Center</i>	<i>2004</i>
Portland	51	Lan Su Chinese Garden	2000
Portland	51	Powell's Books	1971
Portland	51	Museum of Contemporary Craft	1937
Portland	51	Gerding Theater at the Armory	1891
Portland	56	South Park Blocks	1869
Portland	56	Portland State University	1946
Portland	57	Portland State University	1946
Portland	57	Keller Auditorium	1917
<i>Portland</i>	<i>106</i>	<i>Voodoo Doughnuts</i>	<i>2003</i>
Portland	106	Pioneer Courthouse Square	1984
Portland	106	Portland Art Museum	1892
Portland	106	Arlene Schnitzer Concert Hall	1971
Portland	106	Portland Saturday Market	1973
Portland	106	Tom McCall Waterfront Park	1927
Portland	106	Oregon Historical Society Museum	1898
Seattle	66	Lake Union	N/D
Seattle	66	Museum of History and Industry	1952
Seattle	66	The Center for Wooden Boats	1968

## REFERENCES

- Amalie Arena. (n.d.). Retrieved March 27, 2016 from: <http://www.amaliearena.com>
- Arkansas Repertory Theatre. (n.d.). Retrieved March 26, 2016 from:  
<http://www.therep.org>
- Arkansas Secretary of State. (n.d.). Retrieved March 26, 2016 from:  
<http://www.sos.arkansas.gov/statecapitolinfo/pages/default.aspx>
- Bizjak, T. (2015, October 14). New vote on downtown Sacramento streetcars in the works. *The Sacramento Bee*. Retrieved December 5, 2015 from:  
<http://www.sacbee.com/news/local/transportation/back-seat-driver/article39237780.html>
- Branan, B. (2015, April 7). Sacramento County approves \$3 million for downtown streetcar project. *The Sacramento Bee*. Retrieved from  
<http://www.sacbee.com/news/local/transportation/article17781824.html>
- Branston, John. (30 April, 2015). Pyramid arena in Memphis reopens as ‘megastore.’ Retrieved March 26, 2016 from: <http://www.reuters.com/article/us-usa-memphis-pyramid-idUSKBN0NL27E20150430>
- Broadway Center For the Performing Arts. (n.d.). Retrieved March 27, 2016 from:  
<http://www.broadwaycenter.org/>
- California Tax Data. (n.d.). Retrieved December 5, 2015 from:  
<http://www.californiataxdata.com/pdf/benefitsassessment.pdf>
- Calvary Episcopal Church. (n.d.). Retrieved March 26, 2016 from:  
<http://www.calvarymemphis.org/>
- Central Arkansas Library System. (n.d.). Retrieved March 26, 2016 from:  
<http://www.cals.lib.ar.us>
- City of Sacramento. (n.d.). Retrieved November 7, 2015 from:  
<http://www.cityofsacramento.org/mayor/>
- County of Sacramento. (n.d.). Retrieved December 5, 2015 from:  
[http://www.elections.saccounty.net/ElectionInformation/Documents/2015%20June%20Measure%20B\\_ENG.pdf](http://www.elections.saccounty.net/ElectionInformation/Documents/2015%20June%20Measure%20B_ENG.pdf)
- Cruet, G. (2015, February 23). Streetcar Split. *Comstock's*. Retrieved from  
<http://www.comstocksmag.com/web-only/streetcar-split>

Dawid, I. (2015, April 6). Sacramento Streetcar Funding Reaches Key Goal. *Planetizen*. Retrieved from <http://www.planetizen.com/node/75874>

Downtown Sacramento Partnership (n.d.). Retrieved November 7, 2015 from: <http://downtownsac.org/>

FedEx Forum. (n.d.). Retrieved March 26, 2016 from: <http://www.fedexforum.com/homepage.aspx>

Fire Museum of Memphis. (n.d.). Old Fire Station #1. Retrieved March 26, 2016 from: <http://www.firemuseum.com/about-us/old-fire-station-1/>

Florida Museum of Photographic Arts, Inc. (n.d.). Retrieved March 27, 2016 from: <http://fmopa.org/>

Florida State Park. (n.d.). Ybor City Museum State Park. Retrieved April 2, 2016 from: <https://www.floridastateparks.org/sites/default/files/Division%20of%20Recreation%20and%20Parks/documents/ybo-brochure.pdf>

Floridan Palace. (n.d.). Retrieved March 27, 2016 from: <http://floridanpalace.com>

Foss Waterway Seaport. (n.d.). Retrieved March 27, 2016 from: <http://www.fosswaterwayseaport.org/>

Garvin, C. (2015, January 22). Answering the big questions when it comes to Sacramento's proposed \$150 million streetcar line. *Sacramento News & Review*. Retrieved December 5, 2015 from: <https://www.newsreview.com/sacramento/answering-the-big-questions-when/content?oid=16091456>

Garvin, C. (2015, May 7). Can Sacramento afford streetcar, or will it shortchange poor communities' transit options? *Sacramento News & Review*. Retrieved December 5, 2015 from: <https://www.newsreview.com/sacramento/can-sacramento-afford-streetcar-or/content?oid=17032800>

Glazer Children's Museum. (n.d.). Retrieved March 27, 2016 from: <http://glazermuseum.org/>

Greater Tacoma Convention & Trade Center. (n.d.). Retrieved March 27, 2016 from: <http://gtctc.org>

Harten, D. (2013, May 17). Newly-renovated amphitheater dedicated at Riverfront Park. *Arkansas Democrat-Gazette*. Retrieved March 26, 2016 from:

[http://m.arkansasonline.com/news/2013/may/17/newly-renovated-amphitheater-dedicated-riverfront-/](http://m.arkansasonline.com/news/2013/may/17/newly-renovated-amphitheater-dedicated-riverfront/)

Historic Arkansas Museum. (n.d.). Retrieved March 26, 2016 from:  
<http://www.historicarkansas.org>

Historic Memphis Parks. (n.d.). Retrieved March 26, 2016 from: <http://historic-memphis.com/memphis-historic/parks2/historicparks.html>

Hose, M. (2015, October 18). CP&DR News Brief: November 19, 2015: SGC General Plan Guidelines Draft; Treasure Island Island Housing Plan; S.D. Sup. Faces Conflict of Interest; and More. *California Planning & Development Report*. Retrieved December 5, 2015 from: <https://www.cp-dr.com/node/3811>

Lan Su Chinese Garden. (n.d.). Retrieved April 2, 2016 from:  
<http://www.lansugarden.org/>

Little Rock River Market. (n.d.). Retrieved March 26, 2016 from:  
<http://www.rivermarket.info>

MemphisTravel.com. (n.d.). History of The Cannon Center. Retrieved March 26, 2016 from: <http://m.memphistravel.com/history-cannon-center>

Memphis Convention & Visitors Bureau. (n.d.). Retrieved March 26, 2016 from:  
<http://www.memphistravel.com/>

Memphis Cook Convention Center. (n.d.). Retrieved March 26, 2016 from:  
<http://www.cvent.com/rfp/memphis-hotels/memphis-cook-convention-center/venue-1af6b362bd5c4361af940f9bacdba3e7.aspx>

Memphis Heritage At Howard Hall. (2014, September 8). Memphis Railroad & Trolley Museum Invites Public to Central Stations 100<sup>th</sup> Anniversary Celebration, October 3-5. Retrieved March 26, 2016 from:  
<http://www.memphisheritage.org/memphis-railroad-trolley-museum-invites-public-central-stations-100th-anniversary-celebration-october-3-5/>

Memphis Rock n Soul Museum. (n.d.). Retrieved March 26, 2016 from:  
<http://www.memphisrocknsoul.org/>

Miller, N. (2015, May 5). Ride the line: Is Sacramento ready for streetcar? *Sacramento News & Review*. Retrieved December 5, 2015 from:  
<https://www.newsreview.com/sacramento/ride-the-line-is-sacramento/content?oid=17032799>

- Museum of Contemporary Craft. (n.d.). Retrieved April 2, 2016 from:  
<http://museumofcontemporarycraft.org>
- Museum of Discovery. (n.d.). Retrieved March 26, 2016 from:  
<https://www.museumofdiscovery.org>
- Museum of Glass. (n.d.). Retrieved March 27, 2016 from: <https://museumofglass.org>
- Museum of History & Industry. (n.d.). Retrieved April 2, 2016 from:  
<http://www.mohai.org/>
- National Civil Rights Museum. (n.d.). Retrieved March 26, 2016 from:  
<http://civilrightsmuseum.org/>
- Neufeld, D. (2015, May 19). Sacramento's costly streetcar project provides few benefits. *The Sacramento Bee*. Retrieved December 5, 2015 from:  
<http://www.sacbee.com/opinion/op-ed/soapbox/article21404013.html>
- Old State House Museum. (n.d.). Retrieved March 26, 2016 from:  
<http://www.oldstatehouse.com>
- Pink Palace Family of Museums. (n.d.). The Magevney House. Retrieved March 26, 2016 from: <http://www.memphismuseums.org/magevney-overview/>
- Pioneer Courthouse Square. (n.d.). Retrieved April 2, 2016 from:  
<https://thesquarepdx.org/>
- Playle. D. (n.d.). Retrieved December 5, 2015 from:  
<http://www.playle.com/listing.php?i=KDL72481>
- Powell's. (n.d.). Retrieved April 2, 2016 from: <http://www.powells.com>
- Portland's 5 Centers for the Arts. (n.d.). Retrieved April 2, 2016 from:  
<http://www.portland5.com/>
- Portland Art Museum. (n.d.). Retrieved April 2, 2016 from: <http://portlandartmuseum.org>
- Portland Center Stage. (n.d.). Retrieved April 2, 2016 from: <http://www.pcs.org/about-the-armory/index.html#history>
- Portland Saturday Market. (n.d.). Retrieved April 2, 2016 from:  
<http://www.portlandsaturdaymarket.com/about/history/>
- Portland State University. (n.d.). Retrieved April 2, 2016 from: <https://www.pdx.edu>

- Princeton University Library, Data and Statistical Services. (n.d.). Interpreting Regression Output. Retrieved April 22, 2016 from:  
[http://dss.princeton.edu/online\\_help/analysis/interpreting\\_regression.htm](http://dss.princeton.edu/online_help/analysis/interpreting_regression.htm)
- RoadsideAmerica.com. (n.d.). Retrieved March 26, 2016 from:  
<http://www.roadsideamerica.com/story/34325>
- Sacramento Regional Transit District. (n.d.) Retrieved January 8, 2016 from:  
<http://www.sacrt.com/rtfactsheets.stm>
- Stadium Journey. (n.d.). Retrieved March 26, 2016 from:  
<http://www.stadiumjourney.com/stadiums/dickey-stephens-park-s149/>
- Stephens, J. (2010, November 17). California Cities Desire Streetcars. *California Planning & Development Report*. Retrieved from <http://www.cp-dr.com/node/2816>
- Sound Transit. (n.d.). Retrieved April 2, 2016 from: <http://www.soundtransit.org/Rider-Guide/Parking>
- StatisticsSolutions. (n.d.). Homoscedasticity. Retrieved April 22, 2016 from:  
<http://www.statisticssolutions.com/homoscedasticity/>
- Straz Center. (n.d.). Retrieved March 27, 2016 from: <http://www.strazcenter.org>
- Tacoma Art Museum. (n.d.). Retrieved March 27, 2016 from:  
<http://www.tacomaartmuseum.org/>
- Tacoma Dome. (n.d.). Retrieved March 27, 2016 from: <http://tacomadome.org>
- Tampa Convention Center. (n.d.). Retrieved March 27, 2016 from:  
<http://www.tampaconventioncenter.com>
- Tampa Museum of Art. (n.d.). Retrieved March 27, 2016 from: <http://tampamuseum.org/>
- Tampa Theatre. (n.d.). Retrieved April 2, 2016 from: <http://tampatheatre.org/>
- The Center for Wooden Boats. (n.d.). Retrieved April 2, 2016 from: <http://cwb.org/>
- The City of Portland, Oregon. (n.d.). South Park Blocks. Retrieved April 2, 2016 from:  
<http://www.portlandoregon.gov/parks/finder/index.cfm?&propertyid=674&action=ViewPark>



- The City of Portland, Oregon. (n.d.). Waterfront Park. Retrieved April 2, 2016 from:  
<http://www.portlandoregon.gov/parks/finder/index.cfm?&propertyid=156&action=ViewPark>
- The Cotton Museum At The Memphis Cotton Exchange. (n.d.). Retrieved March 26, 2016 from: <http://memphiscottonmuseum.org/>
- The Encyclopedia of Arkansas History & Culture. (n.d.). Retrieved March 26, 2016 from:  
<http://www.encyclopediaofarkansas.net/encyclopedia/entry-detail.aspx?entryID=4464>
- The Florida Aquarium. (n.d.). Retrieved March 27, 2016 from:  
<http://www.flaquarium.org>
- The Official Site of the Memphis Redbirds. (n.d.). Retrieved March 26, 2016 from:  
<http://www.milb.com/index.jsp?sid=t235>
- The Oregon Historical Society. (n.d.). Retrieved April 2, 2016 from: <http://www.ohs.org>
- The Oregon Encyclopedia. (n.d.). Voodoo Doughnut. Retrieved April 2, 2016 from:  
[http://www.oregonencyclopedia.org/articles/voodoo\\_doughnut/#.VwAHuEu19g0](http://www.oregonencyclopedia.org/articles/voodoo_doughnut/#.VwAHuEu19g0)
- The Orpheum Theatre Memphis. (n.d.). Retrieved March 26, 2016 from:  
<http://www.orpheum-memphis.com/>
- The Peabody Memphis. (n.d.). Retrieved March 26, 2016 from:  
<http://www.peabodymemphis.com/>
- University of Washington, Tacoma. (n.d.). Retrieved March 27, 2016 from:  
<https://www.tacoma.uw.edu>
- U.S. Bureau of the Census. (2012, December 6). Geographic Terms and Concepts – Census Tract. Retrieved April 22, 2016 from:  
[https://www.census.gov/geo/reference/gtc/gtc\\_ct.html](https://www.census.gov/geo/reference/gtc/gtc_ct.html)
- U.S. Bureau of the Census. (1993, July). 1990 Census of Population and Housing: Population and Housing Characteristics for Census Tracts and Block Numbering Areas. Little Rock-North Little Rock, AR. Retrieved April 3, 2016 from:  
<https://archive.org/details/1990censusofpopu23213unse>
- U.S. Bureau of the Census. (1993, July). 1990 Census of Population and Housing: Population and Housing Characteristics for Census Tracts and Block Numbering Areas. Memphis, TN-AR-MS MSA. Retrieved April 3, 2016 from:  
<https://archive.org/details/1990censusofpopu3227unse>

- U.S. Bureau of the Census. (1993, July). 1990 Census of Population and Housing: Population and Housing Characteristics for Census Tracts and Block Numbering Areas. Portland-Vancouver, OR-WA. Portland OR. Retrieved April 3, 2016 from: <https://archive.org/stream/1990censusofpopu3266unse>
- U.S. Bureau of the Census. (1993, July). 1990 Census of Population and Housing: Population and Housing Characteristics for Census Tracts and Block Numbering Areas. Seattle-Tacoma, WA CMSA (Part). Seattle, WA PMSA. Section 1 of 2. Retrieved April 3, 2016 from: <https://archive.org/details/1990censusofpopu33011unse>
- U.S. Bureau of the Census. (1993, July). 1990 Census of Population and Housing: Population and Housing Characteristics for Census Tracts and Block Numbering Areas. Seattle-Tacoma, WA CMSA (Part). Seattle, WA PMSA. Section 2 of 2. Retrieved April 3, 2016 from: <https://archive.org/details/1990censusofpopu33012unse>
- U.S. Bureau of the Census. (1993, July). 1990 Census of Population and Housing: Population and Housing Characteristics for Census Tracts and Block Numbering Areas. Seattle-Tacoma, WA CMSA (Part). Tacoma, WA PMSA. Retrieved April 3, 2016 from: <https://archive.org/details/1990censusofpopu3301unse>
- U.S. Bureau of the Census. (1993, July). 1990 Census of Population and Housing: Population and Housing Characteristics for Census Tracts and Block Numbering Areas. Tampa-St. Petersburg-Clearwater, FL MSA. Section 1 of 2. Retrieved April 3, 2016 from: <https://archive.org/details/1990censusofpopu33181unse>
- U.S. Bureau of the Census. (n.d.). 1990 Census of Housing: General Housing Characteristics. Arkansas. Retrieved April 3, 2016 from: <http://www2.census.gov/library/publications/decennial/1990/ch-1/ch-1-5.pdf>
- U.S. Bureau of the Census. (n.d.). 1990 Census of Housing: General Housing Characteristics. Florida. Retrieved April 3, 2016 from: <http://www2.census.gov/library/publications/decennial/1990/ch-1/ch-1-11.pdf>
- U.S. Bureau of the Census. (n.d.). 1990 Census of Housing: General Housing Characteristics. Oregon. Retrieved April 3, 2016 from: <http://www2.census.gov/library/publications/decennial/1990/ch-1/ch-1-39.pdf>
- U.S. Bureau of the Census. (n.d.). 1990 Census of Housing: General Housing Characteristics. Tennessee. Retrieved April 3, 2016 from: <http://www2.census.gov/library/publications/decennial/1990/ch-1/ch-1-44.pdf>

- U.S. Bureau of the Census. (n.d.). 1990 Census of Housing: General Housing Characteristics. Washington. Retrieved April 3, 2016 from: <http://www2.census.gov/library/publications/decennial/1990/ch-1/ch-1-49.pdf>
- U.S. Bureau of the Census. (n.d.). 1990 Census of Population and Housing: Summary Social, Economic, and Housing Characteristics. Tennessee. Retrieved April 3, 2016 from: <http://www.census.gov/prod/cen1990/cph5/cph-5-44.pdf>
- U.S. Bureau of the Census. (n.d.). Census 2000 Summary File 3 (SF 3) - Sample Data. Census Tract 39, Hillsborough County, Florida. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>
- U.S. Bureau of the Census. (n.d.). Census 2000 Summary File 3 (SF 3) - Sample Data. Census Tract 51, Hillsborough County, Florida. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>
- U.S. Bureau of the Census. (n.d.). Census 2000 Summary File 3 (SF 3) - Sample Data. Census Tract 66, King County, Washington. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>
- U.S. Bureau of the Census. (n.d.). Census 2000 Summary File 3 (SF 3) - Sample Data. Census Tract 72, King County, Washington. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>
- U.S. Bureau of the Census. (n.d.). Census 2000 Summary File 3 (SF 3) - Sample Data. Census Tract 73, King County, Washington. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>
- U.S. Bureau of the Census. (n.d.). Census 2000 Summary File 3 (SF 3) - Sample Data. Census Tract 47, Multnomah County, Oregon. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>
- U.S. Bureau of the Census. (n.d.). Census 2000 Summary File 3 (SF 3) - Sample Data. Census Tract 48, Multnomah County, Oregon. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>
- U.S. Bureau of the Census. (n.d.). Census 2000 Summary File 3 (SF 3) - Sample Data. Census Tract 49, Multnomah County, Oregon. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>
- U.S. Bureau of the Census. (n.d.). Census 2000 Summary File 3 (SF 3) - Sample Data. Census Tract 50, Multnomah County, Oregon. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>

- U.S. Bureau of the Census. (n.d.). Census 2000 Summary File 3 (SF 3) - Sample Data. Census Tract 51, Multnomah County, Oregon. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>
- U.S. Bureau of the Census. (n.d.). Census 2000 Summary File 3 (SF 3) - Sample Data. Census Tract 56, Multnomah County, Oregon. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>
- U.S. Bureau of the Census. (n.d.). Census 2000 Summary File 3 (SF 3) - Sample Data. Census Tract 57, Multnomah County, Oregon. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>
- U.S. Bureau of the Census. (n.d.). Census 2000 Summary File 3 (SF 3) - Sample Data. Census Tract 59, Multnomah County, Oregon. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>
- U.S. Bureau of the Census. (n.d.). Census 2000 Summary File 3 (SF 3) - Sample Data. Census Tract 602, Pierce County, Washington. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>
- U.S. Bureau of the Census. (n.d.). Census 2000 Summary File 3 (SF 3) - Sample Data. Census Tract 616.01, Pierce County, Washington. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>
- U.S. Bureau of the Census. (n.d.). Census 2000 Summary File 3 (SF 3) - Sample Data. Census Tract 616.02, Pierce County, Washington. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>
- U.S. Bureau of the Census. (n.d.). Census 2000 Summary File 3 (SF 3) - Sample Data. Census Tract 25, Pulaski County, Arkansas. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>
- U.S. Bureau of the Census. (n.d.). Census 2000 Summary File 3 (SF 3) - Sample Data. Census Tract 21, Shelby County, Tennessee. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>
- U.S. Bureau of the Census. (n.d.). Census 2000 Summary File 3 (SF 3) - Sample Data. Census Tract 36, Shelby County, Tennessee. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>
- U.S. Bureau of the Census. (n.d.). Census 2000 Summary File 3 (SF 3) - Sample Data. Census Tract 38, Shelby County, Tennessee. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>

- U.S. Bureau of the Census. (n.d.). Census 2000 Summary File 3 (SF 3) - Sample Data. Census Tract 39, Shelby County, Tennessee. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>
- U.S. Bureau of the Census. (n.d.). Census 2000 Summary File 3 (SF 3) - Sample Data. Census Tract 42, Shelby County, Tennessee. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>
- U.S. Bureau of the Census. (n.d.). Census 2000 Summary File 3 (SF 3) - Sample Data. Census Tract 43, Shelby County, Tennessee. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>
- U.S. Bureau of the Census. (n.d.). B25058: Median Contract Rent (Dollars). Universe: Renter-occupied housing units paying cash rent. 2006-2010 American Community Survey 5-Year Estimates. Census Tract 39, Hillsborough County, Florida. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>
- U.S. Bureau of the Census. (n.d.). B25058: Median Contract Rent (Dollars). Universe: Renter-occupied housing units paying cash rent. 2006-2010 American Community Survey 5-Year Estimates. Census Tract 51.01, Hillsborough County, Florida. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>
- U.S. Bureau of the Census. (n.d.). B25058: Median Contract Rent (Dollars). Universe: Renter-occupied housing units paying cash rent. 2007-2011 American Community Survey 5-Year Estimates. Census Tract 39, Hillsborough County, Florida. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>
- U.S. Bureau of the Census. (n.d.). B25058: Median Contract Rent (Dollars). Universe: Renter-occupied housing units paying cash rent. 2007-2011 American Community Survey 5-Year Estimates. Census Tract 51.01, Hillsborough County, Florida. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>
- U.S. Bureau of the Census. (n.d.). B25058: Median Contract Rent (Dollars). Universe: Renter-occupied housing units paying cash rent. 2008-2012 American Community Survey 5-Year Estimates. Census Tract 39, Hillsborough County, Florida. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>
- U.S. Bureau of the Census. (n.d.). B25058: Median Contract Rent (Dollars). Universe: Renter-occupied housing units paying cash rent. 2008-2012 American Community Survey 5-Year Estimates. Census Tract 51.01, Hillsborough County, Florida. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>
- U.S. Bureau of the Census. (n.d.). B25058: Median Contract Rent (Dollars). Universe: Renter-occupied housing units paying cash rent. 2009-2013 American

Community Survey 5-Year Estimates. Census Tract 39, Hillsborough County, Florida. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>

U.S. Bureau of the Census. (n.d.). B25058: Median Contract Rent (Dollars). Universe: Renter-occupied housing units paying cash rent. 2009-2013 American Community Survey 5-Year Estimates. Census Tract 51.01, Hillsborough County, Florida. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>

U.S. Bureau of the Census. (n.d.). B25058: Median Contract Rent (Dollars). Universe: Renter-occupied housing units paying cash rent. 2010-2014 American Community Survey 5-Year Estimates. Census Tract 39, Hillsborough County, Florida. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>

U.S. Bureau of the Census. (n.d.). B25058: Median Contract Rent (Dollars). Universe: Renter-occupied housing units paying cash rent. 2010-2014 American Community Survey 5-Year Estimates. Census Tract 51.01, Hillsborough County, Florida. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>

U.S. Bureau of the Census. (n.d.). B25058: Median Contract Rent (Dollars). Universe: Renter-occupied housing units paying cash rent. 2006-2010 American Community Survey 5-Year Estimates. Census Tract 66, King County, Washington. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>

U.S. Bureau of the Census. (n.d.). B25058: Median Contract Rent (Dollars). Universe: Renter-occupied housing units paying cash rent. 2006-2010 American Community Survey 5-Year Estimates. Census Tract 72, King County, Washington. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>

U.S. Bureau of the Census. (n.d.). B25058: Median Contract Rent (Dollars). Universe: Renter-occupied housing units paying cash rent. 2006-2010 American Community Survey 5-Year Estimates. Census Tract 73, King County, Washington. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>

U.S. Bureau of the Census. (n.d.). B25058: Median Contract Rent (Dollars). Universe: Renter-occupied housing units paying cash rent. 2007-2011 American Community Survey 5-Year Estimates. Census Tract 66, King County, Washington. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>

U.S. Bureau of the Census. (n.d.). B25058: Median Contract Rent (Dollars). Universe: Renter-occupied housing units paying cash rent. 2007-2011 American Community Survey 5-Year Estimates. Census Tract 72, King County, Washington. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>

U.S. Bureau of the Census. (n.d.). B25058: Median Contract Rent (Dollars). Universe:

Renter-occupied housing units paying cash rent. 2007-2011 American Community Survey 5-Year Estimates. Census Tract 73, King County, Washington. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>

U.S. Bureau of the Census. (n.d.). B25058: Median Contract Rent (Dollars). Universe: Renter-occupied housing units paying cash rent. 2008-2012 American Community Survey 5-Year Estimates. Census Tract 66, King County, Washington. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>

U.S. Bureau of the Census. (n.d.). B25058: Median Contract Rent (Dollars). Universe: Renter-occupied housing units paying cash rent. 2008-2012 American Community Survey 5-Year Estimates. Census Tract 72, King County, Washington. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>

U.S. Bureau of the Census. (n.d.). B25058: Median Contract Rent (Dollars). Universe: Renter-occupied housing units paying cash rent. 2008-2012 American Community Survey 5-Year Estimates. Census Tract 73, King County, Washington. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>

U.S. Bureau of the Census. (n.d.). B25058: Median Contract Rent (Dollars). Universe: Renter-occupied housing units paying cash rent. 2009-2013 American Community Survey 5-Year Estimates. Census Tract 66, King County, Washington. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>

U.S. Bureau of the Census. (n.d.). B25058: Median Contract Rent (Dollars). Universe: Renter-occupied housing units paying cash rent. 2009-2013 American Community Survey 5-Year Estimates. Census Tract 72, King County, Washington. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>

U.S. Bureau of the Census. (n.d.). B25058: Median Contract Rent (Dollars). Universe: Renter-occupied housing units paying cash rent. 2009-2013 American Community Survey 5-Year Estimates. Census Tract 73, King County, Washington. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>

U.S. Bureau of the Census. (n.d.). B25058: Median Contract Rent (Dollars). Universe: Renter-occupied housing units paying cash rent. 2010-2014 American Community Survey 5-Year Estimates. Census Tract 66, King County, Washington. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>

U.S. Bureau of the Census. (n.d.). B25058: Median Contract Rent (Dollars). Universe: Renter-occupied housing units paying cash rent. 2010-2014 American Community Survey 5-Year Estimates. Census Tract 72, King County, Washington. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>

- U.S. Bureau of the Census. (n.d.). B25058: Median Contract Rent (Dollars). Universe: Renter-occupied housing units paying cash rent. 2010-2014 American Community Survey 5-Year Estimates. Census Tract 73, King County, Washington. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>
- U.S. Bureau of the Census. (n.d.). B25058: Median Contract Rent (Dollars). Universe: Renter-occupied housing units paying cash rent. 2006-2010 American Community Survey 5-Year Estimates. Census Tract 47, Multnomah County, Oregon. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>
- U.S. Bureau of the Census. (n.d.). B25058: Median Contract Rent (Dollars). Universe: Renter-occupied housing units paying cash rent. 2006-2010 American Community Survey 5-Year Estimates. Census Tract 48, Multnomah County, Oregon. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>
- U.S. Bureau of the Census. (n.d.). B25058: Median Contract Rent (Dollars). Universe: Renter-occupied housing units paying cash rent. 2006-2010 American Community Survey 5-Year Estimates. Census Tract 49, Multnomah County, Oregon. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>
- U.S. Bureau of the Census. (n.d.). B25058: Median Contract Rent (Dollars). Universe: Renter-occupied housing units paying cash rent. 2006-2010 American Community Survey 5-Year Estimates. Census Tract 50, Multnomah County, Oregon. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>
- U.S. Bureau of the Census. (n.d.). B25058: Median Contract Rent (Dollars). Universe: Renter-occupied housing units paying cash rent. 2006-2010 American Community Survey 5-Year Estimates. Census Tract 51, Multnomah County, Oregon. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>
- U.S. Bureau of the Census. (n.d.). B25058: Median Contract Rent (Dollars). Universe: Renter-occupied housing units paying cash rent. 2006-2010 American Community Survey 5-Year Estimates. Census Tract 56, Multnomah County, Oregon. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>
- U.S. Bureau of the Census. (n.d.). B25058: Median Contract Rent (Dollars). Universe: Renter-occupied housing units paying cash rent. 2006-2010 American Community Survey 5-Year Estimates. Census Tract 57, Multnomah County, Oregon. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>
- U.S. Bureau of the Census. (n.d.). B25058: Median Contract Rent (Dollars). Universe: Renter-occupied housing units paying cash rent. 2006-2010 American Community Survey 5-Year Estimates. Census Tract 59, Multnomah County, Oregon. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>



- U.S. Bureau of the Census. (n.d.). B25058: Median Contract Rent (Dollars). Universe: Renter-occupied housing units paying cash rent. 2007-2011 American Community Survey 5-Year Estimates. Census Tract 47, Multnomah County, Oregon. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>
- U.S. Bureau of the Census. (n.d.). B25058: Median Contract Rent (Dollars). Universe: Renter-occupied housing units paying cash rent. 2007-2011 American Community Survey 5-Year Estimates. Census Tract 48, Multnomah County, Oregon. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>
- U.S. Bureau of the Census. (n.d.). B25058: Median Contract Rent (Dollars). Universe: Renter-occupied housing units paying cash rent. 2007-2011 American Community Survey 5-Year Estimates. Census Tract 49, Multnomah County, Oregon. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>
- U.S. Bureau of the Census. (n.d.). B25058: Median Contract Rent (Dollars). Universe: Renter-occupied housing units paying cash rent. 2007-2011 American Community Survey 5-Year Estimates. Census Tract 50, Multnomah County, Oregon. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>
- U.S. Bureau of the Census. (n.d.). B25058: Median Contract Rent (Dollars). Universe: Renter-occupied housing units paying cash rent. 2007-2011 American Community Survey 5-Year Estimates. Census Tract 51, Multnomah County, Oregon. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>
- U.S. Bureau of the Census. (n.d.). B25058: Median Contract Rent (Dollars). Universe: Renter-occupied housing units paying cash rent. 2007-2011 American Community Survey 5-Year Estimates. Census Tract 56, Multnomah County, Oregon. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>
- U.S. Bureau of the Census. (n.d.). B25058: Median Contract Rent (Dollars). Universe: Renter-occupied housing units paying cash rent. 2007-2011 American Community Survey 5-Year Estimates. Census Tract 57, Multnomah County, Oregon. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>
- U.S. Bureau of the Census. (n.d.). B25058: Median Contract Rent (Dollars). Universe: Renter-occupied housing units paying cash rent. 2007-2011 American Community Survey 5-Year Estimates. Census Tract 59, Multnomah County, Oregon. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>
- U.S. Bureau of the Census. (n.d.). B25058: Median Contract Rent (Dollars). Universe: Renter-occupied housing units paying cash rent. 2008-2012 American Community Survey 5-Year Estimates. Census Tract 47, Multnomah County,

Oregon. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>

U.S. Bureau of the Census. (n.d.). B25058: Median Contract Rent (Dollars). Universe: Renter-occupied housing units paying cash rent. 2008-2012 American Community Survey 5-Year Estimates. Census Tract 48, Multnomah County, Oregon. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>

U.S. Bureau of the Census. (n.d.). B25058: Median Contract Rent (Dollars). Universe: Renter-occupied housing units paying cash rent. 2008-2012 American Community Survey 5-Year Estimates. Census Tract 49, Multnomah County, Oregon. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>

U.S. Bureau of the Census. (n.d.). B25058: Median Contract Rent (Dollars). Universe: Renter-occupied housing units paying cash rent. 2008-2012 American Community Survey 5-Year Estimates. Census Tract 50, Multnomah County, Oregon. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>

U.S. Bureau of the Census. (n.d.). B25058: Median Contract Rent (Dollars). Universe: Renter-occupied housing units paying cash rent. 2008-2012 American Community Survey 5-Year Estimates. Census Tract 51, Multnomah County, Oregon. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>

U.S. Bureau of the Census. (n.d.). B25058: Median Contract Rent (Dollars). Universe: Renter-occupied housing units paying cash rent. 2008-2012 American Community Survey 5-Year Estimates. Census Tract 56, Multnomah County, Oregon. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>

U.S. Bureau of the Census. (n.d.). B25058: Median Contract Rent (Dollars). Universe: Renter-occupied housing units paying cash rent. 2008-2012 American Community Survey 5-Year Estimates. Census Tract 57, Multnomah County, Oregon. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>

U.S. Bureau of the Census. (n.d.). B25058: Median Contract Rent (Dollars). Universe: Renter-occupied housing units paying cash rent. 2008-2012 American Community Survey 5-Year Estimates. Census Tract 59, Multnomah County, Oregon. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>

U.S. Bureau of the Census. (n.d.). B25058: Median Contract Rent (Dollars). Universe: Renter-occupied housing units paying cash rent. 2009-2013 American Community Survey 5-Year Estimates. Census Tract 47, Multnomah County, Oregon. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>

U.S. Bureau of the Census. (n.d.). B25058: Median Contract Rent (Dollars). Universe: Renter-occupied housing units paying cash rent. 2009-2013 American

Community Survey 5-Year Estimates. Census Tract 48, Multnomah County, Oregon. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>

U.S. Bureau of the Census. (n.d.). B25058: Median Contract Rent (Dollars). Universe: Renter-occupied housing units paying cash rent. 2009-2013 American Community Survey 5-Year Estimates. Census Tract 49, Multnomah County, Oregon. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>

U.S. Bureau of the Census. (n.d.). B25058: Median Contract Rent (Dollars). Universe: Renter-occupied housing units paying cash rent. 2009-2013 American Community Survey 5-Year Estimates. Census Tract 50, Multnomah County, Oregon. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>

U.S. Bureau of the Census. (n.d.). B25058: Median Contract Rent (Dollars). Universe: Renter-occupied housing units paying cash rent. 2009-2013 American Community Survey 5-Year Estimates. Census Tract 51, Multnomah County, Oregon. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>

U.S. Bureau of the Census. (n.d.). B25058: Median Contract Rent (Dollars). Universe: Renter-occupied housing units paying cash rent. 2009-2013 American Community Survey 5-Year Estimates. Census Tract 56, Multnomah County, Oregon. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>

U.S. Bureau of the Census. (n.d.). B25058: Median Contract Rent (Dollars). Universe: Renter-occupied housing units paying cash rent. 2009-2013 American Community Survey 5-Year Estimates. Census Tract 57, Multnomah County, Oregon. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>

U.S. Bureau of the Census. (n.d.). B25058: Median Contract Rent (Dollars). Universe: Renter-occupied housing units paying cash rent. 2009-2013 American Community Survey 5-Year Estimates. Census Tract 59, Multnomah County, Oregon. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>

U.S. Bureau of the Census. (n.d.). B25058: Median Contract Rent (Dollars). Universe: Renter-occupied housing units paying cash rent. 2010-2014 American Community Survey 5-Year Estimates. Census Tract 47, Multnomah County, Oregon. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>

U.S. Bureau of the Census. (n.d.). B25058: Median Contract Rent (Dollars). Universe: Renter-occupied housing units paying cash rent. 2010-2014 American Community Survey 5-Year Estimates. Census Tract 48, Multnomah County, Oregon. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>

U.S. Bureau of the Census. (n.d.). B25058: Median Contract Rent (Dollars). Universe:

Renter-occupied housing units paying cash rent. 2010-2014 American Community Survey 5-Year Estimates. Census Tract 49, Multnomah County, Oregon. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>

U.S. Bureau of the Census. (n.d.). B25058: Median Contract Rent (Dollars). Universe: Renter-occupied housing units paying cash rent. 2010-2014 American Community Survey 5-Year Estimates. Census Tract 50, Multnomah County, Oregon. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>

U.S. Bureau of the Census. (n.d.). B25058: Median Contract Rent (Dollars). Universe: Renter-occupied housing units paying cash rent. 2010-2014 American Community Survey 5-Year Estimates. Census Tract 51, Multnomah County, Oregon. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>

U.S. Bureau of the Census. (n.d.). B25058: Median Contract Rent (Dollars). Universe: Renter-occupied housing units paying cash rent. 2010-2014 American Community Survey 5-Year Estimates. Census Tract 56, Multnomah County, Oregon. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>

U.S. Bureau of the Census. (n.d.). B25058: Median Contract Rent (Dollars). Universe: Renter-occupied housing units paying cash rent. 2010-2014 American Community Survey 5-Year Estimates. Census Tract 57, Multnomah County, Oregon. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>

U.S. Bureau of the Census. (n.d.). B25058: Median Contract Rent (Dollars). Universe: Renter-occupied housing units paying cash rent. 2010-2014 American Community Survey 5-Year Estimates. Census Tract 59, Multnomah County, Oregon. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>

U.S. Bureau of the Census. (n.d.). B25058: Median Contract Rent (Dollars). Universe: Renter-occupied housing units paying cash rent. 2006-2010 American Community Survey 5-Year Estimates. Census Tract 602, Pierce County, Washington. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>

U.S. Bureau of the Census. (n.d.). B25058: Median Contract Rent (Dollars). Universe: Renter-occupied housing units paying cash rent. 2006-2010 American Community Survey 5-Year Estimates. Census Tract 616.01, Pierce County, Washington. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>

U.S. Bureau of the Census. (n.d.). B25058: Median Contract Rent (Dollars). Universe: Renter-occupied housing units paying cash rent. 2006-2010 American Community Survey 5-Year Estimates. Census Tract 616.02, Pierce County, Washington. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>

- U.S. Bureau of the Census. (n.d.). B25058: Median Contract Rent (Dollars). Universe: Renter-occupied housing units paying cash rent. 2007-2011 American Community Survey 5-Year Estimates. Census Tract 602, Pierce County, Washington. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>
- U.S. Bureau of the Census. (n.d.). B25058: Median Contract Rent (Dollars). Universe: Renter-occupied housing units paying cash rent. 2007-2011 American Community Survey 5-Year Estimates. Census Tract 616.01, Pierce County, Washington. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>
- U.S. Bureau of the Census. (n.d.). B25058: Median Contract Rent (Dollars). Universe: Renter-occupied housing units paying cash rent. 2007-2011 American Community Survey 5-Year Estimates. Census Tract 616.02, Pierce County, Washington. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>
- U.S. Bureau of the Census. (n.d.). B25058: Median Contract Rent (Dollars). Universe: Renter-occupied housing units paying cash rent. 2008-2012 American Community Survey 5-Year Estimates. Census Tract 602, Pierce County, Washington. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>
- U.S. Bureau of the Census. (n.d.). B25058: Median Contract Rent (Dollars). Universe: Renter-occupied housing units paying cash rent. 2008-2012 American Community Survey 5-Year Estimates. Census Tract 616.01, Pierce County, Washington. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>
- U.S. Bureau of the Census. (n.d.). B25058: Median Contract Rent (Dollars). Universe: Renter-occupied housing units paying cash rent. 2008-2012 American Community Survey 5-Year Estimates. Census Tract 616.02, Pierce County, Washington. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>
- U.S. Bureau of the Census. (n.d.). B25058: Median Contract Rent (Dollars). Universe: Renter-occupied housing units paying cash rent. 2009-2013 American Community Survey 5-Year Estimates. Census Tract 602, Pierce County, Washington. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>
- U.S. Bureau of the Census. (n.d.). B25058: Median Contract Rent (Dollars). Universe: Renter-occupied housing units paying cash rent. 2009-2013 American Community Survey 5-Year Estimates. Census Tract 616.01, Pierce County, Washington. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>
- U.S. Bureau of the Census. (n.d.). B25058: Median Contract Rent (Dollars). Universe: Renter-occupied housing units paying cash rent. 2009-2013 American Community Survey 5-Year Estimates. Census Tract 616.02, Pierce County, Washington. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>

- U.S. Bureau of the Census. (n.d.). B25058: Median Contract Rent (Dollars). Universe: Renter-occupied housing units paying cash rent. 2010-2014 American Community Survey 5-Year Estimates. Census Tract 602, Pierce County, Washington. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>
- U.S. Bureau of the Census. (n.d.). B25058: Median Contract Rent (Dollars). Universe: Renter-occupied housing units paying cash rent. 2010-2014 American Community Survey 5-Year Estimates. Census Tract 616.01, Pierce County, Washington. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>
- U.S. Bureau of the Census. (n.d.). B25058: Median Contract Rent (Dollars). Universe: Renter-occupied housing units paying cash rent. 2010-2014 American Community Survey 5-Year Estimates. Census Tract 616.02, Pierce County, Washington. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>
- U.S. Bureau of the Census. (n.d.). B25058: Median Contract Rent (Dollars). Universe: Renter-occupied housing units paying cash rent. 2006-2010 American Community Survey 5-Year Estimates. Census Tract 25, Pulaski County, Arkansas. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>
- U.S. Bureau of the Census. (n.d.). B25058: Median Contract Rent (Dollars). Universe: Renter-occupied housing units paying cash rent. 2007-2011 American Community Survey 5-Year Estimates. Census Tract 25, Pulaski County, Arkansas. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>
- U.S. Bureau of the Census. (n.d.). B25058: Median Contract Rent (Dollars). Universe: Renter-occupied housing units paying cash rent. 2008-2012 American Community Survey 5-Year Estimates. Census Tract 25, Pulaski County, Arkansas. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>
- U.S. Bureau of the Census. (n.d.). B25058: Median Contract Rent (Dollars). Universe: Renter-occupied housing units paying cash rent. 2009-2013 American Community Survey 5-Year Estimates. Census Tract 25, Pulaski County, Arkansas. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>
- U.S. Bureau of the Census. (n.d.). B25058: Median Contract Rent (Dollars). Universe: Renter-occupied housing units paying cash rent. 2010-2014 American Community Survey 5-Year Estimates. Census Tract 25, Pulaski County, Arkansas. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>
- U.S. Bureau of the Census. (n.d.). B25058: Median Contract Rent (Dollars). Universe: Renter-occupied housing units paying cash rent. 2006-2010 American Community Survey 5-Year Estimates. Census Tract 21, Shelby County,

Tennessee. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>

U.S. Bureau of the Census. (n.d.). B25058: Median Contract Rent (Dollars). Universe: Renter-occupied housing units paying cash rent. 2006-2010 American Community Survey 5-Year Estimates. Census Tract 36, Shelby County, Tennessee. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>

U.S. Bureau of the Census. (n.d.). B25058: Median Contract Rent (Dollars). Universe: Renter-occupied housing units paying cash rent. 2006-2010 American Community Survey 5-Year Estimates. Census Tract 38, Shelby County, Tennessee. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>

U.S. Bureau of the Census. (n.d.). B25058: Median Contract Rent (Dollars). Universe: Renter-occupied housing units paying cash rent. 2006-2010 American Community Survey 5-Year Estimates. Census Tract 39, Shelby County, Tennessee. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>

U.S. Bureau of the Census. (n.d.). B25058: Median Contract Rent (Dollars). Universe: Renter-occupied housing units paying cash rent. 2006-2010 American Community Survey 5-Year Estimates. Census Tract 42, Shelby County, Tennessee. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>

U.S. Bureau of the Census. (n.d.). B25058: Median Contract Rent (Dollars). Universe: Renter-occupied housing units paying cash rent. 2006-2010 American Community Survey 5-Year Estimates. Census Tract 43, Shelby County, Tennessee. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>

U.S. Bureau of the Census. (n.d.). B25058: Median Contract Rent (Dollars). Universe: Renter-occupied housing units paying cash rent. 2007-2011 American Community Survey 5-Year Estimates. Census Tract 21, Shelby County, Tennessee. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>

U.S. Bureau of the Census. (n.d.). B25058: Median Contract Rent (Dollars). Universe: Renter-occupied housing units paying cash rent. 2007-2011 American Community Survey 5-Year Estimates. Census Tract 36, Shelby County, Tennessee. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>

U.S. Bureau of the Census. (n.d.). B25058: Median Contract Rent (Dollars). Universe: Renter-occupied housing units paying cash rent. 2007-2011 American Community Survey 5-Year Estimates. Census Tract 38, Shelby County, Tennessee. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>

U.S. Bureau of the Census. (n.d.). B25058: Median Contract Rent (Dollars). Universe: Renter-occupied housing units paying cash rent. 2007-2011 American

Community Survey 5-Year Estimates. Census Tract 39, Shelby County, Tennessee. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>

U.S. Bureau of the Census. (n.d.). B25058: Median Contract Rent (Dollars). Universe: Renter-occupied housing units paying cash rent. 2007-2011 American Community Survey 5-Year Estimates. Census Tract 42, Shelby County, Tennessee. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>

U.S. Bureau of the Census. (n.d.). B25058: Median Contract Rent (Dollars). Universe: Renter-occupied housing units paying cash rent. 2007-2011 American Community Survey 5-Year Estimates. Census Tract 43, Shelby County, Tennessee. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>

U.S. Bureau of the Census. (n.d.). B25058: Median Contract Rent (Dollars). Universe: Renter-occupied housing units paying cash rent. 2008-2012 American Community Survey 5-Year Estimates. Census Tract 21, Shelby County, Tennessee. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>

U.S. Bureau of the Census. (n.d.). B25058: Median Contract Rent (Dollars). Universe: Renter-occupied housing units paying cash rent. 2008-2012 American Community Survey 5-Year Estimates. Census Tract 36, Shelby County, Tennessee. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>

U.S. Bureau of the Census. (n.d.). B25058: Median Contract Rent (Dollars). Universe: Renter-occupied housing units paying cash rent. 2008-2012 American Community Survey 5-Year Estimates. Census Tract 38, Shelby County, Tennessee. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>

U.S. Bureau of the Census. (n.d.). B25058: Median Contract Rent (Dollars). Universe: Renter-occupied housing units paying cash rent. 2008-2012 American Community Survey 5-Year Estimates. Census Tract 39, Shelby County, Tennessee. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>

U.S. Bureau of the Census. (n.d.). B25058: Median Contract Rent (Dollars). Universe: Renter-occupied housing units paying cash rent. 2008-2012 American Community Survey 5-Year Estimates. Census Tract 42, Shelby County, Tennessee. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>

U.S. Bureau of the Census. (n.d.). B25058: Median Contract Rent (Dollars). Universe: Renter-occupied housing units paying cash rent. 2008-2012 American Community Survey 5-Year Estimates. Census Tract 43, Shelby County, Tennessee. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>

U.S. Bureau of the Census. (n.d.). B25058: Median Contract Rent (Dollars). Universe:



Renter-occupied housing units paying cash rent. 2009-2013 American Community Survey 5-Year Estimates. Census Tract 21, Shelby County, Tennessee. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>

U.S. Bureau of the Census. (n.d.). B25058: Median Contract Rent (Dollars). Universe: Renter-occupied housing units paying cash rent. 2009-2013 American Community Survey 5-Year Estimates. Census Tract 36, Shelby County, Tennessee. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>

U.S. Bureau of the Census. (n.d.). B25058: Median Contract Rent (Dollars). Universe: Renter-occupied housing units paying cash rent. 2009-2013 American Community Survey 5-Year Estimates. Census Tract 38, Shelby County, Tennessee. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>

U.S. Bureau of the Census. (n.d.). B25058: Median Contract Rent (Dollars). Universe: Renter-occupied housing units paying cash rent. 2009-2013 American Community Survey 5-Year Estimates. Census Tract 39, Shelby County, Tennessee. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>

U.S. Bureau of the Census. (n.d.). B25058: Median Contract Rent (Dollars). Universe: Renter-occupied housing units paying cash rent. 2009-2013 American Community Survey 5-Year Estimates. Census Tract 42, Shelby County, Tennessee. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>

U.S. Bureau of the Census. (n.d.). B25058: Median Contract Rent (Dollars). Universe: Renter-occupied housing units paying cash rent. 2009-2013 American Community Survey 5-Year Estimates. Census Tract 43, Shelby County, Tennessee. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>

U.S. Bureau of the Census. (n.d.). B25058: Median Contract Rent (Dollars). Universe: Renter-occupied housing units paying cash rent. 2010-2014 American Community Survey 5-Year Estimates. Census Tract 21, Shelby County, Tennessee. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>

U.S. Bureau of the Census. (n.d.). B25058: Median Contract Rent (Dollars). Universe: Renter-occupied housing units paying cash rent. 2010-2014 American Community Survey 5-Year Estimates. Census Tract 36, Shelby County, Tennessee. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>

U.S. Bureau of the Census. (n.d.). B25058: Median Contract Rent (Dollars). Universe: Renter-occupied housing units paying cash rent. 2010-2014 American Community Survey 5-Year Estimates. Census Tract 38, Shelby County, Tennessee. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>

- U.S. Bureau of the Census. (n.d.). B25058: Median Contract Rent (Dollars). Universe: Renter-occupied housing units paying cash rent. 2010-2014 American Community Survey 5-Year Estimates. Census Tract 39, Shelby County, Tennessee. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>
- U.S. Bureau of the Census. (n.d.). B25058: Median Contract Rent (Dollars). Universe: Renter-occupied housing units paying cash rent. 2010-2014 American Community Survey 5-Year Estimates. Census Tract 42, Shelby County, Tennessee. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>
- U.S. Bureau of the Census. (n.d.). B25058: Median Contract Rent (Dollars). Universe: Renter-occupied housing units paying cash rent. 2010-2014 American Community Survey 5-Year Estimates. Census Tract 43, Shelby County, Tennessee. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>
- U.S. Bureau of the Census. (n.d.). S1501: Educational Attainment. 2006-2010 American Community Survey 5-Year Estimates. Census Tract 39, Hillsborough County, Florida. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>
- U.S. Bureau of the Census. (n.d.). S1501: Educational Attainment. 2006-2010 American Community Survey 5-Year Estimates. Census Tract 51.01, Hillsborough County, Florida. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>
- U.S. Bureau of the Census. (n.d.). S1501: Educational Attainment. 2007-2011 American Community Survey 5-Year Estimates. Census Tract 39, Hillsborough County, Florida. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>
- U.S. Bureau of the Census. (n.d.). S1501: Educational Attainment. 2007-2011 American Community Survey 5-Year Estimates. Census Tract 51.01, Hillsborough County, Florida. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>
- U.S. Bureau of the Census. (n.d.). S1501: Educational Attainment. 2008-2012 American Community Survey 5-Year Estimates. Census Tract 39, Hillsborough County, Florida. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>
- U.S. Bureau of the Census. (n.d.). S1501: Educational Attainment. 2008-2012 American Community Survey 5-Year Estimates. Census Tract 51.01, Hillsborough County, Florida. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>
- U.S. Bureau of the Census. (n.d.). S1501: Educational Attainment. 2009-2013 American Community Survey 5-Year Estimates. Census Tract 39, Hillsborough County, Florida. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>

- U.S. Bureau of the Census. (n.d.). S1501: Educational Attainment. 2009-2013 American Community Survey 5-Year Estimates. Census Tract 51.01, Hillsborough County, Florida. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>
- U.S. Bureau of the Census. (n.d.). S1501: Educational Attainment. 2010-2014 American Community Survey 5-Year Estimates. Census Tract 39, Hillsborough County, Florida. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>
- U.S. Bureau of the Census. (n.d.). S1501: Educational Attainment. 2010-2014 American Community Survey 5-Year Estimates. Census Tract 51.01, Hillsborough County, Florida. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>
- U.S. Bureau of the Census. (n.d.). S1501: Educational Attainment. 2006-2011 American Community Survey 5-Year Estimates. Census Tract 66, King County, Washington. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>
- U.S. Bureau of the Census. (n.d.). S1501: Educational Attainment. 2006-2011 American Community Survey 5-Year Estimates. Census Tract 72, King County, Washington. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>
- U.S. Bureau of the Census. (n.d.). S1501: Educational Attainment. 2006-2011 American Community Survey 5-Year Estimates. Census Tract 73, King County, Washington. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>
- U.S. Bureau of the Census. (n.d.). S1501: Educational Attainment. 2007-2011 American Community Survey 5-Year Estimates. Census Tract 66, King County, Washington. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>
- U.S. Bureau of the Census. (n.d.). S1501: Educational Attainment. 2007-2011 American Community Survey 5-Year Estimates. Census Tract 72, King County, Washington. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>
- U.S. Bureau of the Census. (n.d.). S1501: Educational Attainment. 2007-2011 American Community Survey 5-Year Estimates. Census Tract 73, King County, Washington. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>
- U.S. Bureau of the Census. (n.d.). S1501: Educational Attainment. 2008-2012 American Community Survey 5-Year Estimates. Census Tract 66, King County, Washington. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>
- U.S. Bureau of the Census. (n.d.). S1501: Educational Attainment. 2008-2012 American Community Survey 5-Year Estimates. Census Tract 72, King County, Washington. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>

- U.S. Bureau of the Census. (n.d.). S1501: Educational Attainment. 2008-2012 American Community Survey 5-Year Estimates. Census Tract 73, King County, Washington. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>
- U.S. Bureau of the Census. (n.d.). S1501: Educational Attainment. 2009-2013 American Community Survey 5-Year Estimates. Census Tract 66, King County, Washington. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>
- U.S. Bureau of the Census. (n.d.). S1501: Educational Attainment. 2009-2013 American Community Survey 5-Year Estimates. Census Tract 72, King County, Washington. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>
- U.S. Bureau of the Census. (n.d.). S1501: Educational Attainment. 2009-2013 American Community Survey 5-Year Estimates. Census Tract 73, King County, Washington. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>
- U.S. Bureau of the Census. (n.d.). S1501: Educational Attainment. 2010-2014 American Community Survey 5-Year Estimates. Census Tract 66, King County, Washington. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>
- U.S. Bureau of the Census. (n.d.). S1501: Educational Attainment. 2010-2014 American Community Survey 5-Year Estimates. Census Tract 72, King County, Washington. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>
- U.S. Bureau of the Census. (n.d.). S1501: Educational Attainment. 2010-2014 American Community Survey 5-Year Estimates. Census Tract 73, King County, Washington. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>
- U.S. Bureau of the Census. (n.d.). S1501: Educational Attainment. 2006-2011 American Community Survey 5-Year Estimates. Census Tract 47, Multnomah County, Oregon. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>
- U.S. Bureau of the Census. (n.d.). S1501: Educational Attainment. 2006-2011 American Community Survey 5-Year Estimates. Census Tract 48, Multnomah County, Oregon. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>
- U.S. Bureau of the Census. (n.d.). S1501: Educational Attainment. 2006-2011 American Community Survey 5-Year Estimates. Census Tract 49, Multnomah County, Oregon. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>
- U.S. Bureau of the Census. (n.d.). S1501: Educational Attainment. 2006-2011 American Community Survey 5-Year Estimates. Census Tract 50, Multnomah County, Oregon. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>

- U.S. Bureau of the Census. (n.d.). S1501: Educational Attainment. 2006-2011 American Community Survey 5-Year Estimates. Census Tract 51, Multnomah County, Oregon. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>
- U.S. Bureau of the Census. (n.d.). S1501: Educational Attainment. 2006-2011 American Community Survey 5-Year Estimates. Census Tract 56, Multnomah County, Oregon. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>
- U.S. Bureau of the Census. (n.d.). S1501: Educational Attainment. 2006-2011 American Community Survey 5-Year Estimates. Census Tract 57, Multnomah County, Oregon. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>
- U.S. Bureau of the Census. (n.d.). S1501: Educational Attainment. 2006-2011 American Community Survey 5-Year Estimates. Census Tract 59, Multnomah County, Oregon. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>
- U.S. Bureau of the Census. (n.d.). S1501: Educational Attainment. 2007-2011 American Community Survey 5-Year Estimates. Census Tract 47, Multnomah County, Oregon. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>
- U.S. Bureau of the Census. (n.d.). S1501: Educational Attainment. 2007-2011 American Community Survey 5-Year Estimates. Census Tract 48, Multnomah County, Oregon. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>
- U.S. Bureau of the Census. (n.d.). S1501: Educational Attainment. 2007-2011 American Community Survey 5-Year Estimates. Census Tract 49, Multnomah County, Oregon. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>
- U.S. Bureau of the Census. (n.d.). S1501: Educational Attainment. 2007-2011 American Community Survey 5-Year Estimates. Census Tract 50, Multnomah County, Oregon. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>
- U.S. Bureau of the Census. (n.d.). S1501: Educational Attainment. 2007-2011 American Community Survey 5-Year Estimates. Census Tract 51, Multnomah County, Oregon. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>
- U.S. Bureau of the Census. (n.d.). S1501: Educational Attainment. 2007-2011 American Community Survey 5-Year Estimates. Census Tract 56, Multnomah County, Oregon. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>
- U.S. Bureau of the Census. (n.d.). S1501: Educational Attainment. 2007-2011 American Community Survey 5-Year Estimates. Census Tract 57, Multnomah County, Oregon. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>

- U.S. Bureau of the Census. (n.d.). S1501: Educational Attainment. 2007-2011 American Community Survey 5-Year Estimates. Census Tract 59, Multnomah County, Oregon. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>
- U.S. Bureau of the Census. (n.d.). S1501: Educational Attainment. 2008-2012 American Community Survey 5-Year Estimates. Census Tract 47, Multnomah County, Oregon. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>
- U.S. Bureau of the Census. (n.d.). S1501: Educational Attainment. 2008-2012 American Community Survey 5-Year Estimates. Census Tract 48, Multnomah County, Oregon. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>
- U.S. Bureau of the Census. (n.d.). S1501: Educational Attainment. 2008-2012 American Community Survey 5-Year Estimates. Census Tract 49, Multnomah County, Oregon. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>
- U.S. Bureau of the Census. (n.d.). S1501: Educational Attainment. 2008-2012 American Community Survey 5-Year Estimates. Census Tract 50, Multnomah County, Oregon. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>
- U.S. Bureau of the Census. (n.d.). S1501: Educational Attainment. 2008-2012 American Community Survey 5-Year Estimates. Census Tract 51, Multnomah County, Oregon. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>
- U.S. Bureau of the Census. (n.d.). S1501: Educational Attainment. 2008-2012 American Community Survey 5-Year Estimates. Census Tract 56, Multnomah County, Oregon. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>
- U.S. Bureau of the Census. (n.d.). S1501: Educational Attainment. 2008-2012 American Community Survey 5-Year Estimates. Census Tract 57, Multnomah County, Oregon. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>
- U.S. Bureau of the Census. (n.d.). S1501: Educational Attainment. 2008-2012 American Community Survey 5-Year Estimates. Census Tract 59, Multnomah County, Oregon. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>
- U.S. Bureau of the Census. (n.d.). S1501: Educational Attainment. 2009-2013 American Community Survey 5-Year Estimates. Census Tract 47, Multnomah County, Oregon. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>
- U.S. Bureau of the Census. (n.d.). S1501: Educational Attainment. 2009-2013 American Community Survey 5-Year Estimates. Census Tract 48, Multnomah County, Oregon. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>

- U.S. Bureau of the Census. (n.d.). S1501: Educational Attainment. 2009-2013 American Community Survey 5-Year Estimates. Census Tract 49, Multnomah County, Oregon. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>
- U.S. Bureau of the Census. (n.d.). S1501: Educational Attainment. 2009-2013 American Community Survey 5-Year Estimates. Census Tract 50, Multnomah County, Oregon. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>
- U.S. Bureau of the Census. (n.d.). S1501: Educational Attainment. 2009-2013 American Community Survey 5-Year Estimates. Census Tract 51, Multnomah County, Oregon. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>
- U.S. Bureau of the Census. (n.d.). S1501: Educational Attainment. 2009-2013 American Community Survey 5-Year Estimates. Census Tract 56, Multnomah County, Oregon. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>
- U.S. Bureau of the Census. (n.d.). S1501: Educational Attainment. 2009-2013 American Community Survey 5-Year Estimates. Census Tract 57, Multnomah County, Oregon. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>
- U.S. Bureau of the Census. (n.d.). S1501: Educational Attainment. 2009-2013 American Community Survey 5-Year Estimates. Census Tract 59, Multnomah County, Oregon. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>
- U.S. Bureau of the Census. (n.d.). S1501: Educational Attainment. 2010-2014 American Community Survey 5-Year Estimates. Census Tract 47, Multnomah County, Oregon. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>
- U.S. Bureau of the Census. (n.d.). S1501: Educational Attainment. 2010-2014 American Community Survey 5-Year Estimates. Census Tract 48, Multnomah County, Oregon. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>
- U.S. Bureau of the Census. (n.d.). S1501: Educational Attainment. 2010-2014 American Community Survey 5-Year Estimates. Census Tract 49, Multnomah County, Oregon. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>
- U.S. Bureau of the Census. (n.d.). S1501: Educational Attainment. 2010-2014 American Community Survey 5-Year Estimates. Census Tract 50, Multnomah County, Oregon. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>
- U.S. Bureau of the Census. (n.d.). S1501: Educational Attainment. 2010-2014 American Community Survey 5-Year Estimates. Census Tract 51, Multnomah County, Oregon. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>

- U.S. Bureau of the Census. (n.d.). S1501: Educational Attainment. 2010-2014 American Community Survey 5-Year Estimates. Census Tract 56, Multnomah County, Oregon. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>
- U.S. Bureau of the Census. (n.d.). S1501: Educational Attainment. 2010-2014 American Community Survey 5-Year Estimates. Census Tract 57, Multnomah County, Oregon. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>
- U.S. Bureau of the Census. (n.d.). S1501: Educational Attainment. 2010-2014 American Community Survey 5-Year Estimates. Census Tract 59, Multnomah County, Oregon. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>
- U.S. Bureau of the Census. (n.d.). S1501: Educational Attainment. 2006-2010 American Community Survey 5-Year Estimates. Census Tract 602, Pierce County, Washington. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>
- U.S. Bureau of the Census. (n.d.). S1501: Educational Attainment. 2006-2010 American Community Survey 5-Year Estimates. Census Tract 616.01, Pierce County, Washington. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>
- U.S. Bureau of the Census. (n.d.). S1501: Educational Attainment. 2006-2010 American Community Survey 5-Year Estimates. Census Tract 616.02, Pierce County, Washington. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>
- U.S. Bureau of the Census. (n.d.). S1501: Educational Attainment. 2007-2011 American Community Survey 5-Year Estimates. Census Tract 602, Pierce County, Washington. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>
- U.S. Bureau of the Census. (n.d.). S1501: Educational Attainment. 2007-2011 American Community Survey 5-Year Estimates. Census Tract 616.01, Pierce County, Washington. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>
- U.S. Bureau of the Census. (n.d.). S1501: Educational Attainment. 2007-2011 American Community Survey 5-Year Estimates. Census Tract 616.02, Pierce County, Washington. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>
- U.S. Bureau of the Census. (n.d.). S1501: Educational Attainment. 2008-2012 American Community Survey 5-Year Estimates. Census Tract 602, Pierce County, Washington. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>
- U.S. Bureau of the Census. (n.d.). S1501: Educational Attainment. 2008-2012 American Community Survey 5-Year Estimates. Census Tract 616.01, Pierce County, Washington. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>



- U.S. Bureau of the Census. (n.d.). S1501: Educational Attainment. 2008-2012 American Community Survey 5-Year Estimates. Census Tract 616.02, Pierce County, Washington. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>
- U.S. Bureau of the Census. (n.d.). S1501: Educational Attainment. 2009-2013 American Community Survey 5-Year Estimates. Census Tract 602, Pierce County, Washington. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>
- U.S. Bureau of the Census. (n.d.). S1501: Educational Attainment. 2009-2013 American Community Survey 5-Year Estimates. Census Tract 616.01, Pierce County, Washington. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>
- U.S. Bureau of the Census. (n.d.). S1501: Educational Attainment. 2009-2013 American Community Survey 5-Year Estimates. Census Tract 616.02, Pierce County, Washington. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>
- U.S. Bureau of the Census. (n.d.). S1501: Educational Attainment. 2010-2014 American Community Survey 5-Year Estimates. Census Tract 602, Pierce County, Washington. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>
- U.S. Bureau of the Census. (n.d.). S1501: Educational Attainment. 2010-2014 American Community Survey 5-Year Estimates. Census Tract 616.01, Pierce County, Washington. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>
- U.S. Bureau of the Census. (n.d.). S1501: Educational Attainment. 2010-2014 American Community Survey 5-Year Estimates. Census Tract 616.02, Pierce County, Washington. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>
- U.S. Bureau of the Census. (n.d.). S1501: Educational Attainment. 2006-2011 American Community Survey 5-Year Estimates. Census Tract 21, Shelby County, Tennessee. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>
- U.S. Bureau of the Census. (n.d.). S1501: Educational Attainment. 2006-2011 American Community Survey 5-Year Estimates. Census Tract 36, Shelby County, Tennessee. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>
- U.S. Bureau of the Census. (n.d.). S1501: Educational Attainment. 2006-2011 American Community Survey 5-Year Estimates. Census Tract 38, Shelby County, Tennessee. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>
- U.S. Bureau of the Census. (n.d.). S1501: Educational Attainment. 2006-2011 American Community Survey 5-Year Estimates. Census Tract 39, Shelby County, Tennessee. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>

- U.S. Bureau of the Census. (n.d.). S1501: Educational Attainment. 2006-2011 American Community Survey 5-Year Estimates. Census Tract 42, Shelby County, Tennessee. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>
- U.S. Bureau of the Census. (n.d.). S1501: Educational Attainment. 2006-2011 American Community Survey 5-Year Estimates. Census Tract 43, Shelby County, Tennessee. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>
- U.S. Bureau of the Census. (n.d.). S1501: Educational Attainment. 2007-2011 American Community Survey 5-Year Estimates. Census Tract 21, Shelby County, Tennessee. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>
- U.S. Bureau of the Census. (n.d.). S1501: Educational Attainment. 2007-2011 American Community Survey 5-Year Estimates. Census Tract 36, Shelby County, Tennessee. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>
- U.S. Bureau of the Census. (n.d.). S1501: Educational Attainment. 2007-2011 American Community Survey 5-Year Estimates. Census Tract 38, Shelby County, Tennessee. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>
- U.S. Bureau of the Census. (n.d.). S1501: Educational Attainment. 2007-2011 American Community Survey 5-Year Estimates. Census Tract 39, Shelby County, Tennessee. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>
- U.S. Bureau of the Census. (n.d.). S1501: Educational Attainment. 2007-2011 American Community Survey 5-Year Estimates. Census Tract 42, Shelby County, Tennessee. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>
- U.S. Bureau of the Census. (n.d.). S1501: Educational Attainment. 2007-2011 American Community Survey 5-Year Estimates. Census Tract 43, Shelby County, Tennessee. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>
- U.S. Bureau of the Census. (n.d.). S1501: Educational Attainment. 2008-2012 American Community Survey 5-Year Estimates. Census Tract 21, Shelby County, Tennessee. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>
- U.S. Bureau of the Census. (n.d.). S1501: Educational Attainment. 2008-2012 American Community Survey 5-Year Estimates. Census Tract 36, Shelby County, Tennessee. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>
- U.S. Bureau of the Census. (n.d.). S1501: Educational Attainment. 2008-2012 American Community Survey 5-Year Estimates. Census Tract 38, Shelby County, Tennessee. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>

- U.S. Bureau of the Census. (n.d.). S1501: Educational Attainment. 2008-2012 American Community Survey 5-Year Estimates. Census Tract 39, Shelby County, Tennessee. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>
- U.S. Bureau of the Census. (n.d.). S1501: Educational Attainment. 2008-2012 American Community Survey 5-Year Estimates. Census Tract 42, Shelby County, Tennessee. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>
- U.S. Bureau of the Census. (n.d.). S1501: Educational Attainment. 2008-2012 American Community Survey 5-Year Estimates. Census Tract 43, Shelby County, Tennessee. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>
- U.S. Bureau of the Census. (n.d.). S1501: Educational Attainment. 2009-2013 American Community Survey 5-Year Estimates. Census Tract 21, Shelby County, Tennessee. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>
- U.S. Bureau of the Census. (n.d.). S1501: Educational Attainment. 2009-2013 American Community Survey 5-Year Estimates. Census Tract 36, Shelby County, Tennessee. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>
- U.S. Bureau of the Census. (n.d.). S1501: Educational Attainment. 2009-2013 American Community Survey 5-Year Estimates. Census Tract 38, Shelby County, Tennessee. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>
- U.S. Bureau of the Census. (n.d.). S1501: Educational Attainment. 2009-2013 American Community Survey 5-Year Estimates. Census Tract 39, Shelby County, Tennessee. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>
- U.S. Bureau of the Census. (n.d.). S1501: Educational Attainment. 2009-2013 American Community Survey 5-Year Estimates. Census Tract 42, Shelby County, Tennessee. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>
- U.S. Bureau of the Census. (n.d.). S1501: Educational Attainment. 2009-2013 American Community Survey 5-Year Estimates. Census Tract 43, Shelby County, Tennessee. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>
- U.S. Bureau of the Census. (n.d.). S1501: Educational Attainment. 2010-2014 American Community Survey 5-Year Estimates. Census Tract 21, Shelby County, Tennessee. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>
- U.S. Bureau of the Census. (n.d.). S1501: Educational Attainment. 2010-2014 American Community Survey 5-Year Estimates. Census Tract 36, Shelby County, Tennessee. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>

- U.S. Bureau of the Census. (n.d.). S1501: Educational Attainment. 2010-2014 American Community Survey 5-Year Estimates. Census Tract 38, Shelby County, Tennessee. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>
- U.S. Bureau of the Census. (n.d.). S1501: Educational Attainment. 2010-2014 American Community Survey 5-Year Estimates. Census Tract 39, Shelby County, Tennessee. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>
- U.S. Bureau of the Census. (n.d.). S1501: Educational Attainment. 2010-2014 American Community Survey 5-Year Estimates. Census Tract 42, Shelby County, Tennessee. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>
- U.S. Bureau of the Census. (n.d.). S1501: Educational Attainment. 2010-2014 American Community Survey 5-Year Estimates. Census Tract 43, Shelby County, Tennessee. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>
- U.S. Bureau of the Census. (n.d.). S1903: Median Income In The Past 12 Months (In 2014 Inflation-Adjusted Dollars). 2006-2010 American Community Survey 5-Year Estimates. Census Tract 39, Hillsborough County, Florida. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>
- U.S. Bureau of the Census. (n.d.). S1903: Median Income In The Past 12 Months (In 2014 Inflation-Adjusted Dollars). 2006-2010 American Community Survey 5-Year Estimates. Census Tract 51.01, Hillsborough County, Florida. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>
- U.S. Bureau of the Census. (n.d.). S1903: Median Income In The Past 12 Months (In 2014 Inflation-Adjusted Dollars). 2007-2011 American Community Survey 5-Year Estimates. Census Tract 39, Hillsborough County, Florida. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>
- U.S. Bureau of the Census. (n.d.). S1903: Median Income In The Past 12 Months (In 2014 Inflation-Adjusted Dollars). 2007-2011 American Community Survey 5-Year Estimates. Census Tract 51.01, Hillsborough County, Florida. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>
- U.S. Bureau of the Census. (n.d.). S1903: Median Income In The Past 12 Months (In 2014 Inflation-Adjusted Dollars). 2008-2012 American Community Survey 5-Year Estimates. Census Tract 39, Hillsborough County, Florida. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>
- U.S. Bureau of the Census. (n.d.). S1903: Median Income In The Past 12 Months (In 2014 Inflation-Adjusted Dollars). 2008-2012 American Community Survey 5-

Year Estimates. Census Tract 51.01, Hillsborough County, Florida. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>

U.S. Bureau of the Census. (n.d.). S1903: Median Income In The Past 12 Months (In 2014 Inflation-Adjusted Dollars). 2009-2013 American Community Survey 5-Year Estimates. Census Tract 39, Hillsborough County, Florida. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>

U.S. Bureau of the Census. (n.d.). S1903: Median Income In The Past 12 Months (In 2014 Inflation-Adjusted Dollars). 2009-2013 American Community Survey 5-Year Estimates. Census Tract 51.01, Hillsborough County, Florida. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>

U.S. Bureau of the Census. (n.d.). S1903: Median Income In The Past 12 Months (In 2014 Inflation-Adjusted Dollars). 2010-2014 American Community Survey 5-Year Estimates. Census Tract 39, Hillsborough County, Florida. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>

U.S. Bureau of the Census. (n.d.). S1903: Median Income In The Past 12 Months (In 2014 Inflation-Adjusted Dollars). 2010-2014 American Community Survey 5-Year Estimates. Census Tract 51.01, Hillsborough County, Florida. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>

U.S. Bureau of the Census. (n.d.). S1903: Median Income In The Past 12 Months (In 2014 Inflation-Adjusted Dollars). 2006-2010 American Community Survey 5-Year Estimates. Census Tract 66, King County, Washington. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>

U.S. Bureau of the Census. (n.d.). S1903: Median Income In The Past 12 Months (In 2014 Inflation-Adjusted Dollars). 2006-2010 American Community Survey 5-Year Estimates. Census Tract 72, King County, Washington. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>

U.S. Bureau of the Census. (n.d.). S1903: Median Income In The Past 12 Months (In 2014 Inflation-Adjusted Dollars). 2006-2010 American Community Survey 5-Year Estimates. Census Tract 73, King County, Washington. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>

U.S. Bureau of the Census. (n.d.). S1903: Median Income In The Past 12 Months (In 2014 Inflation-Adjusted Dollars). 2007-2011 American Community Survey 5-Year Estimates. Census Tract 66, King County, Washington. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>

U.S. Bureau of the Census. (n.d.). S1903: Median Income In The Past 12 Months (In 2014 Inflation-Adjusted Dollars). 2007-2011 American Community Survey 5-Year Estimates. Census Tract 72, King County, Washington. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>

U.S. Bureau of the Census. (n.d.). S1903: Median Income In The Past 12 Months (In 2014 Inflation-Adjusted Dollars). 2007-2011 American Community Survey 5-Year Estimates. Census Tract 73, King County, Washington. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>

U.S. Bureau of the Census. (n.d.). S1903: Median Income In The Past 12 Months (In 2014 Inflation-Adjusted Dollars). 2008-2012 American Community Survey 5-Year Estimates. Census Tract 66, King County, Washington. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>

U.S. Bureau of the Census. (n.d.). S1903: Median Income In The Past 12 Months (In 2014 Inflation-Adjusted Dollars). 2008-2012 American Community Survey 5-Year Estimates. Census Tract 72, King County, Washington. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>

U.S. Bureau of the Census. (n.d.). S1903: Median Income In The Past 12 Months (In 2014 Inflation-Adjusted Dollars). 2008-2012 American Community Survey 5-Year Estimates. Census Tract 73, King County, Washington. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>

U.S. Bureau of the Census. (n.d.). S1903: Median Income In The Past 12 Months (In 2014 Inflation-Adjusted Dollars). 2009-2013 American Community Survey 5-Year Estimates. Census Tract 66, King County, Washington. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>

U.S. Bureau of the Census. (n.d.). S1903: Median Income In The Past 12 Months (In 2014 Inflation-Adjusted Dollars). 2009-2013 American Community Survey 5-Year Estimates. Census Tract 72, King County, Washington. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>

U.S. Bureau of the Census. (n.d.). S1903: Median Income In The Past 12 Months (In 2014 Inflation-Adjusted Dollars). 2009-2013 American Community Survey 5-Year Estimates. Census Tract 73, King County, Washington. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>

U.S. Bureau of the Census. (n.d.). S1903: Median Income In The Past 12 Months (In 2014 Inflation-Adjusted Dollars). 2010-2014 American Community Survey 5-Year Estimates. Census Tract 66, King County, Washington. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>

- U.S. Bureau of the Census. (n.d.). S1903: Median Income In The Past 12 Months (In 2014 Inflation-Adjusted Dollars). 2010-2014 American Community Survey 5-Year Estimates. Census Tract 72, King County, Washington. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>
- U.S. Bureau of the Census. (n.d.). S1903: Median Income In The Past 12 Months (In 2014 Inflation-Adjusted Dollars). 2010-2014 American Community Survey 5-Year Estimates. Census Tract 73, King County, Washington. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>
- U.S. Bureau of the Census. (n.d.). S1903: Median Income In The Past 12 Months (In 2014 Inflation-Adjusted Dollars). 2006-2010 American Community Survey 5-Year Estimates. Census Tract 47, Multnomah County, Oregon. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>
- U.S. Bureau of the Census. (n.d.). S1903: Median Income In The Past 12 Months (In 2014 Inflation-Adjusted Dollars). 2006-2010 American Community Survey 5-Year Estimates. Census Tract 48, Multnomah County, Oregon. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>
- U.S. Bureau of the Census. (n.d.). S1903: Median Income In The Past 12 Months (In 2014 Inflation-Adjusted Dollars). 2006-2010 American Community Survey 5-Year Estimates. Census Tract 49, Multnomah County, Oregon. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>
- U.S. Bureau of the Census. (n.d.). S1903: Median Income In The Past 12 Months (In 2014 Inflation-Adjusted Dollars). 2006-2010 American Community Survey 5-Year Estimates. Census Tract 50, Multnomah County, Oregon. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>
- U.S. Bureau of the Census. (n.d.). S1903: Median Income In The Past 12 Months (In 2014 Inflation-Adjusted Dollars). 2006-2010 American Community Survey 5-Year Estimates. Census Tract 51, Multnomah County, Oregon. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>
- U.S. Bureau of the Census. (n.d.). S1903: Median Income In The Past 12 Months (In 2014 Inflation-Adjusted Dollars). 2006-2010 American Community Survey 5-Year Estimates. Census Tract 56, Multnomah County, Oregon. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>
- U.S. Bureau of the Census. (n.d.). S1903: Median Income In The Past 12 Months (In 2014 Inflation-Adjusted Dollars). 2006-2010 American Community Survey 5-

- Year Estimates. Census Tract 57, Multnomah County, Oregon. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>
- U.S. Bureau of the Census. (n.d.). S1903: Median Income In The Past 12 Months (In 2014 Inflation-Adjusted Dollars). 2006-2010 American Community Survey 5-Year Estimates. Census Tract 59, Multnomah County, Oregon. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>
- U.S. Bureau of the Census. (n.d.). S1903: Median Income In The Past 12 Months (In 2014 Inflation-Adjusted Dollars). 2007-2011 American Community Survey 5-Year Estimates. Census Tract 47, Multnomah County, Oregon. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>
- U.S. Bureau of the Census. (n.d.). S1903: Median Income In The Past 12 Months (In 2014 Inflation-Adjusted Dollars). 2007-2011 American Community Survey 5-Year Estimates. Census Tract 48, Multnomah County, Oregon. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>
- U.S. Bureau of the Census. (n.d.). S1903: Median Income In The Past 12 Months (In 2014 Inflation-Adjusted Dollars). 2007-2011 American Community Survey 5-Year Estimates. Census Tract 49, Multnomah County, Oregon. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>
- U.S. Bureau of the Census. (n.d.). S1903: Median Income In The Past 12 Months (In 2014 Inflation-Adjusted Dollars). 2007-2011 American Community Survey 5-Year Estimates. Census Tract 50, Multnomah County, Oregon. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>
- U.S. Bureau of the Census. (n.d.). S1903: Median Income In The Past 12 Months (In 2014 Inflation-Adjusted Dollars). 2007-2011 American Community Survey 5-Year Estimates. Census Tract 51, Multnomah County, Oregon. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>
- U.S. Bureau of the Census. (n.d.). S1903: Median Income In The Past 12 Months (In 2014 Inflation-Adjusted Dollars). 2007-2011 American Community Survey 5-Year Estimates. Census Tract 56, Multnomah County, Oregon. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>
- U.S. Bureau of the Census. (n.d.). S1903: Median Income In The Past 12 Months (In 2014 Inflation-Adjusted Dollars). 2007-2011 American Community Survey 5-Year Estimates. Census Tract 57, Multnomah County, Oregon. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>



- U.S. Bureau of the Census. (n.d.). S1903: Median Income In The Past 12 Months (In 2014 Inflation-Adjusted Dollars). 2007-2011 American Community Survey 5-Year Estimates. Census Tract 59, Multnomah County, Oregon. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>
- U.S. Bureau of the Census. (n.d.). S1903: Median Income In The Past 12 Months (In 2014 Inflation-Adjusted Dollars). 2008-2012 American Community Survey 5-Year Estimates. Census Tract 47, Multnomah County, Oregon. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>
- U.S. Bureau of the Census. (n.d.). S1903: Median Income In The Past 12 Months (In 2014 Inflation-Adjusted Dollars). 2008-2012 American Community Survey 5-Year Estimates. Census Tract 48, Multnomah County, Oregon. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>
- U.S. Bureau of the Census. (n.d.). S1903: Median Income In The Past 12 Months (In 2014 Inflation-Adjusted Dollars). 2008-2012 American Community Survey 5-Year Estimates. Census Tract 49, Multnomah County, Oregon. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>
- U.S. Bureau of the Census. (n.d.). S1903: Median Income In The Past 12 Months (In 2014 Inflation-Adjusted Dollars). 2008-2012 American Community Survey 5-Year Estimates. Census Tract 50, Multnomah County, Oregon. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>
- U.S. Bureau of the Census. (n.d.). S1903: Median Income In The Past 12 Months (In 2014 Inflation-Adjusted Dollars). 2008-2012 American Community Survey 5-Year Estimates. Census Tract 51, Multnomah County, Oregon. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>
- U.S. Bureau of the Census. (n.d.). S1903: Median Income In The Past 12 Months (In 2014 Inflation-Adjusted Dollars). 2008-2012 American Community Survey 5-Year Estimates. Census Tract 56, Multnomah County, Oregon. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>
- U.S. Bureau of the Census. (n.d.). S1903: Median Income In The Past 12 Months (In 2014 Inflation-Adjusted Dollars). 2008-2012 American Community Survey 5-Year Estimates. Census Tract 57, Multnomah County, Oregon. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>
- U.S. Bureau of the Census. (n.d.). S1903: Median Income In The Past 12 Months (In 2014 Inflation-Adjusted Dollars). 2008-2012 American Community Survey 5-Year Estimates. Census Tract 59, Multnomah County, Oregon. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>

- U.S. Bureau of the Census. (n.d.). S1903: Median Income In The Past 12 Months (In 2014 Inflation-Adjusted Dollars). 2009-2013 American Community Survey 5-Year Estimates. Census Tract 47, Multnomah County, Oregon. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>
- U.S. Bureau of the Census. (n.d.). S1903: Median Income In The Past 12 Months (In 2014 Inflation-Adjusted Dollars). 2009-2013 American Community Survey 5-Year Estimates. Census Tract 48, Multnomah County, Oregon. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>
- U.S. Bureau of the Census. (n.d.). S1903: Median Income In The Past 12 Months (In 2014 Inflation-Adjusted Dollars). 2009-2013 American Community Survey 5-Year Estimates. Census Tract 49, Multnomah County, Oregon. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>
- U.S. Bureau of the Census. (n.d.). S1903: Median Income In The Past 12 Months (In 2014 Inflation-Adjusted Dollars). 2009-2013 American Community Survey 5-Year Estimates. Census Tract 50, Multnomah County, Oregon. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>
- U.S. Bureau of the Census. (n.d.). S1903: Median Income In The Past 12 Months (In 2014 Inflation-Adjusted Dollars). 2009-2013 American Community Survey 5-Year Estimates. Census Tract 51, Multnomah County, Oregon. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>
- U.S. Bureau of the Census. (n.d.). S1903: Median Income In The Past 12 Months (In 2014 Inflation-Adjusted Dollars). 2009-2013 American Community Survey 5-Year Estimates. Census Tract 56, Multnomah County, Oregon. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>
- U.S. Bureau of the Census. (n.d.). S1903: Median Income In The Past 12 Months (In 2014 Inflation-Adjusted Dollars). 2009-2013 American Community Survey 5-Year Estimates. Census Tract 57, Multnomah County, Oregon. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>
- U.S. Bureau of the Census. (n.d.). S1903: Median Income In The Past 12 Months (In 2014 Inflation-Adjusted Dollars). 2009-2013 American Community Survey 5-Year Estimates. Census Tract 59, Multnomah County, Oregon. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>
- U.S. Bureau of the Census. (n.d.). S1903: Median Income In The Past 12 Months (In 2014 Inflation-Adjusted Dollars). 2010-2014 American Community Survey 5-

- Year Estimates. Census Tract 47, Multnomah County, Oregon. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>
- U.S. Bureau of the Census. (n.d.). S1903: Median Income In The Past 12 Months (In 2014 Inflation-Adjusted Dollars). 2010-2014 American Community Survey 5-Year Estimates. Census Tract 48, Multnomah County, Oregon. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>
- U.S. Bureau of the Census. (n.d.). S1903: Median Income In The Past 12 Months (In 2014 Inflation-Adjusted Dollars). 2010-2014 American Community Survey 5-Year Estimates. Census Tract 49, Multnomah County, Oregon. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>
- U.S. Bureau of the Census. (n.d.). S1903: Median Income In The Past 12 Months (In 2014 Inflation-Adjusted Dollars). 2010-2014 American Community Survey 5-Year Estimates. Census Tract 50, Multnomah County, Oregon. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>
- U.S. Bureau of the Census. (n.d.). S1903: Median Income In The Past 12 Months (In 2014 Inflation-Adjusted Dollars). 2010-2014 American Community Survey 5-Year Estimates. Census Tract 51, Multnomah County, Oregon. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>
- U.S. Bureau of the Census. (n.d.). S1903: Median Income In The Past 12 Months (In 2014 Inflation-Adjusted Dollars). 2010-2014 American Community Survey 5-Year Estimates. Census Tract 56, Multnomah County, Oregon. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>
- U.S. Bureau of the Census. (n.d.). S1903: Median Income In The Past 12 Months (In 2014 Inflation-Adjusted Dollars). 2010-2014 American Community Survey 5-Year Estimates. Census Tract 57, Multnomah County, Oregon. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>
- U.S. Bureau of the Census. (n.d.). S1903: Median Income In The Past 12 Months (In 2014 Inflation-Adjusted Dollars). 2010-2014 American Community Survey 5-Year Estimates. Census Tract 59, Multnomah County, Oregon. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>
- U.S. Bureau of the Census. (n.d.). S1903: Median Income In The Past 12 Months (In 2014 Inflation-Adjusted Dollars). 2006-2011 American Community Survey 5-Year Estimates. Census Tract 602, Pierce County, Washington. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>

- U.S. Bureau of the Census. (n.d.). S1903: Median Income In The Past 12 Months (In 2014 Inflation-Adjusted Dollars). 2006-2011 American Community Survey 5-Year Estimates. Census Tract 616.01, Pierce County, Washington. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>
- U.S. Bureau of the Census. (n.d.). S1903: Median Income In The Past 12 Months (In 2014 Inflation-Adjusted Dollars). 2006-2011 American Community Survey 5-Year Estimates. Census Tract 616.02, Pierce County, Washington. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>
- U.S. Bureau of the Census. (n.d.). S1903: Median Income In The Past 12 Months (In 2014 Inflation-Adjusted Dollars). 2007-2011 American Community Survey 5-Year Estimates. Census Tract 602, Pierce County, Washington. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>
- U.S. Bureau of the Census. (n.d.). S1903: Median Income In The Past 12 Months (In 2014 Inflation-Adjusted Dollars). 2007-2011 American Community Survey 5-Year Estimates. Census Tract 616.01, Pierce County, Washington. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>
- U.S. Bureau of the Census. (n.d.). S1903: Median Income In The Past 12 Months (In 2014 Inflation-Adjusted Dollars). 2007-2011 American Community Survey 5-Year Estimates. Census Tract 616.02, Pierce County, Washington. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>
- U.S. Bureau of the Census. (n.d.). S1903: Median Income In The Past 12 Months (In 2014 Inflation-Adjusted Dollars). 2008-2012 American Community Survey 5-Year Estimates. Census Tract 602, Pierce County, Washington. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>
- U.S. Bureau of the Census. (n.d.). S1903: Median Income In The Past 12 Months (In 2014 Inflation-Adjusted Dollars). 2008-2012 American Community Survey 5-Year Estimates. Census Tract 616.01, Pierce County, Washington. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>
- U.S. Bureau of the Census. (n.d.). S1903: Median Income In The Past 12 Months (In 2014 Inflation-Adjusted Dollars). 2008-2012 American Community Survey 5-Year Estimates. Census Tract 616.02, Pierce County, Washington. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>
- U.S. Bureau of the Census. (n.d.). S1903: Median Income In The Past 12 Months (In 2014 Inflation-Adjusted Dollars). 2009-2013 American Community Survey 5-Year Estimates. Census Tract 602, Pierce County, Washington. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>

- U.S. Bureau of the Census. (n.d.). S1903: Median Income In The Past 12 Months (In 2014 Inflation-Adjusted Dollars). 2009-2013 American Community Survey 5-Year Estimates. Census Tract 616.01, Pierce County, Washington. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>
- U.S. Bureau of the Census. (n.d.). S1903: Median Income In The Past 12 Months (In 2014 Inflation-Adjusted Dollars). 2009-2013 American Community Survey 5-Year Estimates. Census Tract 616.02, Pierce County, Washington. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>
- U.S. Bureau of the Census. (n.d.). S1903: Median Income In The Past 12 Months (In 2014 Inflation-Adjusted Dollars). 2010-2014 American Community Survey 5-Year Estimates. Census Tract 602, Pierce County, Washington. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>
- U.S. Bureau of the Census. (n.d.). S1903: Median Income In The Past 12 Months (In 2014 Inflation-Adjusted Dollars). 2010-2014 American Community Survey 5-Year Estimates. Census Tract 616.01, Pierce County, Washington. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>
- U.S. Bureau of the Census. (n.d.). S1903: Median Income In The Past 12 Months (In 2014 Inflation-Adjusted Dollars). 2010-2014 American Community Survey 5-Year Estimates. Census Tract 616.02, Pierce County, Washington. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>
- U.S. Bureau of the Census. (n.d.). S1501: Educational Attainment. 2006-2010 American Community Survey 5-Year Estimates. Census Tract 25, Pulaski County, Arkansas. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>
- U.S. Bureau of the Census. (n.d.). S1501: Educational Attainment. 2007-2011 American Community Survey 5-Year Estimates. Census Tract 25, Pulaski County, Arkansas. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>
- U.S. Bureau of the Census. (n.d.). S1501: Educational Attainment. 2008-2012 American Community Survey 5-Year Estimates. Census Tract 25, Pulaski County, Arkansas. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>
- U.S. Bureau of the Census. (n.d.). S1501: Educational Attainment. 2009-2013 American Community Survey 5-Year Estimates. Census Tract 25, Pulaski County, Arkansas. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>

- U.S. Bureau of the Census. (n.d.). S1501: Educational Attainment. 2010-2014 American Community Survey 5-Year Estimates. Census Tract 25, Pulaski County, Arkansas Retrieved March 5, 2016 from: <http://factfinder.census.gov/>
- U.S. Bureau of the Census. (n.d.). S1903: Median Income In The Past 12 Months (In 2014 Inflation-Adjusted Dollars). 2006-2011 American Community Survey 5-Year Estimates. Census Tract 25, Pulaski County, Arkansas. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>
- U.S. Bureau of the Census. (n.d.). S1903: Median Income In The Past 12 Months (In 2014 Inflation-Adjusted Dollars). 2007-2011 American Community Survey 5-Year Estimates. Census Tract 25, Pulaski County, Arkansas. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>
- U.S. Bureau of the Census. (n.d.). S1903: Median Income In The Past 12 Months (In 2014 Inflation-Adjusted Dollars). 2008-2012 American Community Survey 5-Year Estimates. Census Tract 25, Pulaski County, Arkansas. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>
- U.S. Bureau of the Census. (n.d.). S1903: Median Income In The Past 12 Months (In 2014 Inflation-Adjusted Dollars). 2009-2013 American Community Survey 5-Year Estimates. Census Tract 25, Pulaski County, Arkansas. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>
- U.S. Bureau of the Census. (n.d.). S1903: Median Income In The Past 12 Months (In 2014 Inflation-Adjusted Dollars). 2010-2014 American Community Survey 5-Year Estimates. Census Tract 25, Pulaski County, Arkansas. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>
- U.S. Bureau of the Census. (n.d.). S1903: Median Income In The Past 12 Months (In 2014 Inflation-Adjusted Dollars). 2006-2010 American Community Survey 5-Year Estimates. Census Tract 21, Shelby County, Tennessee. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>
- U.S. Bureau of the Census. (n.d.). S1903: Median Income In The Past 12 Months (In 2014 Inflation-Adjusted Dollars). 2006-2010 American Community Survey 5-Year Estimates. Census Tract 36, Shelby County, Tennessee. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>
- U.S. Bureau of the Census. (n.d.). S1903: Median Income In The Past 12 Months (In 2014 Inflation-Adjusted Dollars). 2006-2010 American Community Survey 5-Year Estimates. Census Tract 38, Shelby County, Tennessee. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>

- U.S. Bureau of the Census. (n.d.). S1903: Median Income In The Past 12 Months (In 2014 Inflation-Adjusted Dollars). 2006-2010 American Community Survey 5-Year Estimates. Census Tract 39, Shelby County, Tennessee. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>
- U.S. Bureau of the Census. (n.d.). S1903: Median Income In The Past 12 Months (In 2014 Inflation-Adjusted Dollars). 2006-2010 American Community Survey 5-Year Estimates. Census Tract 42, Shelby County, Tennessee. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>
- U.S. Bureau of the Census. (n.d.). S1903: Median Income In The Past 12 Months (In 2014 Inflation-Adjusted Dollars). 2006-2010 American Community Survey 5-Year Estimates. Census Tract 43, Shelby County, Tennessee. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>
- U.S. Bureau of the Census. (n.d.). S1903: Median Income In The Past 12 Months (In 2014 Inflation-Adjusted Dollars). 2007-2011 American Community Survey 5-Year Estimates. Census Tract 21, Shelby County, Tennessee. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>
- U.S. Bureau of the Census. (n.d.). S1903: Median Income In The Past 12 Months (In 2014 Inflation-Adjusted Dollars). 2007-2011 American Community Survey 5-Year Estimates. Census Tract 36, Shelby County, Tennessee. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>
- U.S. Bureau of the Census. (n.d.). S1903: Median Income In The Past 12 Months (In 2014 Inflation-Adjusted Dollars). 2007-2011 American Community Survey 5-Year Estimates. Census Tract 38, Shelby County, Tennessee. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>
- U.S. Bureau of the Census. (n.d.). S1903: Median Income In The Past 12 Months (In 2014 Inflation-Adjusted Dollars). 2007-2011 American Community Survey 5-Year Estimates. Census Tract 39, Shelby County, Tennessee. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>
- U.S. Bureau of the Census. (n.d.). S1903: Median Income In The Past 12 Months (In 2014 Inflation-Adjusted Dollars). 2007-2011 American Community Survey 5-Year Estimates. Census Tract 42, Shelby County, Tennessee. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>
- U.S. Bureau of the Census. (n.d.). S1903: Median Income In The Past 12 Months (In 2014 Inflation-Adjusted Dollars). 2007-2011 American Community Survey 5-Year Estimates. Census Tract 43, Shelby County, Tennessee. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>

- U.S. Bureau of the Census. (n.d.). S1903: Median Income In The Past 12 Months (In 2014 Inflation-Adjusted Dollars). 2008-2012 American Community Survey 5-Year Estimates. Census Tract 21, Shelby County, Tennessee. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>
- U.S. Bureau of the Census. (n.d.). S1903: Median Income In The Past 12 Months (In 2014 Inflation-Adjusted Dollars). 2008-2012 American Community Survey 5-Year Estimates. Census Tract 36, Shelby County, Tennessee. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>
- U.S. Bureau of the Census. (n.d.). S1903: Median Income In The Past 12 Months (In 2014 Inflation-Adjusted Dollars). 2008-2012 American Community Survey 5-Year Estimates. Census Tract 38, Shelby County, Tennessee. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>
- U.S. Bureau of the Census. (n.d.). S1903: Median Income In The Past 12 Months (In 2014 Inflation-Adjusted Dollars). 2008-2012 American Community Survey 5-Year Estimates. Census Tract 39, Shelby County, Tennessee. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>
- U.S. Bureau of the Census. (n.d.). S1903: Median Income In The Past 12 Months (In 2014 Inflation-Adjusted Dollars). 2008-2012 American Community Survey 5-Year Estimates. Census Tract 42, Shelby County, Tennessee. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>
- U.S. Bureau of the Census. (n.d.). S1903: Median Income In The Past 12 Months (In 2014 Inflation-Adjusted Dollars). 2008-2012 American Community Survey 5-Year Estimates. Census Tract 43, Shelby County, Tennessee. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>
- U.S. Bureau of the Census. (n.d.). S1903: Median Income In The Past 12 Months (In 2014 Inflation-Adjusted Dollars). 2009-2013 American Community Survey 5-Year Estimates. Census Tract 21, Shelby County, Tennessee. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>
- U.S. Bureau of the Census. (n.d.). S1903: Median Income In The Past 12 Months (In 2014 Inflation-Adjusted Dollars). 2009-2013 American Community Survey 5-Year Estimates. Census Tract 36, Shelby County, Tennessee. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>
- U.S. Bureau of the Census. (n.d.). S1903: Median Income In The Past 12 Months (In 2014 Inflation-Adjusted Dollars). 2009-2013 American Community Survey 5-



- Year Estimates. Census Tract 38, Shelby County, Tennessee. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>
- U.S. Bureau of the Census. (n.d.). S1903: Median Income In The Past 12 Months (In 2014 Inflation-Adjusted Dollars). 2009-2013 American Community Survey 5-Year Estimates. Census Tract 39, Shelby County, Tennessee. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>
- U.S. Bureau of the Census. (n.d.). S1903: Median Income In The Past 12 Months (In 2014 Inflation-Adjusted Dollars). 2009-2013 American Community Survey 5-Year Estimates. Census Tract 42, Shelby County, Tennessee. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>
- U.S. Bureau of the Census. (n.d.). S1903: Median Income In The Past 12 Months (In 2014 Inflation-Adjusted Dollars). 2009-2013 American Community Survey 5-Year Estimates. Census Tract 43, Shelby County, Tennessee. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>
- U.S. Bureau of the Census. (n.d.). S1903: Median Income In The Past 12 Months (In 2014 Inflation-Adjusted Dollars). 2010-2014 American Community Survey 5-Year Estimates. Census Tract 21, Shelby County, Tennessee. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>
- U.S. Bureau of the Census. (n.d.). S1903: Median Income In The Past 12 Months (In 2014 Inflation-Adjusted Dollars). 2010-2014 American Community Survey 5-Year Estimates. Census Tract 36, Shelby County, Tennessee. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>
- U.S. Bureau of the Census. (n.d.). S1903: Median Income In The Past 12 Months (In 2014 Inflation-Adjusted Dollars). 2010-2014 American Community Survey 5-Year Estimates. Census Tract 38, Shelby County, Tennessee. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>
- U.S. Bureau of the Census. (n.d.). S1903: Median Income In The Past 12 Months (In 2014 Inflation-Adjusted Dollars). 2010-2014 American Community Survey 5-Year Estimates. Census Tract 39, Shelby County, Tennessee. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>
- U.S. Bureau of the Census. (n.d.). S1903: Median Income In The Past 12 Months (In 2014 Inflation-Adjusted Dollars). 2010-2014 American Community Survey 5-Year Estimates. Census Tract 42, Shelby County, Tennessee. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>

- U.S. Bureau of the Census. (n.d.). S1903: Median Income In The Past 12 Months (In 2014 Inflation-Adjusted Dollars). 2010-2014 American Community Survey 5-Year Estimates. Census Tract 43, Shelby County, Tennessee. Retrieved March 5, 2016 from: <http://factfinder.census.gov/>
- U.S. Department of Transit Federal Transit Administration (2013, August). Retrieved January 16, 2016 from: [http://www.fta.dot.gov/documents/NS-SS\\_Final\\_PolicyGuidance\\_August\\_2013.pdf](http://www.fta.dot.gov/documents/NS-SS_Final_PolicyGuidance_August_2013.pdf)
- VacationsMadeEasy.com. (n.d.). Victorian Village Historic District In Memphis, TN. Retrieved March 26, 2016 from: <https://www.vacationsmadeeasy.com/MemphisTN/pointsOfInterest/VictorianVillageHistoricDistrictInMemphisTN.html>
- Verizon Arena. (n.d.). Retrieved March 26, 2016 from: <https://www.verizonarena.com/>
- Winters, K. (n.d.). Violations of the model and outliers. Retrieved April 23, 2016 from: [http://www.academia.edu/3590612/Multicollinearity\\_heteroscedasticity\\_and\\_outliers\\_in\\_OLS\\_lecture](http://www.academia.edu/3590612/Multicollinearity_heteroscedasticity_and_outliers_in_OLS_lecture)
- Zink, J. (2010 January 24). Tampa's Curtis Hixon Waterfront Park opens to mostly rave reviews. Retrieved April 2, 2016 from: <http://www.tampabay.com/news/humaninterest/tampas-curtis-hixon-waterfront-park-opens-to-mostly-rave-reviews/1067820>