TAX ABATEMENTS AND GENTRIFICATION:

HOW GOVERNMENT POLICY DISRUPTS COMMUNITIES

by

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ABSTRACT OF DISSERTATION

Tax Abatements and Gentrification: How Government Policy Disrupts Communities

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Urban municipal governments often face challenges when redeveloping their distressed centers. In 2000, the City Council of Philadelphia passed a series of bills modifying its existing residential tax abatement policies to expand their eligibility and to make them last for ten years. The timing of the passage of these bills also corresponded with Mayor John Street's Neighborhood Transformation Initiative (NTI), which aimed to prepare land for redevelopment. The combination of the revised abatement policies and NTI created a series of competing interests for politicians, business owners, and community organizations. Utilizing a methodological design consisting a historical critical analysis based on urban regime theory, GIS, and regression analysis, this dissertation profiles the formulation, implementation, and impact of Philadelphia's tax abatement policies from 2000 to 2010. It also proposes a mechanism by which government policies can facilitate or accelerate gentrification. Results show support for a relationship between the incidence of tax abatements and gentrification.

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Chapter 1: Introduction

This dissertation explores the role of government policy in initiating or accelerating gentrification, which in turn, may cause displacement. Specifically, it examines the stated rationale and impact of Philadelphia's tax abatement policies. Gentrification is a complicated, yet prevalent issue within urban contexts. It can be a conscious policy outcome, an unintended effect of redevelopment, or a combination of both depending on the motivations of policy creators.

Economic explanations of gentrification suggest that neighborhoods are targeted for redevelopment when there is clear potential for a payoff that results from a gap between the earning potential of the current and economically optimal uses of land in a particular area (N. Smith, 1979). Smith (1979) argues, "capital flows where the rate of return is highest," and that gentrification only occurs when the gap between potential and actual rent in an area is large enough to make rehabilitation and renewal efforts worthwhile investments (p. 546). While Smith's (1979) rent gap is posited as the result of market forces, government policies may also play a role in its formation. In addition to the fiscal-economic motivators of redevelopment, there are also sociopolitical motivators such as public safety and beautification (Smith, 1979). The influence of Smith's rent gap theory is especially evident in cities like Philadelphia, PA where residential tax abatements have been used to encourage redevelopment since 2000. Just as importantly, though, a complex interplay of interests shaped that policy. Building on the theoretical frameworks of Neil Smith and Lance Freeman and using a methodological approach consisting of a critical historical analysis of the policy process, GIS and descriptive analysis, and regression analysis this project seeks to develop a deeper and theoretically-

informed understanding the causes and effects of tax abatements on targeted

communities.

Contributions to the Field

This research offers three important contributions. First, it seeks to address gaps

in the gentrification literature by specifically linking it to the study of community power

and urban regime theory (Terry N Clark, 1967; Dahl, 1961; Stone, 1986, 1989). The

literature streams on the gentrification—specifically Smith's (1979) rent gap—and

community power literatures are usually kept separate but engaging them together is

useful in understanding the overall impact of residential tax abatements, which can lead

to development and subsequent gentrification. Instead of focusing on residential

dwellings, most tax abatement research focuses on the use of tax abatements in attracting

new businesses, which are expected to create jobs for residents of the community. Thus,

this dissertation seeks to elucidate the role of underlying power structures and influences

behind the formation of the tax abatement policies. Based on the complexity of the tax

abatement policies, one would expect that multiple groups of elites were involved in their

formulation and subsequent modification. This project seeks to uncover some of the

interest groups and their motivations for the policies' formulation. I expected to find

competing motivations among politicians and developers, with consideration of

community residents' interests as an afterthought.

Second, as the empirical grounding for theory development this dissertation seeks

to provide a history of Philadelphia's tax abatements, their evolution, and their impact.

Philadelphia was chosen as the location of this study because as a large, older city with

both distressed and prosperous areas, it typifies cities that tend to choose to utilize tax

abatement policies. It was also chosen due to my personal connection with the city and access to data. As a native Philadelphian, it has always been my hope that some portion of my research can be used to bring clarity to urban issues that face my friends and neighbors.

The history of Philadelphia's successive tax abatement laws is quite complex. They respectively make up four distinct parts of Philadelphia's municipal code. Three of the four distinct policies existed since the 1970s and 1980s and were modified in 2000 through a series of ordinances passed under the leadership of Councilman Frank DiCicco. Philadelphia's conscious decision to rely on policies with the potential to lead to gentrification can have major impacts on long-term racial and ethnic enclaves. Research shows that gentrifying neighborhoods can lose their distinctive character even though their character is a part of what made these neighborhoods attractive (Doan & Higgins, 2011; Park & Kim, 2008). This sociopolitical effect of gentrification is typically shortchanged when cities focus on attraction investment.

Third, this dissertation seeks to explore the relationship between tax abatement policy and gentrification independent of other common factors included as control variables. It is difficult to find evidence for the direct connection between gentrification and tax abatement policies. This is a concept that is heavily contested within the field in part because the implicit association between gentrification and displacement is controversial. Although Newman and Wiley (2006) showed in their quantitative study of New York City that some residents did in fact relocate from gentrifying neighborhoods to less-expensive areas and boroughs, many other scholars argue that gentrification does not lead to displacement because gentrifying communities and non-gentrifying communities

lose residents at the same rate (Ding, Hwang, & Divringi, 2016; Freeman, 2005; Newman & Wyly, 2006). There has been a great deal of research on gentrification and displacement that is centered on New York City (Freeman, 2006; Lees, 2003; Newman & Wyly, 2006). However, New York City's rent control laws have the potential to slow displacement by preventing rent prices from rising as quickly as the market may dictate (Cain & Hopkins, 2002; Lang, 1980; Vigdor, 2002). It is difficult to demonstrate displacement quantitatively. Many scholars, including Lance Freeman, suggest that displacement is not a real threat related to gentrification. My two-stage regression model is proposed as a means of evaluating this claim.

Defining the Problem: Gentrification and Displacement

This project specifically seeks to answer the following research questions:

1. What factors led to the creation of the Philadelphia's tax abatement policies?
2. What is the relationship between tax abatement policies and gentrification in Philadelphia?

The first research question is best explored qualitatively because it focuses on a process that does not neatly fit within the linear constraints of quantitative methods (Abbott, 1988). In contrast, the second research question focuses on a relationship that can be easily measured using pre-existing quantitative data. Since the first research question would best be answered qualitatively and the second research question would best be answered quantitatively, this dissertation employs both qualitative and quantitative methods. The first research question is answered through a historical critical analysis utilizing legislation, newspaper articles from the *Philadelphia Inquirer* and *Philadelphia Daily News*, and secondary literature in order to explain the process that led

to the formation of Philadelphia's tax abatement policies (Creswell & Poth, 2017; Yin, 2016). The second research question is answered through a quantitative analysis using U.S Census data as well as property data available from Philadelphia's Office of Property Assessment. It is my hope that the use of a critical historical analysis of the policy process and quantitative analysis is beneficial in bringing clarity to relationships explored through the above research questions.

Even though tax abatement policies can be beneficial for prospective residents and developers, they also can be problematic for long-term residents in a neighborhood targeted for redevelopment or in adjacent neighborhoods. While benefits of the increased development may include more economic activity, lower crime, and heightened property values, some long-term residents may be adversely impacted and displaced due to subsequent increases in property taxes or rent prices—particularly if they have low incomes (Freeman, 2006; Kromer, 2009; Schaffer, 2005). Long-term residents may also experience a major disruption in the social fabric of their existing communities (Doan & Higgins, 2011; Levy, 1978; Park & Kim, 2008).

The definition of gentrification used in this dissertation is from Freeman (2005), who states it is "the process by which decline and disinvestments in inner-city neighborhoods are reversed" (p. 463). This definition is broad due to the amount of conflict within the field about the connection between gentrification and displacement. For the purposes of this project, displacement is the process in which long-term, low-income often minority residents have to move out of their communities usually in the name of neighborhood redevelopment. Freeman defines displacement is the process "whereby current residents are forced to move because they can no longer afford to reside

in gentrifying neighborhoods" (Freeman, 2005, p. 463). Some theorists believe that the connection between gentrification and displacement is clear and accepted (Atkinson, 2000; Levy, 1978; Marcuse, 2013; Newman & Wyly, 2006). One notable theorist who believed strongly in the connection between gentrification and displacement is Glass (1964), who was paraphrased in Barton (2016) describing gentrification as "the 'invasion' of members of the middle and upper classes into traditionally working-class neighbourhoods, resulting in the displacement of incumbent residents and a change of the social character of the neighbourhood" (Barton, 2016, p. 93). He further breaks down Glass's (1964) definition of gentrification into two key parts: first, it "raises the economic level of the neighborhood population"; second, it "changes the 'social character' or culture of neighborhoods" (Barton, 2016, p. 93). Another example is Neil Smith's rent gap theory suggests that gentrification is the result of a gap between current and potential rental income in a community (N. Smith, 1979). While his argument is purely economic, the definition used in this project includes the social and demographic changes that scholars like Lees (2003) and Hwang (2016) have observed in gentrifying communities.

Others, like Freeman (2005), feel that any displacement resulting from gentrification is minor at best. It is clear that displacement can occur without gentrification. For instance, urban renewal resulted in displacement when the interstate system was built, destroying song longstanding urban communities without any gentrification (Duany, Plater-Zyberk, & Speck, 2010; Hayden, 2009; Jackson, 1987; Rae, 2008). Logically, however, gentrification also can cause displacement at some point—even though some long-term residents may benefit from it. To illustrate the nuanced relationship between gentrification and displacement, Philadelphia's Northern Liberties

neighborhood, one of the most redeveloped sections in the City, was mostly abandoned factories that were demolished due to the city's Neighborhood Transformation Initiative. Therefore, in at least some parts of Northern Liberties, gentrification could have occurred without displacement. At the same time, as Northern Liberties became a popular destination, gentrification began occurring in its adjacent communities like Fishtown, Chinatown, and Kensington. Because those neighborhoods were already densely populated, gentrification could more likely result in displacement (Graham, 2011; Holtzman, 2007).

Figure 1 and Table 1 show the locations of Philadelphia neighborhoods. Given the sheer number of neighborhoods that are included on this map, it is overlaid with zip codes, which are easier to reference. Zip codes 19103 and 19106 are in Center City along with 19102 and 19107, which are not labeled. Chinatown, Rittenhouse, Logan Square, and Society Hill are key neighborhoods in Center City. Zip codes 19123, 19125, 19130, 19121, 19122, 19132, 19133, 19134 19140, and parts of 19141, 19120, and 19137 are in North Philadelphia. Kensington, Francisville, Strawberry Mansion, Brewerytown, and Olney are key North Philadelphia neighborhoods. Northern Liberties, Fishtown, and Fairmount are North Philadelphia neighborhoods that are often considered a part of Center City for marketing purposes. Indeed, Northern Liberties, which is in 19123, has been labeled as one of Philadelphia's most rapidly gentrifying areas (Blomquist, 2016).

Zip codes 19145, 19146, 19147, 19148, and 19112 are in South Philadelphia. East Passyunk, Point Breeze, Queen Village, Graduate Hospital, and Pennsport are key South Philadelphia neighborhoods. Point Breeze, which is in 19146 has been labeled as one of Philadelphia's most rapidly gentrifying areas (Blomquist, 2016). Zip codes 19104, 19131,

19139, 19143, and 19151 are in West Philadelphia. University City, Cobbs Creek, Wynnefield, and Mantua are key West Philadelphia neighborhoods. Zip codes 19142 and 19153 are in Southwest Philadelphia. Zip codes 19111, 19114, 19115, 19116, 19124, 19135, 19136, 19149, 19152, 19154, and parts of 19134 and 19120 are in Northeast Philadelphia. Frankford, Juniata, Tacony, Holmesburg, Mayfair, Rhawnhurst, and Somerton are key Northeast Philadelphia neighborhoods. The remaining zip codes 19126, 19138, 19119, 19118, 19127, 19128, 19129, 19144, and parts of 19141 represent the neighborhoods in the northwest part of Philadelphia that are always referred to by their neighborhood name and not by any geographic reference. Thus, it would be inaccurate to refer to them as Northwest Philadelphia. Key neighborhoods in this part of Philadelphia include Mount Airy, Germantown, East Oak Lane, and West Oak Lane. For more information on Philadelphia neighborhoods by zip code, see Appendix A.

Figure 1: Philadelphia Neighborhood Map
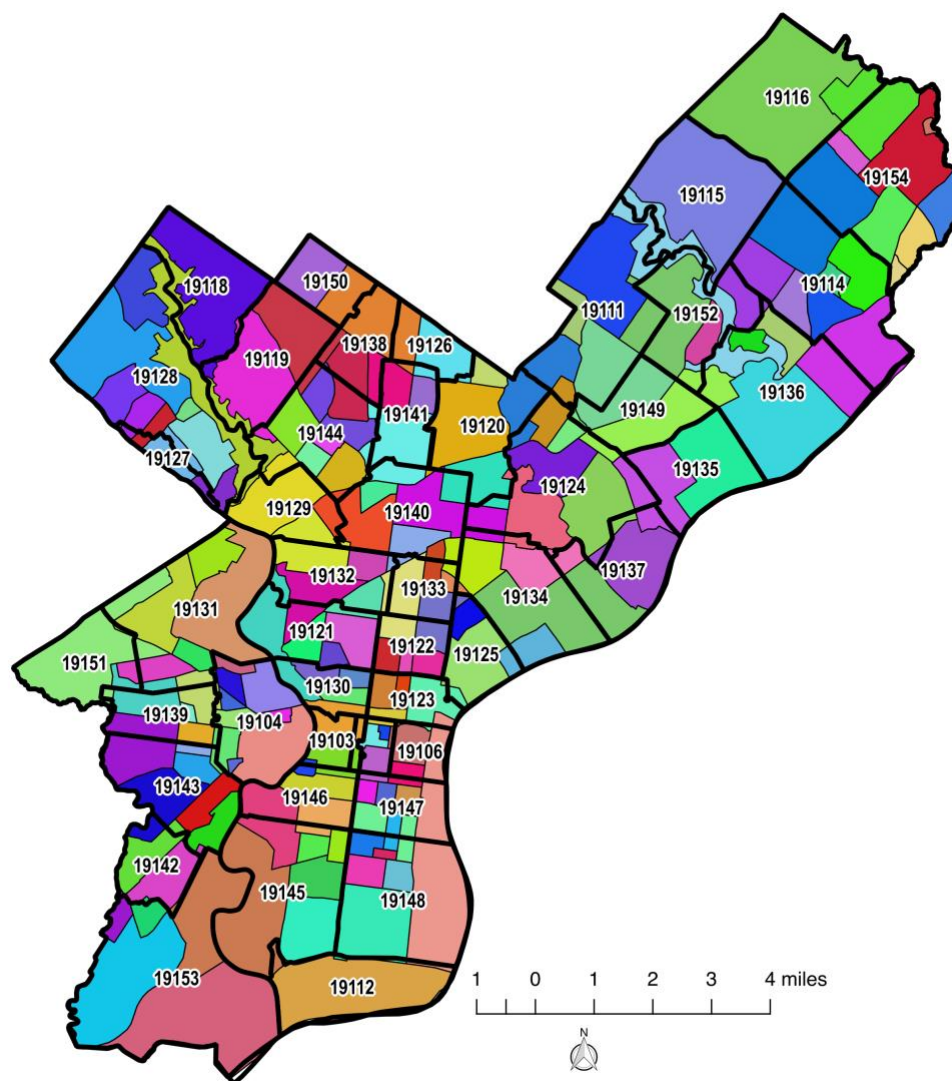
Data Source: Philadelphia City Planning Commission via OpenDataPhilly.com

Table 1: Philadelphia Neighborhood Map Legend

Academy Gardens	Fern Rock	Mantua	Riverfront
Airport	Fishtown - Lower Kensington	Mayfair	Roxborough
Allegheny West	Fitler Square	McGuire	Roxborough Park
Andorra	Fox Chase	Mechanicsville	Sharswood
Aston-Woodbridge	Francisville	Melrose Park Gardens	Society Hill
Bartram Village	Frankford	Mill Creek	Somerton
Bella Vista	Franklin Mills	Millbrook	Southwest Schuylkill
Belmont	Franklinville	Modena	Spring Garden
Brewerytown	Garden Court	Morrell Park	Spruce Hill
Bridesburg	Germantown, East	Mount Airy, East	Stadium District
Burholme	Germantown, Morton	Mount Airy, West	Stanton
Bustleton	Germantown, Penn Knox	Navy Yard	Strawberry Mansion
Byberry	Germantown, Southwest	Newbold	Summerdale
Callowhill	Germantown, West Central	Nicetown	Tacony
Carroll Park	Germantown, Westside	Normandy Village	Tioga
Cedar Park	Germany Hill	North Central	Torresdale
Cedarbrook	Girard Estates	Northeast Phila Airport	University City
Center City East	Glenwood	Northern Liberties	Upper Kensington
Chestnut Hill	Graduate Hospital	Northwood	Upper Roxborough
Chinatown	Grays Ferry	Ogontz	Walnut Hill
Clearview	Greenwich	Old City	Washington Square West
Cobbs Creek	Haddington	Olney	West Oak Lane
Crescentville	Harrowgate	Overbrook	West Park
Crestmont Farms	Hartranft	Oxford Circle	West Parkside
Dearnley Park	Haverford North	Packer Park	West Passyunk
Dickinson Narrows	Hawthorne	Parkwood Manor	West Poplar
Dunlap	Holmesburg	Paschall	West Powelton
East Falls	Hunting Park	Passyunk Square	West Torresdale
East Kensington	Industrial	Pennsport	Whitman
East Oak Lane	Juniata Park	Pennypack	Winchester Park
East Park	Kensington, Old	Pennypack Park	Wissahickon
East Parkside	Kensington, West	Pennypack Woods	Wissahickon Hills
East Passyunk	Kingsessing	Penrose	Wissahickon Park
East Poplar	Lawndale	Point Breeze	Wissinoming
Eastwick	Lexington Park	Port Richmond	Wister
Elmwood	Logan	Powelton	Woodland Terrace
Fairhill	Logan Square	Queen Village	Wynnefield
Fairmount	Lower Moyamensing	Rhawnhurst	Wynnefield Heights
Feltonville	Ludlow	Richmond	Yorktown
	Manayunk	Rittenhouse	

Data Source: Philadelphia City Planning Commission via OpenDataPhilly.com

In an effort to combat blight and promote development in its dilapidated areas, Philadelphia's City Council made a conscious policy to enact tax abatements. This dissertation focuses on the development of this policy decision and the impact of the residential tax abatements that were issued. These policies led to major redevelopment in

previously impoverished neighborhoods. In Figure 2, which is a heat map measuring of

the percentage of abated properties per census tract, it is clear that the abatements were

most abundant in zip codes 19131, 19133, 19121, 19122, 19123, 19125, 19130, 19102,

19103, 19106, 19107, 19145, 19146, 19147, 19148, and 19112—a broad swath of

Philadelphia that includes waterfront neighborhoods, Center City, the home of City Hall

and most museums, and its immediate surrounding neighborhoods in North, South, and

West Philadelphia. For reference, the Delaware River runs along much of Philadelphia's

eastern border from the edge of 19114 abutting Bucks County to the edge of 19153

touching on Delaware County. Outside of the city's core, there are also heavily abated

tracts in Northeast Philadelphia zip codes 19135, 19136, 19114, and 19154 as well as

Roxborough and Manayunk zip codes 19127 and 19128. Indeed, as some would predict,

the areas of Philadelphia with the most tax-abated properties are closest to the

commercial business districts, historical sites, and cultural attractions that seem to attract

young professionals to urban settings (Florida, 2008, 2014).

Figure 2: Philadelphia Tax Abatement Heat Map 2000-2010
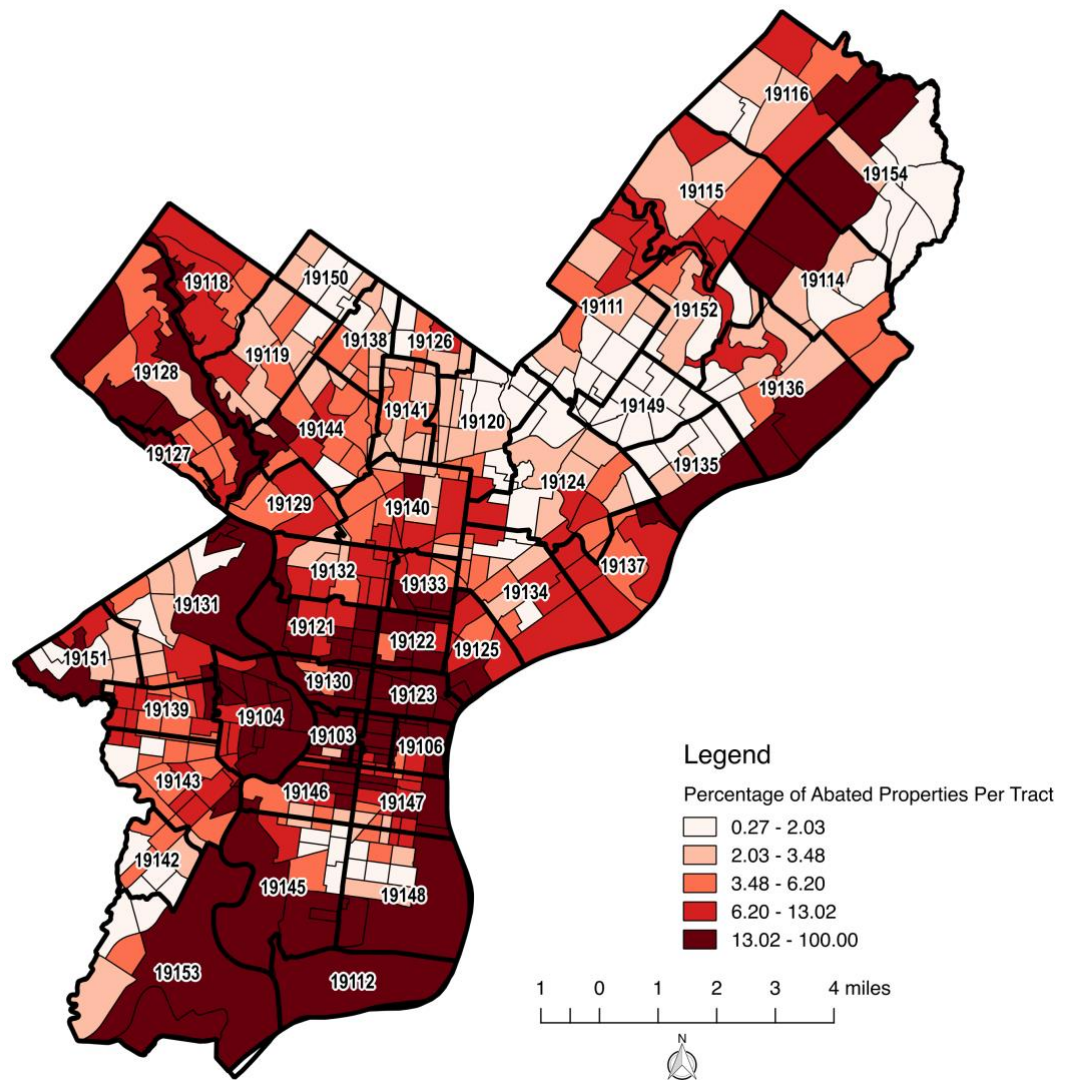
Data Source: Philadelphia Office of Property Assessment, 2010

It is important to note that redevelopment had been occurring in Philadelphia prior
to the enactment of this policy in neighborhoods like Queen Village and Society Hill
which are older neighborhoods located largely in 19147 that are in or adjacent to historic
Old City Philadelphia (Levy, 1978). The presence of gentrification prior to the
Philadelphia's passage of tax abatements in 2000 and the concentration of tax abatement

use near regions of Philadelphia that were already deemed to be prosperous raises a question of directionality. After all, the tax abatements, which were conceptualized as a means of improving underdeveloped areas could have been used in proximity to areas where development was already likely to occur. This is especially relevant when considering that Mayor John Street's Neighborhood Transformation Initiative (NTI) played a major role in preparing once undesirable areas for future development through the razing of abandoned buildings (Kromer, 2009; McGovern, 2006). The qualitative portion of this dissertation also seeks to explore this issue of directionality.

Moreover, Philadelphia's tax abatement policy is unusual. While cities like New York and St. Louis have used tax abatement policies in the past, their policies directly incentivized developers and not homebuyers thereby increasing supply without affecting demand (Mandelker, Feder, & Collins, 1980; Sternlieb, Roistacher, & Hughes, 1976). In contrast, Philadelphia's tax abatement policy incentivizes both developers and homebuyers thus affecting supply and demand simultaneously. Even though this simultaneous focus on developers and homebuyers has the potential to make these policies more effective by increasing demand and supply together, it also makes it difficult to disentangle which impacts facing the City of Philadelphia originate from the supply-side incentives versus demand-side incentives since the two types of effects can feed off each other. Thus, it is essential to incorporate a qualitative analysis of the policy formulation along with a quantitative analysis of policy impact.

Plan of Study

The remaining chapters of this dissertation are organized in the following manner. Chapter 2 is a review of literature that is relevant to gentrification, tax abatements, and community power. Three literature streams provide the foundation for the theoretical framework that is undergirding this entire dissertation. They are also used to operationalize key variables. Chapter 3 explains the methodological approach that is used in this study.

Chapter 4 presents the qualitative analysis, a critical historical analysis that is divided into four key sections. The first section is a history and overview of Philadelphia's tax abatements. Then, the second section discusses the creation of the tax abatement policies. The third section displays the ways in which Philadelphia's tax abatement policies have changed over time. Finally, the fourth section focuses on the implementation of Philadelphia's tax abatement policy and the Neighborhood Transformation Initiative (NTI) from the perspective of key stakeholders.

Chapter 5 outlines the trends of some of the key variables in this dissertation through presenting descriptive statistics for every relevant variable in the dataset. Chapter 6 presents the results of two-stage regression models and logistic regression models examining the ability of key variables related to the abatement policy to predict the presence of gentrification.

Finally, Chapter 7 synthesizes the results from the previous chapters, discusses their implications, and considers directions for future research.

Chapter 2: Literature Review and Theoretical Framework

This literature review is organized around three key streams of scholarly work that are relevant to this research. It first examines the gentrification literature, then tax abatements, and concludes with urban politics, with a specific emphasis on community power and regime theory. These three literature streams are critical to an understanding of the policies being examined in this dissertation. By engaging the gentrification literature, this dissertation seeks to elucidate the changes that have occurred within the City of Philadelphia during the focal time period 2000-2010. Through the engagement of the tax abatement literature, this dissertation seeks to bring context to the mechanism and motivation behind the use of tax abatements in Philadelphia. By engaging the community power literature, this dissertation hopes to bring clarity to the underlying interests and power structures that played a role in the formation and subsequent modification of Philadelphia's tax abatement policies.

Gentrification

In *There Goes the Hood*, Freeman (2006) portrays gentrification as a potential means of mobility for low-income homeowners. The process of gentrification typically results from wealthier populations moving into neighborhoods that were previously associated with poverty and urban decay (Lees, 2003; N. Smith, 1984, 1996; N. Smith & Williams, 1986). Policies like Philadelphia's property tax abatement have the potential to initiate or accelerate gentrification thereby creating an added economic incentive for people with financial means to purchase newly built or renovated properties within the city. It is necessary to make the distinction between whether the policy would have the

potential to initiate or accelerate gentrification because of the divergent development

trends taking place within the City of Philadelphia. While some areas had seen little to no

development for several decades, others had already started gentrifying due to their

proximity to popular neighborhoods and cultural amenities (Kromer, 2009; Levy, 1978).

In order to fully understand the relationship between Philadelphia's tax abatement

policies and gentrification, it is necessary to review the literature on gentrification. This

section focuses first on economic theories of gentrification because they are most

applicable to the economic motivations behind the use of tax abatements in urban

redevelopment efforts. It then focuses on sociological perspectives on how gentrification

impacts communities.

The economic theories of gentrification are largely divided into two categories:

production side and consumption side. Production side theories rely heavily on the notion

of a "rent gap," first defined by Neil Smith (1979). Smith (1979) posits gentrification as

"a structural product of land and housing markets" occurring only when the gap between

potential and actual rent in an area is large enough to make investment in rehabilitation

and renewal efforts worthwhile (p. 546). As such, production theories focus on those

parties that will have a direct economic benefit of gentrification including developers,

landlords, and likely politicians. Still, Smith's theory has been criticized greatly by

scholars who deny the existence of a rent gap or at least suggest that the theory is in need

of reformulation due to its emphasis on distinguishing between actual and potential rent

and its inability to adequately explain the timing and location of land use changes

(Bourassa, 1993; E. Clark, 1995; Hammel, 1999).

In contrast, the consumption side arguments pose gentrification as resulting from the increased presence of a burgeoning middle class in an area that was previously impoverished. Therefore, these theories focus on the new residents of gentrifying communities who are typically seen as members of a burgeoning middle class who flock to communities in close proximity to employment, arts, and other amenities (Beauregard, 1986; Florida, 2014; Hamnett, 1984). Richard Florida (2014) describes this burgeoning middle class as the Creative Class, which includes "people in science and engineering, architecture and design, education, arts, music, and entertainment whose economic function is to create new ideas, new technology, and new creative content" (Florida, 2014, p. 8). As such, he believes that "technology, talent, and tolerance" are necessary for economic development to occur and suggests that cities missing one of those three necessary components fail to grow (Florida, 2014, p. 228). Still, recently Florida has reversed course on the universal benefits of urban revitalization and now sees gentrification one of the causes of a "New Urban Crisis" (Florida, 2017).

The impacts of gentrification, however, go beyond notions of production and consumption. They are also socio-political. Even though gentrification scholars try to suggest that redevelopment benefits or at least potentially benefits all residents of a community, displacement has been a documented side effect. In trying to figure out what happens to displaced residents of gentrifying communities, Lang (1980) posits that displaced residents usually attempt to reside in lower cost regions of core cities. In their research on New York City, Newman and Wyly (2006) demonstrate that displaced residents often moved to less expensive boroughs. Van Criekingen (2008) observed that

displaced residents in Brussels tended to move short distances toward lower-income, working class communities in Brussels.

In the Philadelphia area, observed trends were similar even before the city's tax abatements as noted when residents of Society Hill began moving to Queen Village, an adjacent low-income community of mostly immigrants, to escape the effect of gentrification (Levy, 1978). The construction of I-95 through the heart of Philadelphia's waterfront, which included parts of Society Hill and Queen Village, altered the character of both neighborhoods by diminishing the amount of housing stock and increasing demand. At the time, Queen Village was a prime example of the phenomenon known as immigrant clustering, but it lost much of its traditional character after rising home values out-priced residents whose families had ties to the neighborhood for generations as a result of its gentrification (Fong & Chan, 2010; Levy, 1978; Logan, Zhang, & Alba, 2002; Massey, Goldring, & Durand, 1994). These incidents demonstrate the prevalence of displacement and redevelopment in Philadelphia prior to the widespread incentivization of development by way of tax abatements. Therefore, there is potential for greater displacement to occur in the years after the tax abatement policies were modified and implemented in 2000.

Tax Abatements

Tax abatements are policies in which a portion of a particular tax—usually business taxes or real estate taxes—is waived to bring about a desired economic result like attracting new businesses and spurring real estate development (Cassell & Turner, 2010; Coffin, 1982; Ding et al., 2016; Rosentraub, Mikelbank, & Post, 2010). While

there is extensive research on the role of tax abatements in urban development, the tax abatement laws that have been researched tended to concentrate on commercial rather than residential properties. Mandelker, Feder, and Collins (1980) write extensively about *Chapter 353*, legislation passed in St. Louis, Missouri in 1945 that encouraged the formation of urban redevelopment corporations that would be able to use the city's power of eminent domain and would be eligible for ten-year property tax abatements and a subsequent assessment at half value for an additional 15 years. This legislation was created in an effort to improve housing stock to encourage middle class families to remain within the City of St. Louis instead of moving to suburban housing in St. Louis County. Under *Chapter 353*, redevelopment corporations would transfer abatements to purchasers, but these purchasers were developers. Indeed, developers had to demonstrate that an area was blighted to qualify for Chapter 353.

Sternlieb, Roistacher, and Hughes (1976) focus on the *421* and *J51* tax abatement programs in New York City. The *421* program offered tax abatements to new or rehabbed multiple unit dwellings with 6 or more units in which construction started after January 1, 1975 and ended prior to December 31, 1979. These properties were issued 10-year tax abatements that decreased by 20% every two years (p. 10). This was a revised version of *421* program, which existed prior to 1975 and had its eligibility limited to newly constructed multiple unit dwellings with at least 10 units. The *J51* program applied to "privately financed condominiums and cooperatives" in addition to buildings converted "from nonresidential use to multiple dwellings" (p. 12). Its tax abatement was less straightforward than that of the *421* program and could last anywhere from 9 to 20 years (p. 13). Both policies were credited with spurring great development investment and

increasing tax revenue upon the expiration of the noted abatements. Like *Chapter 353* and unlike Philadelphia's tax abatement policies, only developers could benefit from the abated taxes in *J51* and *421*. In addition, the abatement benefit was only available long-term to developers who retained ownership of their properties and made most of their money through rentals, effectively creating demand for long-term investment.

Although tax abatement policies are commonly used in initiatives to redevelop neighborhoods and attract businesses, their effectiveness is debatable. When factored in with other corporate expenses, the use of tax abatements on improvements to building structures to redevelop Indianapolis, IN in the 1970s failed to attract businesses and stem decline (Coffin, 1982). Likewise, the use of tax abatements on residential structures to redevelop Cleveland, OH starting in the 1980s only resulted in marginal increase to the city's tax revenue and housing stock by 2005 (Rosentraub et al., 2010). As a result, researchers have discussed the need to better regulate tax abatements (Dalehite, Mikesell, & Zorn, 2005; Nunn, 1994). In an effort to demonstrate the real costs behind tax abatement policies, Wassmer (2014) suggests governments count all abated taxes as expenditures to give a more accurate account of the true cost of such policies before they are enacted. Nonetheless, the decision to rely on tax abatement policies is positively related to a community's age and population growth (Reese, 1999). In fact, the relationship between firm demand and abatement use has led to competition between municipalities, which has created a "race to the bottom" with respect to the magnitude of abatements being offered based on studies conducted in Ohio and Michigan (Cassell & Turner, 2010; Reese & Sands, 2006).

Chapter 353 in St. Louis is a rare abatement policy in part because it has been evaluated. According to Mandelker, Feder, and Collins (1980), two surveys gauging the effectiveness of *Chapter 353* give conflicting results. Results from a 1975 survey conducted by Price Waterhouse, Inc. suggest that developers do not view property tax considerations as integral to "determining whether or not to invest in new construction or major rehabilitation at their present locations" (34). However, in a 1977 evaluation from the Opinion Research Division of Fleishman-Hilliard, on a scale of 1 to 5 with 5 being most important, developers gave tax abatement benefits a mean score of 4.6 (35). In addition, Chapter 353 policy faced a series of legal challenges including *Young v. Harris*, 599 F .2d 870 (1979), in which a group of plaintiffs from a low-income, mostly African American area redeveloped through the policy attempted to argue for relocation assistance due to the use of federal funds in the redevelopment of their former neighborhood. However, the private status of *Chapter 353* redevelopment corporations prevented them from being held to the relocation standards illustrated in the Uniform Relocation Act (87). Although the residents did not win the legal battle, the *Young v. Harris*, 599 F .2d 870 (1979) case serves as a reminder that redevelopment policies like *Chapter 353* and Philadelphia's own policy may be simultaneously perceived as being beneficial by developers and potential buyers and detrimental by long-term residents of targeted communities due to displacement.

The need for analysis of tax abatement policies to include social and political perspectives is especially clear with respect to the effect of property tax abatements on school funding. Since property taxes are the main source of funding for public school districts, the use of residential property tax abatements in redevelopment has potentially

troublesome ramifications for urban, distressed areas like Philadelphia because many economically depressed cities are already suffering from inadequate resources when compared to their suburban counterparts (Peterson, 1981; Saiger, 2009; Tiebout, 1956). This is a problem that logically will only be exacerbated by the use of property tax abatements, which give new residents the opportunity to purchase newly constructed or renovated properties without providing tax dollars to fund the schools for the duration of the abatement. Indeed, both gentrification and tax abatements can have social and economic impacts.

Although Gillen and Westrum (2014) project a net gain in population and overall tax revenue by way of the Philadelphia's wage tax, which has a rate of 3.8907% for residents and 3.4654% for nonresidents who work in the city, it is still important to note that Philadelphia's tax abatements abruptly end ten years after construction and that such a jolt could lead to a similar decrease considering that the new residents could choose to relocate with the abatement's end (City of Philadelphia, 2018). Indeed, researchers have pointed out that it is only in a municipality's best interest to offer a tax abatement if it is receiving some other sort of aid from the State or Federal Government that is at least partially funding abatements (Morse & Farmer, 1986, p. 234). If development in Philadelphia would have taken place regardless of the availability of abatements, then the abatements would result in a loss in property tax income. This is possible considering the fact that gentrification in Philadelphia was already documented prior to the passage of the iteration of abatement policies that are central to this dissertation in 2000 (Ding, Hwang, & Divringi, 2015; Levy, 1978). However, Philadelphia's abatements alone have no clear external funding sources to compensate for the loss in property tax revenue.

It is important to note that the Philadelphia School District has been dealing with budget shortfalls for several years in spite of the degree of redevelopment that has taken place in some of its once-fledgling neighborhoods (Caskey & Kuperberg, 2014; Jack & Sludden, 2013; "Philadelphia Schools: Another Year, Another Budget Crisis," 2014). Indeed, in the midst of current Mayor James Kenney's efforts to raise property taxes for school district funding, City Controller Rebecca Rhynhart was quoted as questioning whether keeping the abatements intact would "prevent much needed funding from flowing to the school district." (Adelman, 2018, p. A11). According to Adelman (2018), Former City Manager Alan Goldsmith states:

> "The tax abatement merely eats into the finances of the school district, and I don't think the school district should be subsidizing development." (Adelman, 2018, p. A11)

Still, it is possible that the increase in property taxes that occurs as abatements expire could benefit the Philadelphia School District at some point in the future. It is also important to note that when governments make the decision to issue tax abatements, they become increasingly more likely to issue tax abatements in the future suggesting a type of path dependence that could hinder future fiscal growth (Reese, 2006; Reese, Blackmond Larnell, & Sands, 2010).

Displacement, which can result from the use of tax abatements and subsequent gentrification, can bring about major changes to the social character of a community. After all, many gentrifying communities were previously home to low-income and impoverished populations. The effects of concentrated poverty have been well-documented (Jargowsky, 1997; Jargowsky & Yang, 2006; Massey, Gross, & Shibuya, 1994; Wilson, 1987). Impoverished populations are generally spatially isolated (Massey,

1994; Massey & Eggers, 1990; Vigdor, 2002). Indeed, research suggests that breaking up

impoverished areas and relocating residents to neighborhoods with lower levels of

poverty, higher median incomes, and higher levels of educational attainment is a

successful intervention to poverty (Clampet-Lundquist & Massey, 2008).

When gentrification reaches areas with concentrated poverty, long-term residents

are often excited about the improvements to their neighborhoods and view the changes as

a form of upward social mobility thereby showing that concentrated poverty can be

addressed without total displacement (Freeman, 2006). As a result, there are two

scenarios for gentrification due to Philadelphia's tax abatement policies: (1) economic

growth, eventual increases in tax revenue, and displacement of some vulnerable residents

or (2) continued local government reliance on tax abatements for redevelopment. These

scenarios are not mutually exclusive. This dissertation seeks to explore which of these

outcomes most accurately depicts what has occurred in Philadelphia between 2000 and

2010. Given the mixed record of abatement policies, it is not entirely clear why they

remain popular among cities seeking redevelopment. Thus, it is necessary to examine the

urban politics that lead to their enactment.

Community Power

The community power literature is integral to providing a theoretical foundation

for understanding the motivations and influence of the various parties who came together

to form and modify Philadelphia's tax abatement policies. In defining power, Lukes

(1974) posits that there are three dimensions of power: issue, agenda, and manipulation.

"Issue" refers to choosing an issue and a clear response to it. "Agenda" refers to

controlling the context where decisions are made. "Manipulation" refers to controlling

what is perceived as correct. In determining how power is distributed, community power

theorists can be divided into two categories: elitists and pluralists (Bachrach & Baratz,

1962). Elitists believe that community power resides within the elites (F. Hunter, 1953;

C. W. Mills, 1956). In contrast, pluralists believe that community power is diffused

across many groups (Dahl, 1961). Hunter and Dahl are key scholars for both perspectives

respectively (Bachrach & Baratz, 1962; Terry Nichols Clark, 1975). The pluralist

perspective was largely favored within the field of political science, but has since been

disavowed by many including Lindblom, who talks about "the privileged position of

business" in *Politics and the Markets* (Lindblom, 1977, p. 5; Polsby, 1960).

Within the community power literature, there is a thread that posits the coalitional

perspective as an alternative to the elitist vs. pluralist debate (Johnson, 1984; Mollenkopf,

1989). Mollenkopf describes dominant coalitions as "necessarily cross-class in nature,

including support not only from business interests but also broader constituencies

organized through political parties, labor organizations, interest groups, etc."

(Mollenkopf, 1989, p. 131). Coalitions are flexible can unite and disband around

particular issues as needed (Johnson, 1984; Mollenkopf, 1989; Stone, 1986). Indeed, the

use of coalitions has been key to many social justice efforts in urban contexts (Molotch,

1976; Piven & Cloward, 1991). The coalitional perspective pushes back against elitists by

suggesting that "it is rare to find, in medium-sized and larger cities and metropolitan

areas, a single cohesive power elite ruling consistently and without serious challenge,"

while at the same time pointing out "fluid pluralism, in which many groups compete on a

more or less equal basis across a range of issues is equally uncommon" (Johnson, 1984, p. 5).

This project focuses heavily on urban regime theory due to its ability to explain power structures in urban contexts. Urban regime theory is a part of the community power literature which is attributed to Clarence Stone whose research on Atlanta pointed out that power in urban governments is divided between politicians, businesses, and community groups (Stone, 1989). Stone argues that urban regime theory is different from pluralism because it acknowledges the social and economic inequalities that prevent politics from being completely open and it is different from elitism because participation in a governing coalition changes based on the issue in question (Stone, 1998).

Engagement with the community power literature is useful for this project because it elucidates the complexity behind the power structures that were at play in the formulation of Philadelphia's tax abatement policies. Whether adhering with the elitist or coalitional perspectives, the community power literature points out that power is often in the hands of the few. Community power literature questions who is exercising power, and according to the elitist and coalitional perspectives, the power is exercised by a small group of people who wield their influence over the larger populace (Johnson, 1984; Mollenkopf, 1989; Molotch, 1976; Stone, 1986). This is especially relevant when considering the formulation and timing of the tax abatement policies in Philadelphia, their concurrent policy NTI, and the subsequent passage of the Actual Value Initiative (AVI), which led to Philadelphia's first property value reassessment in several decades, because these policies together appear to benefit politicians and developers more than

anybody else. After all, NTI is largely responsible for the prevalence of vacant land in the neighborhoods that were later major centers of redevelopment (McGovern, 2006).

By engaging the community power literature to gain a better understanding of the formulation and passage of tax abatement policies in Philadelphia and utilizing it as a framework for the qualitative portion of this research, I expect to find the existence of a small core group of people and special interest organizations including politicians, businesses, and community organizations that were very influential in the structuring and the implementation of all of Philadelphia's policies that were related to the redevelopment of once-dilapidated parts of the city.

Theoretical Framework

While the literature is explicit and extensive on the role of economic arguments related to gentrification, there is comparative less on the role of local governments in facilitating through policy decisions, though this dissertation focuses on examples in St. Louis and New York City (Mandelker et al., 1980; Newman & Wyly, 2006). Indeed, while the production and consumption-based theories of gentrification are purely based on market forces, the government often plays a role in gentrification through the enactment of policies with incentives that benefit landlords, developers, and individual homebuyers. On the production side, landlords and developers clearly benefit from Philadelphia's residential tax abatement policy because the low property taxes make the massive renovations and/or new construction projects that would be necessary to bring in higher levels of rent or higher purchase prices worthwhile. Likewise, on the consumption side, homeowners and renters with adequate income levels can find a better quality of

housing stock that is also easier to afford due to the abatement. These benefits to

landlords, developers, homeowners, and renters can work together to bring about

gentrification and displacement.

In utilizing the theories of gentrification, the effect of tax abatement policies, and

community power, I propose the following answers to the research questions outlined in

the introduction:

H1: The economic and political needs of politicians, business owners, and community organizations led to the design of Philadelphia's tax abatement policies.
H2: The incidence of tax-abated properties in communities in Philadelphia leads to an increase in gentrification.

Hypothesis 1 is centered on the extent to which government policymaking can

lead to gentrification. As depicted in Figure 3, Hypothesis 1 focuses on the circumstances

surrounding the creation of gentrification-enabling policies in Philadelphia like the tax

abatements and NTI. It asks how political forces like pressure from interest groups and

market forces can affect the way decision makers formulated Philadelphia's tax

abatement policies. Using Stone's (1989) urban regime theory, decision makers are

identified as politicians, businesses, and community organizations.

Figure 3: Hypothesis 1

In contrast, Hypothesis 2 is centered on the results of the tax abatement policies in Philadelphia. As shown in Figure 4, Hypothesis 2 focuses on whether gentrification is quantifiably more evident in communities in Philadelphia where the use of the tax abatement policy is more prevalent. It argues that tax abatement policies have divergent impacts in distressed and gentrifying communities. While the tax abatement policies can lead to accelerated gentrification and displacement in gentrifying communities, it can also lead to gentrification and displacement in distressed communities—especially in distressed communities that are in close proximity to gentrifying communities. Then gentrification and displacement can result in social changes that would be evident in the demographics and overall character of these gentrifying neighborhoods. The gentrification and displacement can also result in financial and economic development.

Figure 4: Hypothesis 2
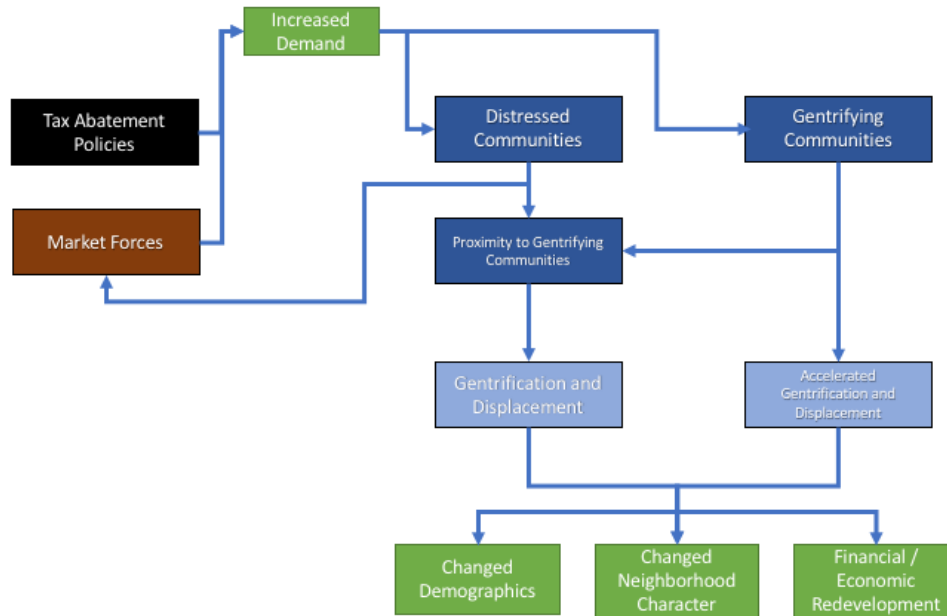
Figure 5 is a graphic depiction of the overall theoretical model used in this project. Thus, it is a combination of both individual diagrams of Hypothesis 1 and 2. It shows how the tax abatement policies and market forces can impact the businesses, politicians, and community organization thereby referencing urban regime theory. Then, businesses, politicians, community organizations as well as market forces impact the formation of the tax abatement policies, which led to an increase in demand for housing. This increased demand could lead to gentrification in neighborhoods close to gentrifying communities and accelerated gentrification in communities that are already gentrifying. Then gentrification can result in social changes in evident in neighborhood demographics and character as well as financial and economic development.

Figure 5: Theoretical Model
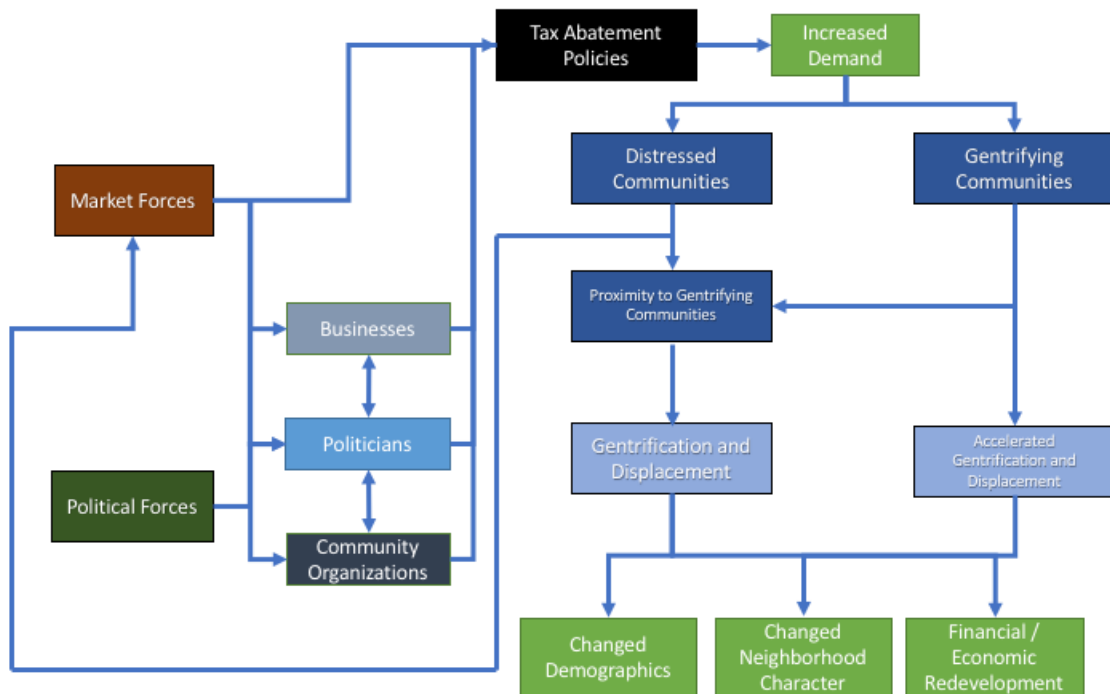
Conclusion

The gentrification, tax abatement, and community power literature streams serve as the basis for the theoretical framework being tested in this dissertation through Hypotheses 1 and 2. It is the goal of this dissertation to shed light on the role and distinct motivations of urban regimes in the formulation and implementation of policy measures like Philadelphia's tax abatements and programs like the Neighborhood Transformation Initiative. Indeed, Philadelphia's tax abatement policies and the Neighborhood Transformation Initiative provide strong examples of complex policy measures with layers of effects that can be perceived as positive or negative depending on which stakeholders are making such determination. After all, the needs of businesses, politicians, and community organizations are often at odds. This dissertation seeks to

bring some clarity to this complex phenomenon of government-influenced gentrification

and displacement using Philadelphia as an example in an effort to fill this gap in the

literature.

Chapter 3: Research Methods

This research aims to gain a better understanding of the effects resulting from the implementation of the tax abatement policy in Philadelphia, PA. It utilizes qualitative historical case methodology to investigate the origin and politics of the tax abatement policies followed by a quantitative methodology involving Geographic Information Systems (GIS) and regression analysis to elucidate its effects. These three phases of the methods section are graphically depicted in Figure 6.

Figure 6: Total Methodology Framework
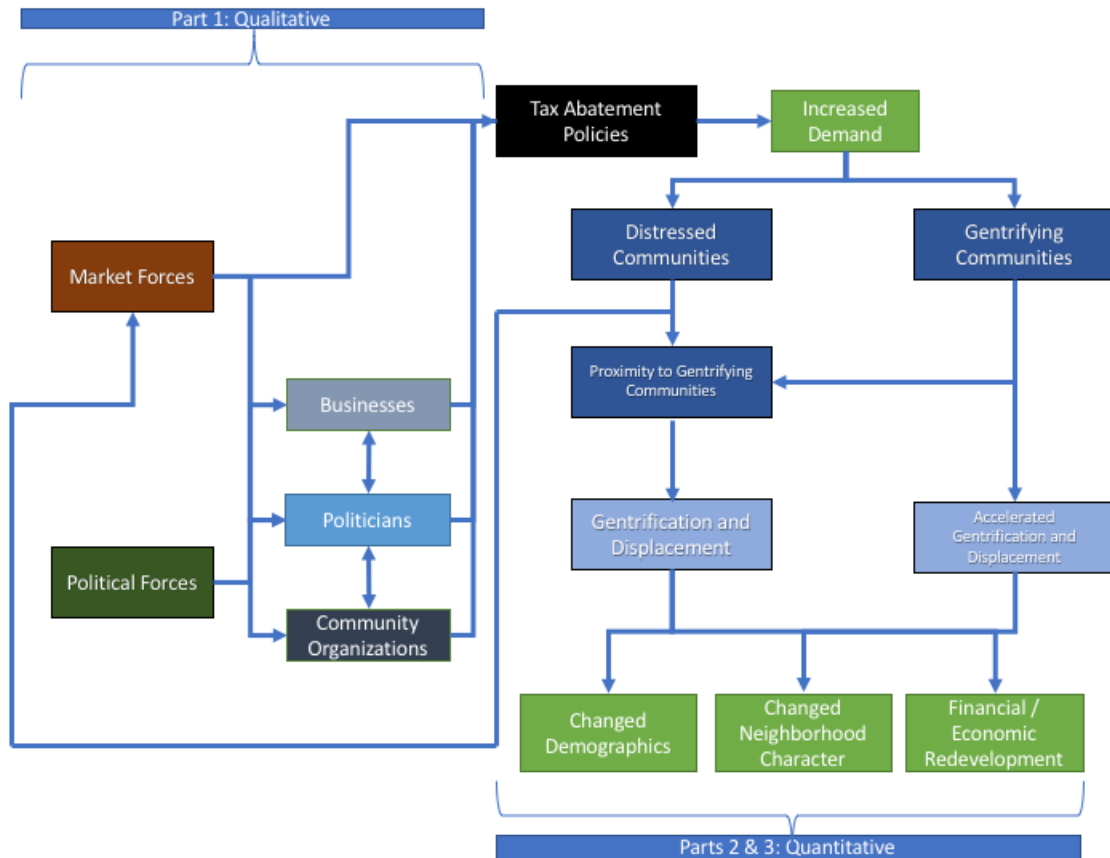
Part 1: Critical Historical Analysis

To answer the first research question, test Hypothesis 1, and provide information about the motivation behind the formulation of Philadelphia's tax abatement policy, I conduct a critical historical analysis using newspaper articles and proceedings from Philadelphia's City Council hearings. This analysis is instrumental in elucidating the goals of the policy, determining the impact of NTI, and informing the evaluation in the discussion section of the dissertation.

In public policy research, qualitative research has been used to demonstrate the ground level effects of enacted policies. The work of William Julius Wilson is based around the effects of deindustrialization on urban areas across the northern United States (Wilson, 1987, 1996). Likewise, Freeman's (2006) *There Goes the Hood* uses interviews to track the effects of gentrification in two New York neighborhoods. For the purposes of this dissertation, key informant interviews were not used to supplement the archival and secondary research into the factors motivating the formulation of Philadelphia's tax abatement policies because the age of the tax abatement policies make interviewing difficult—especially when considering that Ordinance 961 was initially added to the municipal code in the 1970s while Ordinances 1456-A and 1130 were both added in the mid 1980s.

This dissertation contributes to a substantial body of qualitative research set in the City of Philadelphia. Philadelphia was the location of W.E.B. Du Bois' (1899) *The Philadelphia Negro,* one of the oldest examples of urban sociology in the United States (Du Bois & Eaton, 1899). Utilizing a mixed methods approach, which included both quantitative analysis and ethnography, Du Bois provides great insight into the lives of

African Americans in the late nineteenth century and their efforts to survive and thrive in the face of racism. In his book, *African American Citymakers; How the Philadelphia Negro Changed Urban America*, Marcus Anthony Hunter utilizes historical ethnography to elucidate the challenges facing African Americans in Philadelphia from the late nineteenth century to the Great Migration in the 1960s (M. A. Hunter, 2013). Elijah Anderson's (1999) *Code of the Street* focuses on the impact of deindustrialization, the proliferation of illegal substances, welfare policy on low-income African Americans living in Philadelphia, while his more recent book *The Cosmopolitan Canopy* focuses on the convergence of races and classes in public settings across the Philadelphia area (Anderson, 1999, 2011). Alice Goffman's *On the Run* demonstrates some of the unintended effects of the war on drugs on a group of African American teens and young adults living in a neighborhood that is given the pseudonym of "Sixth Street" (Goffman, 2015).

Content analysis was performed on the original abatement legislation and its subsequent iterations. Data were coded using Dedoose and analyzed using constructivist grounded theory, which allows for an interpretive understanding of the data being studied (Creswell & Poth, 2017; Glaser, 1998, 2007; J. Mills, Bonner, & Francis, 2008). As such, codes were not predetermined, but were instead derived throughout the process of analysis.

Codes were created based on the purpose of each piece of legislation, which was written explicitly into each preamble. The coding rubric was based on the underlying structure of Philadelphia's legislation, which always includes a preamble, and notates text to be added and removed from each iteration of a policy. These added and removed

sections of policies were further categorized based on their intended impact, which was clearly stated in the text of each policy. The standard structure of Philadelphia's legislation made it possible to ensure the accuracy of results after a few test codes conducted on the original versions of the legislation. After all, these original versions provided the overall framework for the subsequent iterations that were coded. Coding was conducted in the two cycles. The first coding cycle most closely to "Holistic Coding," which "applies a single code to a large unit of data in the corpus, rather than line-by-line coding, to capture a sense of the overall contents and the possible categories that may develop" (Saldaña, 2015, p. 264). During the second coding cycle, the initial holistic codes were then split into more specific codes using the "Descriptive Coding," which Assigns labels to data to summarize in a word or short phrase – most often as a noun – the basic topic of a passage of qualitative data" (Saldaña, 2015, p. 262).

Codes were then grouped into thematic categories that allowed for conclusions to be drawn (Bowen, 2009; Fereday & Muir-Cochrane, 2006). Figure 7 is the code tree for the critical historical analysis. For more information about the codes and their frequencies, see Appendix B.

Figure 7: Qualitative Code Tree

- Dates
  - Date Passed
  - Effective Date
  - Reporting Period
  - Termination Date
- Definitions
  - Applicant
  - Board
  - Delinquency
  - Dwelling Unit
  - Eligibility
    - Condition
      - Aged
      - Deteriorated
      - Unsafe for Human Habitation
    - Location
    - Owner Occupancy
    - Type
      - Commercial
      - Commercial Residential
      - Hotel
      - Industrial
      - Non Residential
      - Residential
    - Value
  - Improvement
- Edited
  - Added
  - Removed
- Exemptions
  - Authorization
  - Continuation
  - Exemption Amount
  - Exemption Schedule
  - Other Exemptions
  - Procedure
  - Termination
- Interesting Details
  - Fifth District
  - Repeal of 970214
- Mayor
  - Goode
  - Green
  - Rendell
  - Rizzo
  - Street
- Motivations
  - Age of Property
  - Condition of Area
  - Condition of Property
  - Enhance Neighborhood Communities
  - Improve Economic Base
  - Improve Social Conditions
  - Increase Residents
  - Vacancy
- Other Legislation
- Preamble
  - Create 970274 / 19-1303 (5)
  - Create or Modify 1130 / 19-1303 (3)
  - Create or Modify 1456-A / 19-1303 (4)
  - Create or Modify 961 / 19-1303 (2)

Part 2: GIS and Data Preparation

GIS was used to create many of the control variables that are necessary for the regression analysis in Part 3. These variables were calculated for each Census tract within the city of Philadelphia using 2010 tract geography by using crosswalk files from the Longitudinal Tract Database (LTDB) from Brown University to facilitate the conversion of 2000 Census data to 2010 Census tract boundaries.

The following variables were calculated using the MMQGIS plugin on QGIS:

1. <u>% Total Number of Tax Abated Properties from 2000-2010</u>
   (Number of Tax Abated Properties from 2000-2010 / Number of Properties)

The Number of Tax Abated Properties and Number of Total Properties were obtained from the Philadelphia Office of Property Assessment. These values were combined using the above formula to create the % Total Number of Tax Abated Properties from 2000-2010, which is one of the key independent variables that is being examined in this project Using QGIS, the abated properties were converted to a point layer based on the properties' addresses and then aggregated to tract level using 2010 Census Tract boundaries for the City of Philadelphia. The resulting shapefile was then exported in CSV format for merging with the other data sources. This variable was created to measure the incidence of tax abatements, which is meant to demonstrate the direct impact of the tax abatement policies.

2. <u>% Total Value of Tax Abated Properties</u>
   (Value of Tax Abated Properties / Value of Total Properties)

The Value of Tax Abated Properties and Value of Properties were obtained from the Philadelphia Office of Property Assessment. These values were combined using the above formula to create the % Total Value of Tax Abated Properties from 2000-2010. It is also a key independent variable that is being examined in this project. Using QGIS, the assessed values of the tax abated properties were converted to a point layer based on the properties' addresses and then aggregated to tract level using 2010 Census Tract boundaries for the City of Philadelphia. The resulting shapefile was then exported in CSV format for merging with the other data sources. This variable was also created as an alternative measure of the incidence of tax abatements.

3. <u>Distance from the Center City Business District</u>

The Center City Business District boundaries were obtained from Open Data Philly. Using the Hub Distance function on MMQGIS, distances in miles were calculated from the Center City Business District to every Census tract within the City of Philadelphia in miles. The resulting shapefile was then exported in CSV format to facilitate an easy merge with other data sources. The Hub Distance function utilizes centroids in its distance calculations. As such, the distance calculated is the distance from each tract centroid to the centroid of the Center City Business district. Figure 8 shows where Center City Business District's location relative to the remainder of the City of Philadelphia. Figure 9 shows the boundaries for the Center City District zoomed in close enough to see the individual neighborhoods that make it up. These boundaries were created in 1991 and are used by the Central Philadelphia Development Corporation and the Center City District Foundation in their fundraising and development efforts (Center City District, Central Philadelpia Development Corporation, & Center City District Foundation, 2018). The theoretical justification for this variable is taken from Richard Florida's concept of the creative class being attracted to regions where work and culture are nearby. In Philadelphia, most businesses and cultural attractions are located within the Center City District.

Figure 8: Center City District Boundaries
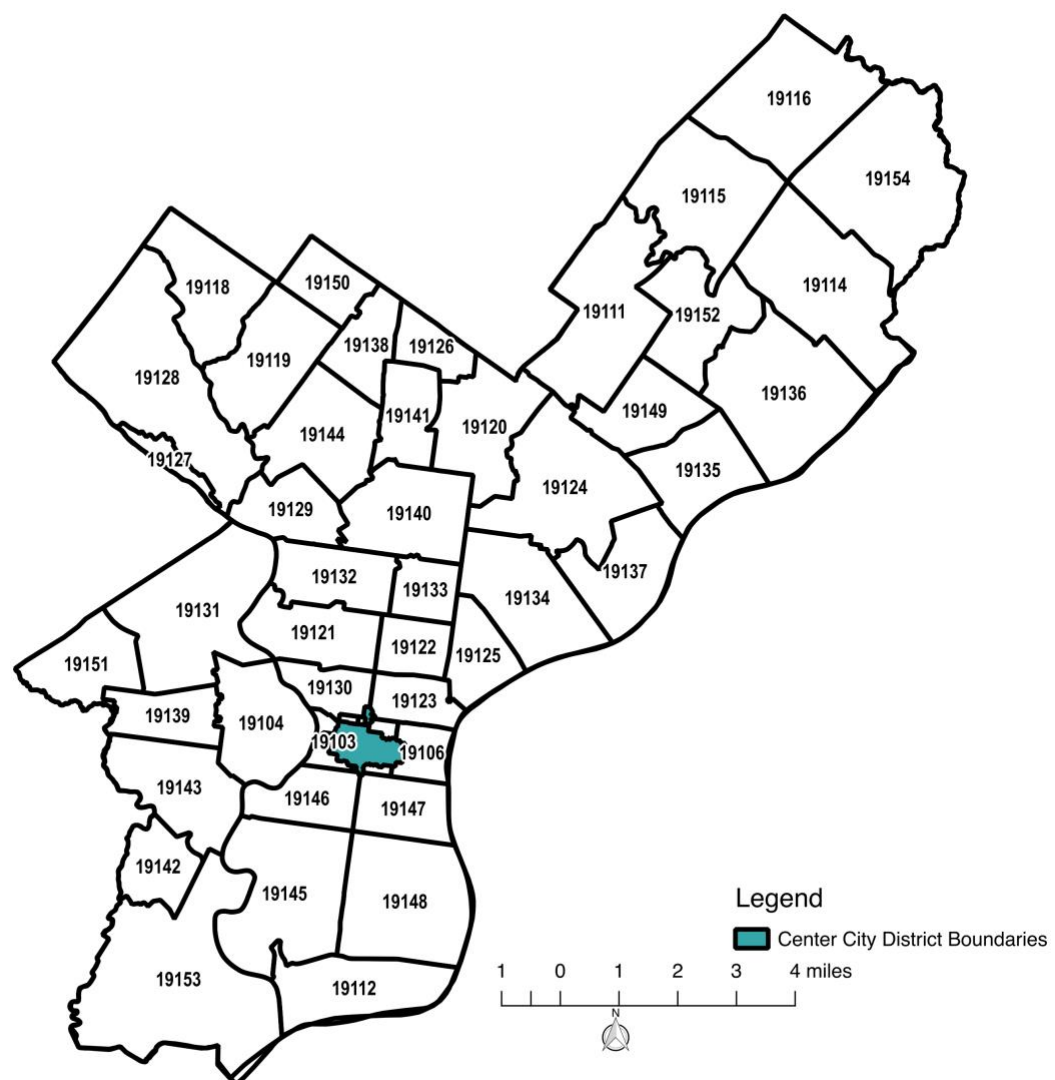
Figure 9: Center City District Boundaries Zoomed In
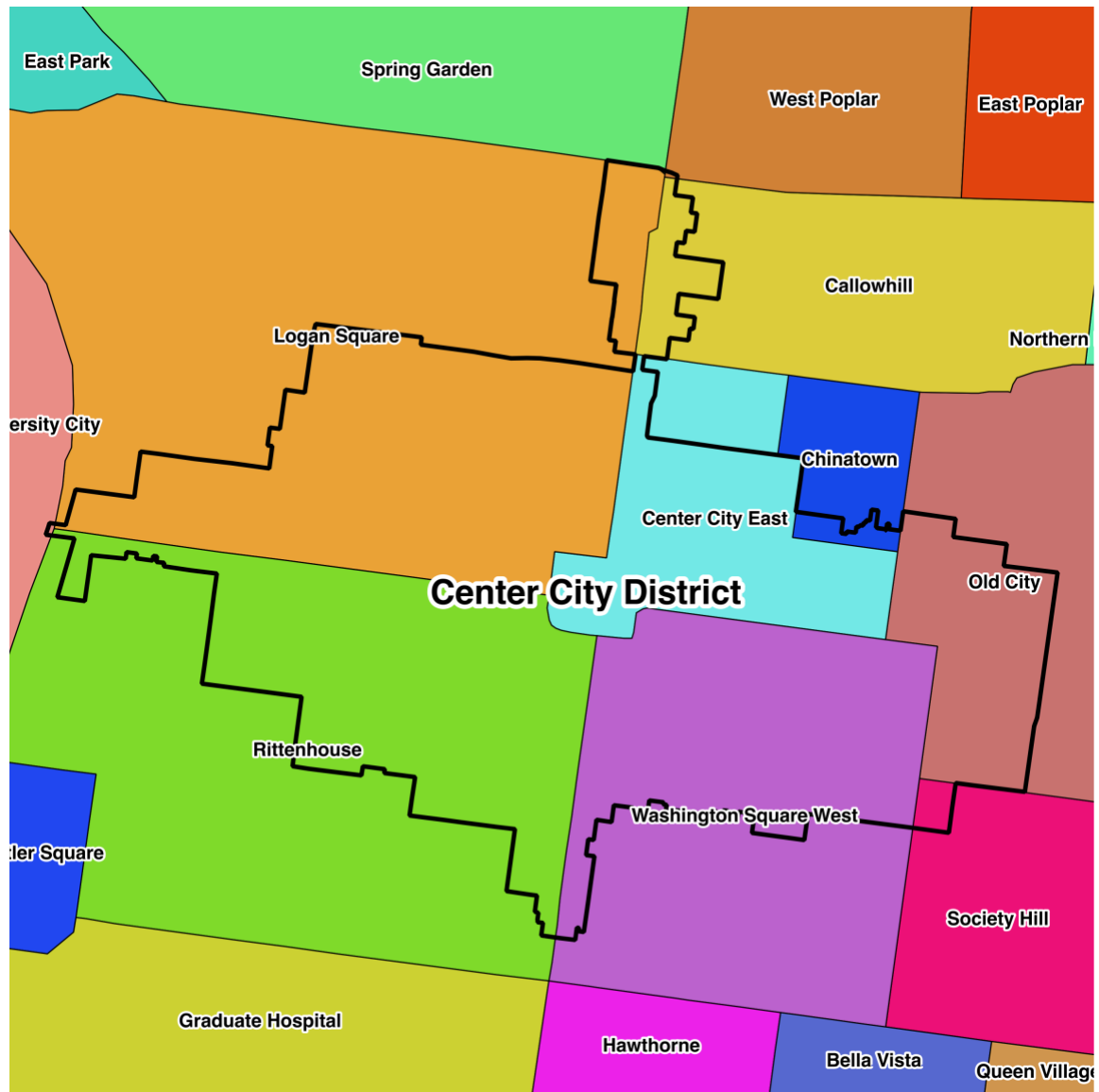
Data Source: OpenDataPhilly.com

4. <u>Distance from Cultural Attractions</u>

Cultural Attractions were determined by geocoding attractions within

Philadelphia city limits that were located on Visit Philly.com using MMQGIS, which

resulted in the creation of a point layer. The distance in miles from the centroid of every

Census tract within the City of Philadelphia to its closest attraction was then calculated

using the Hub Distance function of MMQGIS. Then, the resulting shapefile was exported in CSV format for merge with other data sources. The theoretical justification for this variable is taken from Richard Florida's concept of the creative class preferring areas with many cultural attractions. It differs from the previous variable because many of the attractions are outside of the small area that is considered the Center City Business District including the sports arenas, which are located in South Philadelphia, and Morris Arboretum, which is located in Chestnut Hill in the Northwest corner of the City. Figure 10 is a map depicting this variable. The lines, which are drawn from each Census tract to its closest Philadelphia attraction, are visual representations of each observation of this variable.

Figure 10: Distance from Nearest Philadelphia Attraction
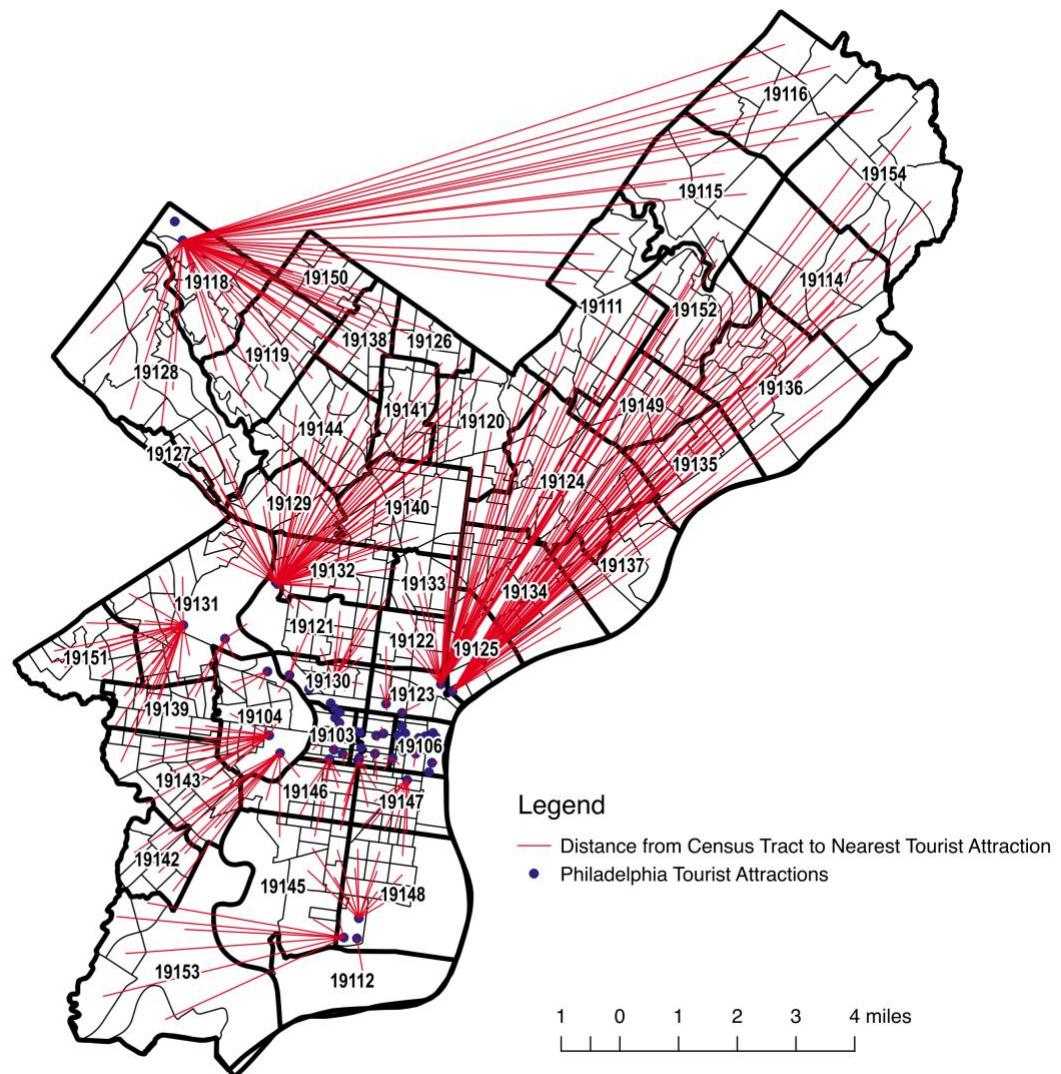
5. <u>Distance from Nearest College or University</u>

College and University locations were obtained from the Integrated

Postsecondary Education Data System (IPEDS) and geocoded using the MMQGIS plugin

resulting in the creation of a point layer. The distance in miles from the centroid of every

Census tract within the City of Philadelphia to its closest college or university within

Philadelphia city limits was then calculated using the Hub Distance function of

MMQGIS. Then, the resulting shapefile was exported in CSV format for merge with

other data sources. The theoretical justification for this variable is taken from Richard

Florida's concept of the creative class preferring areas with abundant universities.

Philadelphia's universities are not limited to the Center City Business District. In

addition, University City, which is located in West Philadelphia, Philadelphia has

universities or colleges spread throughout the City including Holy Family University in

Northeast Philadelphia, Philadelphia University in Roxborough, and Chestnut Hill

College in Chestnut Hill. Figure 11 is a map depicting this variable. The lines, which are

drawn from each Census tract to its closest Philadelphia college or university, are visual

representations of each observation of this variable.

Figure 11: Distance from Nearest Philadelphia College and University
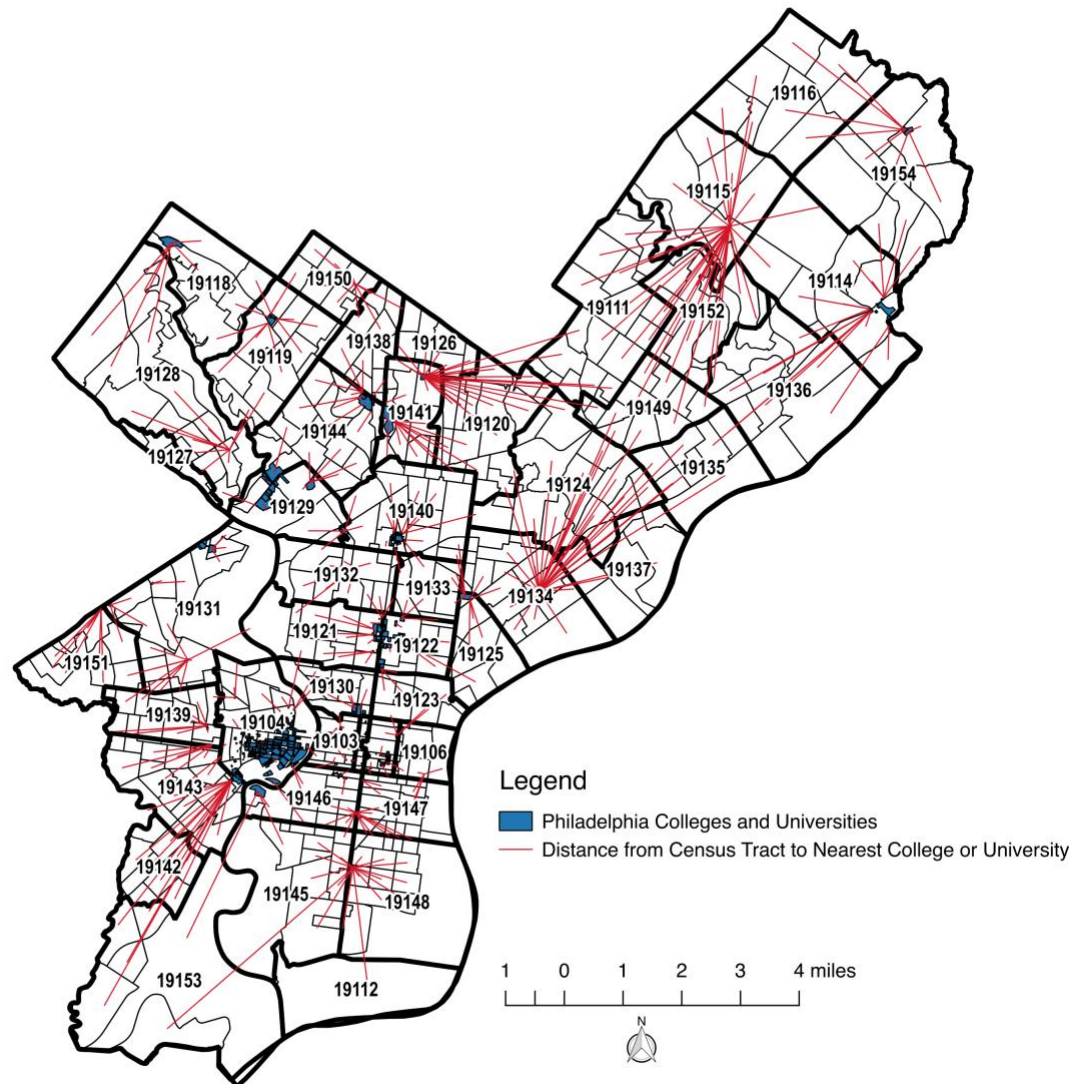
6. Distance from Nearest Regional Rail Station

Regional Rail station locations were obtained from shapefiles of the Southeastern

Public Transportation Authority (SEPTA) Regional Rail system by way of the Delaware

Valley Regional Planning Commission (DVRPC). Regional Rail lines help to connect

Philadelphia's suburbs to its Center City Business district. Despite this apparent suburban

mission, there are still many regional rail stations that are located within Philadelphia city limits that facilitate easy travel to Center City. The distance in miles from the centroid of every Census tract within the City of Philadelphia to its closest Regional Rail station was then calculated using the Hub Distance function of MMQGIS. Then, the resulting shapefile was exported in CSV format for merge with other data sources. The theoretical justification for this variable is transit-oriented development, which was a part of Mayor John Street's motivation behind NTI. (Deka, 2017; Fleming, 2003c; Gray-O'Connor, 2009). In some cases, the closest Regional Rail Station was located outside of Philadelphia City Limits. This was especially true in parts of Northeast Philadelphia and West Oak Lane. Figure 12 is a map depicting this variable. The lines, which are drawn from each Census tract to its closest Regional Rail station, are visual representations of each observation of this variable.

Figure 12: Distance from Nearest Regional Rail Station
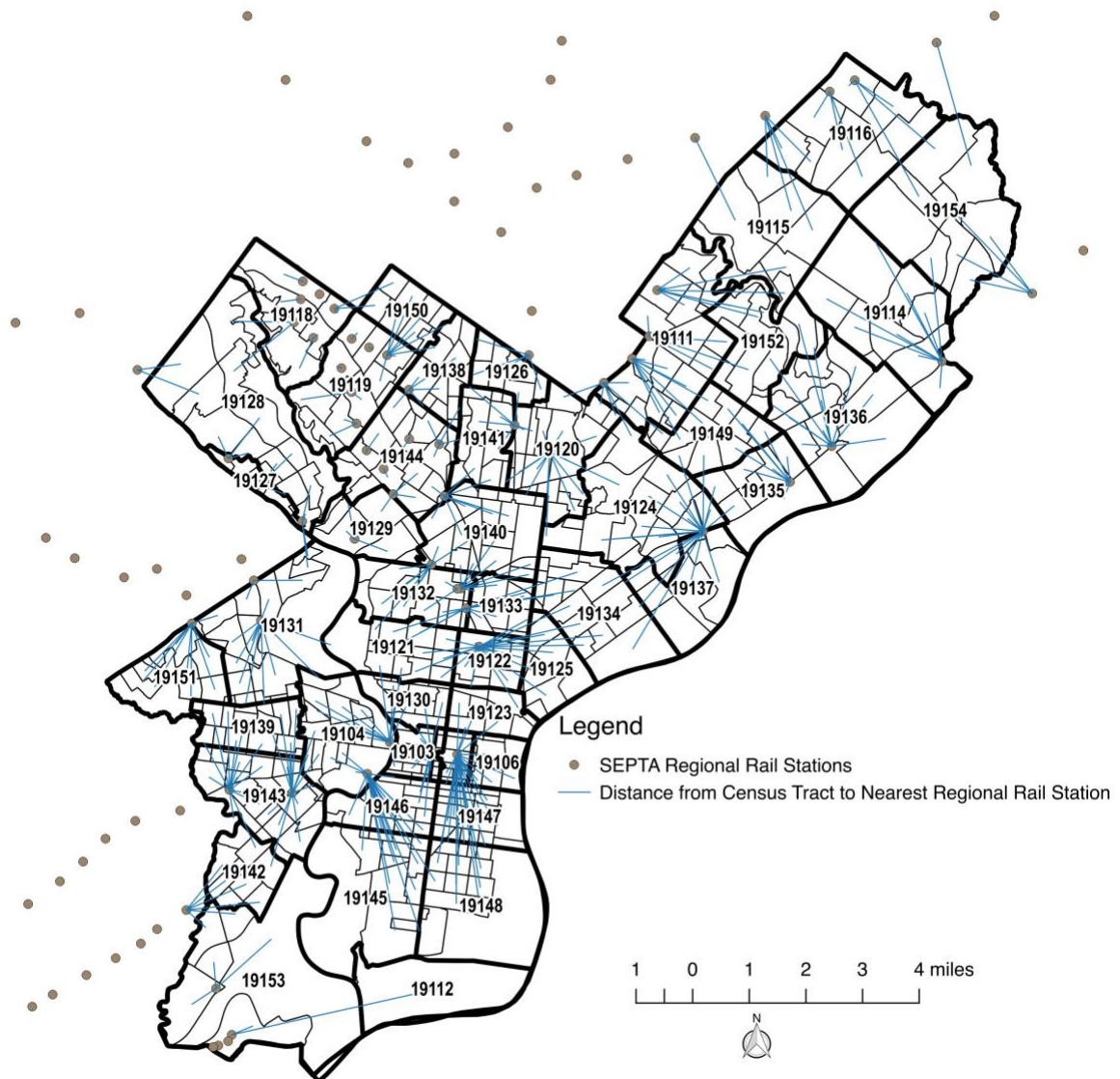
7. Distance from Nearest High-Speed / Light Rail Station

High-Speed Rail station locations were obtained from shapefiles of the

Southeastern Public Transportation Authority (SEPTA) High-Speed rail system by way

of the Delaware Valley Regional Planning Commission (DVRPC). For the purposes of

this project, "High-Speed Rail" refers to the Market-Frankford Line, Broad Street Line,

and the Norristown High Speed Line. The Market Frankford Line is a partly-elevated, partly-underground rail line that connects Northeast Philadelphia to Upper Darby, PA by way of Center City and West Philadelphia. The Broad Street Line connects North Philadelphia to South Philadelphia by way of Center City. Most notably, the two lines intersect with one another in Center City at 15th Street Station / City Hall. The Norristown High Speed Line operates entirely outside of Philadelphia City Limits from 69th Street in Upper Darby to Norristown, PA. The distance in miles from the centroid of every Census tract within the City of Philadelphia to its closest High-Speed Rail station was then calculated using the Hub Distance function of MMQGIS. Then, the resulting shapefile was exported in CSV format for merge with other data sources. The theoretical justification for this variable is transit-oriented development, which was a part of Mayor John Street's motivation behind NTI (Deka, 2017; Fleming, 2003c; Gray-O'Connor, 2009). For some Census Tracts, the closest high-speed rail station is located outside of Philadelphia on either the Market Frankford Line or the Norristown High Speed Line. Figure 13 is a map depicting this variable. The lines, which are drawn from each Census tract to its closest High-Speed station, are visual representations of each observation of this variable.

Figure 13: Distance from Nearest High-Speed Rail Station
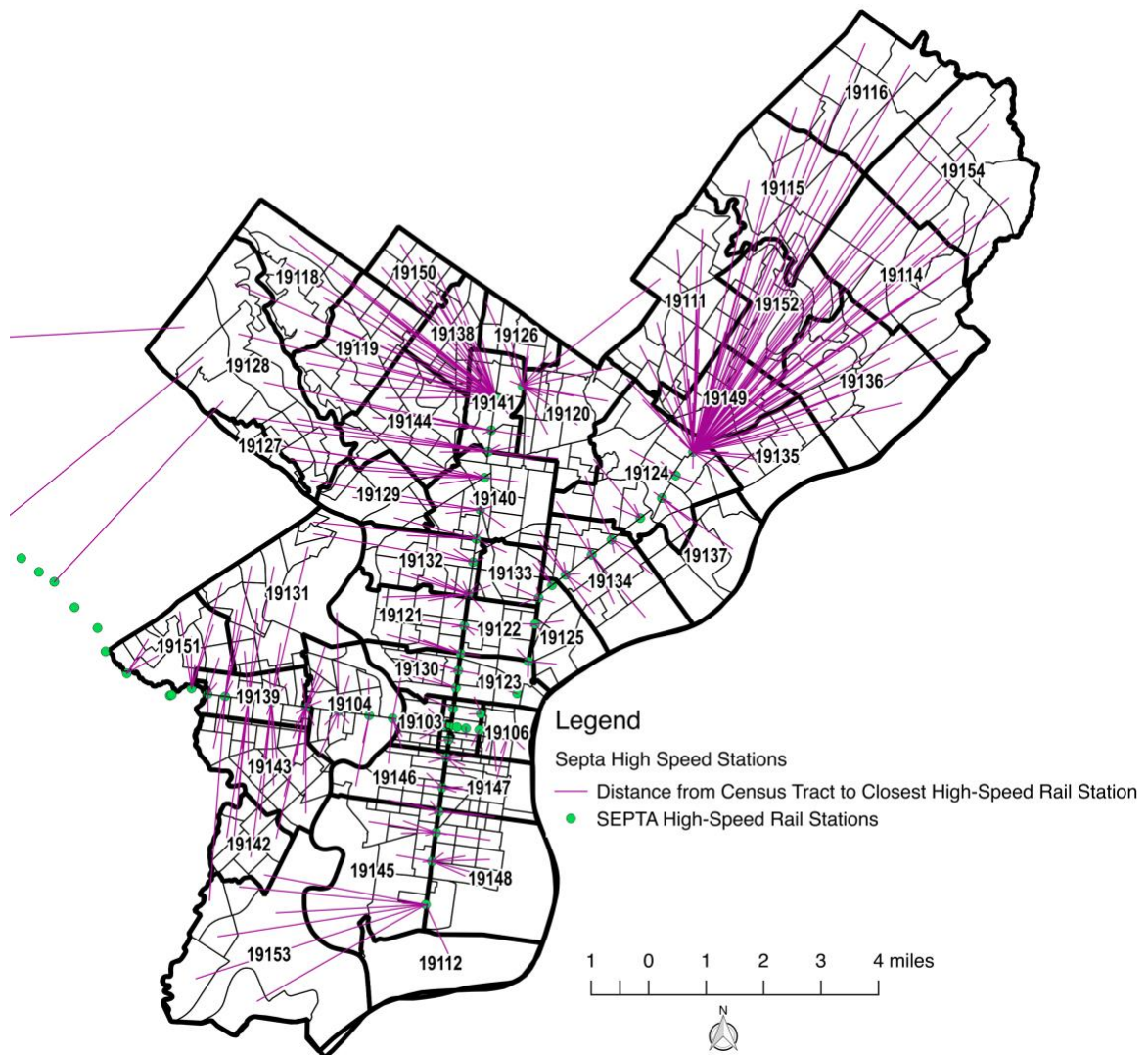
8. Gentrification Index

The Gentrification Index was created using dimension reduction on a series of eleven Census variables examining the socioeconomic, demographic, and housing characteristics of each Census tract in Philadelphia. The use of dimension reduction methods is common in gentrification research. Principal components analysis (PCA) and principal factor analysis are commonly performed methods of dimension reduction that

are used in the creation of indexes and composite variables (Abeyasekera, 2005;

Cavatassi, Davis, & Lipper, 2004; Davis, 2002; Osborne & Costello, 2009). Ley (1986)

uses principal components analysis prior to regression analysis in his study of the

determinants of gentrification in Canada. In addition, Bourassa, Hamelink, Hoesli, and

MacGregor (1999) use PCA and k-means clustering to define housing submarkets from

survey data in Sydney and Melbourne Australia. Van Criekingen (2008) also used PCA

to find patterns of residential mobility in gentrifying neighborhoods in Brussels, Belgium.

Due to their similarity, principal components analysis and factor analysis are two

statistical methods that are often used interchangeably (Osborne & Costello, 2009). For

instance, Abel and White (2011) state that they use factor analysis to examine

gentrification in Seattle though they clarify that they use PCA. Likewise Grodach, Foster,

and Murdoch (2014) state they use factor analysis to examine the relationship between

gentrification and the arts even though they later define PCA as a type of factor analysis.

 PCA is more commonly used in dimension reduction efforts, I chose factor

analysis because it is a method of dimension reduction that analyzes the underlying latent

structure of variables while focusing only shared variance (Osborne & Costello, 2009).

This is distinct from principal component analysis, which provides similar results, but

focuses on both shared and unique variances (Osborne & Costello, 2009). The resulting

factors were then rotated orthogonally (Osborne & Costello, 2009; Trendafilov, Unkel, &

Krzanowski, n.d.).

Part 3: Regression Analysis

 The timeframe of the quantitative analysis in this study is 2000-2010, prior to the

passage of AVI, which would have been a confounding intervention with respect to the

proposed causal model because both AVI and abatements effect property taxes that are used in this study. The chosen timeframe is the first ten years of the widespread use of tax abatements in Philadelphia. I estimate the effect of abatements on gentrification using Ordinary Least Squares (OLS) regression models of gentrification variables on measures of tax abatement using tract-level data for the City of Philadelphia. However, In view of the possibility of reverse causality, I estimate instrumental variable models as a check to the robustness of the OLS models. Instrumental variables are usually used to uncover a causal relationship at times when controlled experiments are not possible (Angrist & Krueger, 2001). It is a means of controlling for threats to internal validity including reverse causality and left out variable bias (Meyer, 1995). The model for this dissertation is attempting to determine whether the use of tax abatements led to gentrification and displacement, which is proxied by the factors derived from percent changes of socioeconomic indicators between 2000 and 2010. As a safeguard to assure meaningful results, the percentage of vacant properties in 2000 was chosen as an instrumental variable. This variable was chosen because it should primarily have an impact on the socioeconomic indicators through its effect on the use of tax abatements. After all, with all other things being equal one would expect for tax abatement to have been higher in areas where there were more vacant properties at Census tract level. At the same time, vacant units in 2000 would not contribute to gentrification net of the other controlled variables. Thus, vacant units in 2000 is a plausible instrument for tax abatements.

Hypothesis 2 was tested in two ways: 1) an ordinary least squares regression model of my gentrification factor variables on measures of tax abatements and control variables and 2) a two-stage least squares regression model. The two-stage least squares

regression was chosen because of the possibility that abatements are not exogenous.

While my hypothesis is that abatements lead to gentrification, it could be that

gentrification itself leads to abatements. Thus, examining the relationship through

traditional ordinary least squares regression could result in biased results. The

instrumental variable regression was conducted using the ivreg2 command in STATA.

Ordinary Least Squares Regression

$$Y = b_1 + b_2A + b_3*(controls)$$

where Y is the derived factor of demographic and socioeconomic variables
associated with gentrification or composite variables derived from the use of a factor
analysis on the following demographic, socioeconomic, and housing variables:
Demographic Variables
- *% Change in Total Population from 2000 – 2010*
- *% Change in White Population from 2000 – 2010*
- *% Change in Black Population from 2000 – 2010*
- *% Change in Hispanic Population from 2000 – 2010*
- *% Change in Other Races from 2000 – 2010*

Socioeconomic Variables
- *% Change in Median Household Income from 2000 – 2010*
- *% Change in Median Property Value from 2000 – 2010*
- *% Change in Median Property Tax Paid from 2000 – 2010*
- *% Change in Median Gross Rent from 2000 – 2010*

Housing Variables
- *% New Residents between 2000 – 2009*
- *% of All Units Built between 2000 – 2009*

A is a vector of the abatement variables:
- *Number of Abated Properties / Number of Properties*
- *Value of Tax Abatement / Total Value of Properties*

and the following are control variables:
- *Distance from Business District / Center City*
- *Distance from Cultural Attractions*
- *Distance from Universities*
- *Distance from Public Transportation (Broad Street Line, Market Frankford Line)*
- *Distance from Regional Rail*

I estimate two ordinary least squares regressions—one for each of the abatement variables individually. This was necessary due to the structuring of the two-stage regression models below. In addition, each regression was weighted by the census-tract population obtained from the 2010 American Community Survey 5-year Estimates (Maddala, 1977).

Two-Stage Least Squares Regression

Stage 1:

$$A = a_1 + a_2 VE + a_3*(controls) + u$$

where A is a derived factor of abatement-related variables:
- *Number of Abated Properties / Number of Properties*
- *Value of Tax Abatement / Total Value of Properties*

VE is the instrumental variable:
- *% Vacant Properties from 2000*

and the following are control variables:
- *Distance from Business District / Center City (Calculated in Part 2)*
- *Distance from Cultural Attractions (Calculated in Part 2)*
- *Distance from Universities (Calculated in Part 2)*
- *Distance from Public Transportation (Broad Street Line, Market Frankford Line) (Calculated in Part 2)*
- *Distance from Regional Rail (Calculated in Part 2)*

and u is a vector of error terms.

Stage 2:

$$Y = b_1 + b_2\hat{A} + b_3*(controls) + v$$

where Y is the derived factor of demographic and socioeconomic variables associated with gentrification or composite variables derived from the use of a factor analysis on the following demographic, socioeconomic, and housing variables:

Demographic Variables
- *% Change in Total Population from 2000 – 2010*
- *% Change in White Population from 2000 – 2010*
- *% Change in Black Population from 2000 – 2010*
- *% Change in Hispanic Population from 2000 – 2010*
- *% Change in Other Races from 2000 – 2010*

Socioeconomic Variables

- *% Change in Median Household Income from 2000 – 2010*
- *% Change in Median Property Value from 2000 – 2010*
- *% Change in Median Property Tax Paid from 2000 – 2010*
- *% Change in Median Gross Rent from 2000 – 2010*

Housing Variables
- *% New Residents between 2000 – 2009*
- *% of All Units Built between 2000 – 2009*

$\hat{A}$ is a vector of predicted values for the abatement variables calculated from Step 1:
- *Number of Abated Properties / Number of Properties*
- *Value of Tax Abatement / Total Value of Properties*

and the following are control variables:
- *Distance from Business District / Center City*
- *Distance from Cultural Attractions*
- *Distance from Universities*
- *Distance from Public Transportation (Broad Street Line, Market Frankford Line)*
- *Distance from Regional Rail*

and v is a vector of error terms.

The socioeconomic, demographic, instrumental, and housing variables were all

obtained from the United States Census Bureau. The socioeconomic, demographic, and

instrumental variables were calculated using data from the 2000 Decennial Census and

the 2010 American Community Survey 5-Year Estimates. The use of Census variables to

measure gentrification has a long history. Galster and Peacock (1986) use Census data to

demonstrate gentrification in Philadelphia as it related to changes in the percentage of

Black residents, residents with at least one year of college education, median income, and

median property values between 1970 and 1980. Atkinson (2000) uses census data from

London known as "The Longitudinal Study" to identify wards where the rate of increase

of people with professional positions was higher than the rate in London as a whole as a

means of demonstrating gentrification. Hammel and Wyly (1996) classify Census tracts

as gentrifiable if their median incomes are less than 50% of the median incomes for their

Metropolitan Statistical Area (MSA). Likewise, a portion of Freeman's (2005) efforts to identify gentrifying communities relies on tract median incomes being less than the 40th percentile for its metropolitan area and the "proportion of housing built in the past 20 years lower than the proportion found at the median (40th percentile) for the respective metropolitan area" (Freeman, 2005, p. 472). Finally, Ding, Hwang, and Divringi (2016), whose paper was initially released as a report from the Federal Reserve Bank of Philadelphia in 2015, use Census Data extensively in the development of their typology of gentrification.

Values of Median Household Income, Median Property Value, Median Property Tax, and Median Rent from the 2000 Census were adjusted for inflation to 2010 dollars. This use of the American Community Survey 5-Year Estimates was necessary because the United States Census Bureau stopped conducting the long form of the Decennial Census after 2000. Variables expressed as percentage changes are calculated from the following formula:

$$\frac{100 \text{ X (Final} - \text{Initial)}}{\text{Initial}}$$

The above formula is the traditional formula used for calculating percentage changes. While this formula worked for calculating the percentage changes of Median Household Income, Median Property Value, Median Property Tax, and Median Rent, it would not work for calculating the percentage changes in the race variables because the values chosen for this dissertation were already in percent form. As a result, the above formula would have added too much noise to the data if it were used since the resulting calculation would be a percent change of a percent. For this reason, it was decided that

the changes over time with respect to the race variables would be framed as changes in the overall population share.

The race variables used in this dissertation were % White, % Black, % Hispanic or Latino, and % Other Race. For the purposes of this dissertation, values that were used for the White and Black populations did not include people who identified as Hispanic or Latino. This was done to ensure that Hispanic or Latino Census respondents were not double-counted. After all, the Census considers the Hispanic or Latino category as an ethnicity, which means that Hispanic or Latino respondents are still able to choose to identify as a race—most commonly White or Black. In addition, the "Other Race" category is really a sum of four individual categories from the American Community Survey—non-Hispanic or Latino American Indian, non-Hispanic or Latino Asian, non-Hispanic or Latino Native Hawaiian or Pacific Islander, and Other Race. Changes in the population share for each race were calculated by subtracting the 2000 race percentages from the 2010 race percentages using the following formula:

$$Race2010 - Race2000$$

In contrast to the socioeconomic, demographic, and instrumental variables, the housing variables are calculated solely from the 2010 American Community Survey 5-Year Estimates, which track the percentage of new residents and new construction homes by year ranges 2000-2004 and 2005-2009. Thus, the percentage of new residents between 2000-2009 is the sum of the percentage of householders who moved into their units between 2000-2004 and the percentage of householders who moved into their units from 2005-2009 as counted in the 2010 American Community Survey 5-Year Estimates. As such, a major limitation of this variable is that it does not distinguish between true new

residents to a Census tract and residents who moved to new units within the same Census tract. This could result in an overestimation of the type of movement between neighborhoods that this dissertation seeks to observe. In a similar manner, the percentage of new construction homes built from 2000-2009 is the sum of the percentage of new construction homes built from 2000-2004 and the percentage of new construction homes built from 2005-2009 as counted in the 2010 American Community Survey 5-Year Estimates.

Socioeconomic and demographic variables were selected based on extant scholarship. Median household income, and median property value have consistently been demonstrated to increase in gentrifying neighborhoods (Ding et al., 2016; Doan & Higgins, 2011; Dowdall, 2016). Median property taxes paid for all owner occupied units was chosen because Kromer (2009) referenced them as a potential side effect of the tax abatement policy, and the City of Philadelphia created the Homestead Exemption and Long-term Owner Occupant Program due to rising property taxes (Graham, 2013). The percentage of homes built after 2000 was included because gentrification tends to lead to construction and renovation (Lees, 2003; N. Smith, 1979; N. Smith & Williams, 1986). Population was added because economic arguments for gentrification see increased demand as a cause (Bourassa, 1993; Ley, 1986). Thus, populations in gentrifying tracts would be expected to increase overall, even if the proportion of low-income residents decreases. Likewise, the race variables were chosen because a change in the racial breakdown of a neighborhood is often seen as a marker of gentrification and displacement (Freeman, 2006; Hwang, 2016; Lees, 2003). Hammel and Wyly (1996) demonstrated that percent changes across socioeconomic data can be used to predict

Census tracts where gentrification is occurring (Hammel & Wyly, 1996). These variables were be collected for each Census tract within the city of Philadelphia for both 2000 and 2010. Data from 2000 were converted to 2010 Census tract geography using the Longitudinal Tract Database (LTDB) crosswalk files from Brown University.

Notably absent from the list of socioeconomic variables associated with gentrification is educational attainment. This was because of its expected relationship with median household income. After all, educational attainment is often portrayed as a driver of income. Another issue is that educational attainment is often represented as a percentage. As a result, it would be necessary to represent the change in educational attainment over time as a change in percentage share like the race variables. This could lead to confusion in analyzing the effect of the individual socioeconomic variables in the factor analysis since all the other socioeconomic variables fit the definition of a traditional percentage change.

The abatement variables were chosen based on their relationship to Philadelphia's tax abatement policy. The distance-related control variables were included because they serve as alternative explanations for gentrification. The three distance variables related to Center City, Cultural Attractions, and Universities are derived from Richard Florida's concept of the creative class, which suggests that gentrification occurs largely due to the proximity of a neighborhood to culture and creative work opportunities (Florida, 2008, 2014). The two distance variables related to Public Transportation and Regional Rails are derived from the concept of transit oriented development, which is mentioned extensively in the Delaware Valley Regional Planning Commission's Connections 2040 plan (Delaware Valley Regional Planning Commission, 2013).

A principal factor analysis was then conducted on the five demographic, four socioeconomic, and two housing variables as a means of dimension reduction. These factors were rotated orthogonally and scored to composite variables. The resulting composite variables were then fitted to the above regression model to proxy gentrification as "Y".

Chapter 4: Critical Historical Analysis

This chapter is divided into three sections: history, abatement creation, and abatement changes. In relating it back to Lukes' three dimensions of power, the history section focuses on how urban blight in Philadelphia became the focal "Issue" of this policy effort and details the process of creating responding to it in the form of the abatement policy. The abatement creation section describes the purpose behind each of the pieces of Philadelphia's tax abatements when they were first written and provides key details about the date of their establishment. This section focuses on the process of setting the "Agenda" to discuss how the issue of Philadelphia's housing stock would be addressed, and most importantly, who would be a part of these discussions. Finally, the abatement changes section focuses on the intermediate pieces of legislation that facilitated the change Philadelphia's tax abatements between their inception and 2000. This section includes an examination of the motivation for the alteration of Philadelphia's existing tax abatements by focusing on the roles of politicians, developers, and community organizations during and after the legislation changed including the implementation of NTI thus connecting it back to urban regime theory. It also relates back to the "Manipulation," which is how each of the stakeholders finds a way to shape perceptions of the policy efforts being supported. Finally, the abatement changes section focuses on the intermediate pieces of legislation that facilitated the change Philadelphia's tax abatements between their inception and 2000.

History: Choosing the Issue

Lukes describes the "Issue" dimension of power as involving "a focus on behavior in the making of decisions on issues over which there is an observable conflict of subjective interests, seen as express policy preferences, revealed by political participation" (Lukes, 1974, p. 15). This is indeed evident in the story of how urban blight became the focal issue of Philadelphia's redevelopment efforts. Philadelphia's tax abatement policy is a combination of four ordinances: Ordinance 961, which offers ten years of abated property taxes for rehab construction of residential properties, Ordinance 1456-A, which offers ten years of abated property taxes for new construction of residential properties, Ordinance 970274, which offers ten years of abated property taxes for projects involving the conversion of existing buildings to residential use, and Ordinance 1130, which serves as the commercial counterpart for the three residential policies (Gillen, 2013). The goals of these policies were to encourage the redevelopment of dilapidated communities, to encourage new construction on vacant lots, and to attract young professionals who would typically choose to live in other parts of the city, county, metropolitan region, or country by simultaneously lowering their tax burden and improving the overall quality of housing. Indeed, the original wording of Ordinance 961 states:

> "The great majority of Philadelphia's housing was built before 1939, and there are, in all neighborhoods of the City, numbers of occupied and vacant dwellings in need of repair and rehabilitation. It is in the City's interest to encourage such repair and rehabilitation, in order to preserve and improve the City's residential neighborhoods." (Council of the City of Philadelphia, 1974)

It is important to note that Ordinance 961, Ordinance 1456-A, and their commercial counterpart Ordinance 1130 had existed within Philadelphia's code for over a decade and were sparingly used before Council President Frank DiCicco amended them

by expanding their eligibility beyond owner-occupied homes and making the new guidelines effective immediately in 2000 (Council of the City of Philadelphia, 2000a, 2000d, 2000b; McCoy, 1997). Following 2000, properties were no longer eligible to apply for tax abatement under Ordinance 970274 after June 30, 2002 (Council of the City of Philadelphia, 1997a).

At the same time, it is also important to note that Mayor John Street's anti-blight initiative known as the Neighborhood Transformation Initiative formally launched in 2001 and continued through 2007 (Kromer, 2009). Given Mayor John Street's prior tenure as Philadelphia's City Council President immediately prior to his time as Mayor it is quite possible that some of the groundwork for NTI was laid at the same time as the modifications in Philadelphia's tax abatement program. NTI, which was generally viewed as a successful land restructuring effort, had six major activity categories: "community planning; blight removal; code enforcement; real estate acquisition and conveyance; strategic investment in neighborhoods; and the leveraging of additional resources to support NTI goals" (Kromer, 2009, p. 115; Pinnegar, 2012; Schilling & Logan, 2008). As a result, NTI is a major factor in the post-2000 energy behind Philadelphia's tax abatement policies because it facilitated the preparation of previously undesirable land for development at a time when the tax abatement incentivized it.

Current research clearly indicates that residential tax abatement policy impacts long-term homeowners and long-term renters in different ways (Dalehite et al., 2005; Rosentraub et al., 2010). Since many of the newly constructed properties have higher property values than their older counterparts, the long-term homeowners see the values of their properties increase dramatically (Kromer, 2009). Long-term residents saw their

property taxes increase even more abruptly after the Philadelphia Office of Property

Assessment implemented the Actual Value Initiative (AVI) in 2014. Since Philadelphia's

property taxes were not updated regularly, many residents in newly-desirable

rehabilitated neighborhoods saw major increases on their first property tax bill after AVI

even though property tax rates decreased (Associated Press, 2013; Nadolny, 2015).

Complaints from long-term residents led city council to create a Homestead exemption

for owner occupants, which lessened the burden of increased property taxes resulting

from AVI and the tax abatement policy (Graham, 2013). In spite of the increased

property taxes, which were expected to increase Philadelphia's revenue by $90 million,

property tax revenue actually declined in 2014 and 2015 as shown in Table 2 (Associated

Press, 2012; Vargas, 2015). Although, Figure 14 demonstrates that property tax revenue

began to increase in 2010 in conjunction with the first groups of abatements expiring, the

subsequent decrease in 2014 is likely the result of the passage of the Homestead

Exemption.

Table 2: Property Tax Collected 1999-2015 in $ millions

Year	Property Tax Collected
1999	$316.2
2000	$322.0
2001	$326.7
2002	$340.4
2003	$326.8
2004	$340.9
2005	$350.3
2006	$339.6
2007	$347.5
2008	$346.4
2009	$315.4
2010	$353.7
2011	$440.9
2012	$459.2
2013	$505.6
2014	$482.1
2015	$481.9

Data Source: Office of Property Assessment, City of Philadelphia

Figure 14: Property Tax Collected 1999-2015 in $ millions
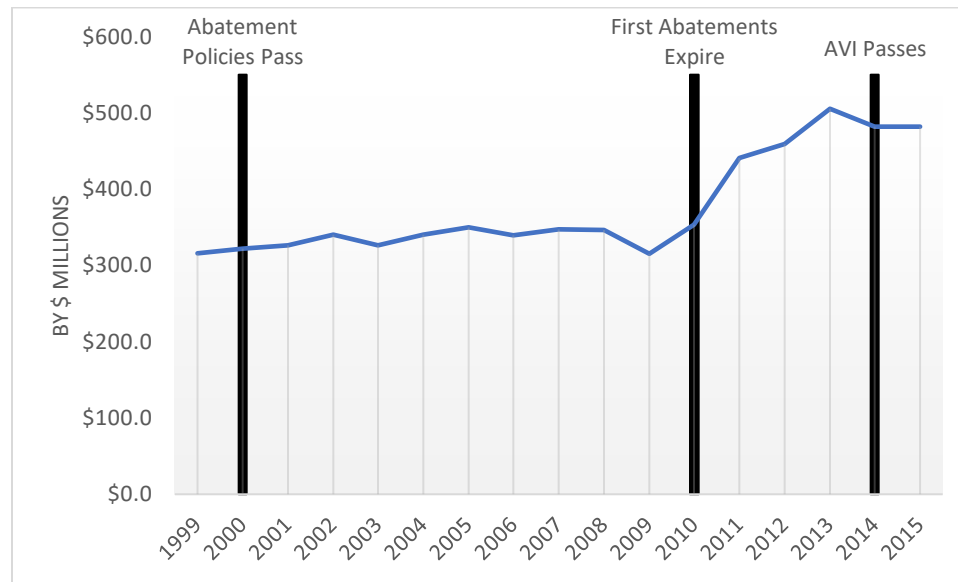
Data Source: Office of Property Assessment, City of Philadelphia

Many of the areas labeled as "Distressed" and "Reclamation" in Figure 15 below were key areas for the use of the abatement policies in Figure 3. While the Center City neighborhoods are largely coded as "High Value" and "Steady" in Figure 15, the red "Reclamation" areas surrounding them correspond to portions of North, South, and West Philadelphia. This suggests a connection between the use of tax abatements and the repurposing of land in Philadelphia through NTI while also giving some evidence of the applicability of Smith's (1979) rent gap theory in explaining its impact.

Figure 15: Neighborhood Transformation Initiative Map

Image Source: Market Value Analysis: Using Data and Mapping to Identify Public and Private Investment Opportunities in Cities. The Reinvestment Fund, 2008.

Another confounding factor about the application of Philadelphia's tax abatement

policies is the fact that the Philadelphia Housing Authority is its largest user, suggesting

that it is resulted in the construction and renovation of at least some low-income housing

(Gillen, 2013). This points out that even though the policies appear to benefit mostly

homebuyers and developers, Philadelphia's municipal government still managed to

utilize it in a manner that could benefit low-income residents by improving their existing

housing stock and building new properties earmarked for low-income residents either for

purchase or for rent. Still, this confounding factor is adequately explained by the City

Council of Philadelphia's focus on blight alleviation. After all, it would be in the best

interests of Philadelphia's City Council if the modified abatement policies actually

enabled the city government to address blight and improve housing stock efficiently and

effectively.

Thus, the choice of urban blight as the "Issue" enabled City Council to tie its

desire for revitalization into existing policies created for that purpose while

simultaneously creating the conditions necessary to attract new residents and increase its

tax base.

Abatement Creation: Setting the Agenda

Lukes describes to role of "Agenda" dimension of power as allowing "for

consideration of the ways in which decisions are prevented from being taken on in

potential issues over which there is an observable conflict of (subjective) interests, seen

as embodied in express policy preferences and sub-political grievances" (Lukes, 1974, p.

20). There is clear evidence of this dimension in the way that Philadelphia's City Council

was able to maintain control over abatement-related decisions. Philadelphia's residential

tax abatement policy is a combination of three ordinances: Ordinance 961, which offers

ten years of abated property taxes for rehab construction of residential properties

Ordinance 1456-A, which offers ten years of abated property taxes for new construction

of residential properties, and Ordinance 970274, which offers ten years of abated

property taxes for projects involving the conversion of existing buildings to residential

use (Gillen, 2013). Although the goals of these policies after their 2000 modification are

geared around redevelopment, revitalization, and the attraction of young professionals, these policies had very different goals when they were first enacted. By choosing to address urban blight through the modification of existing legislation instead of the creation of entirely new statutes, the Philadelphia City Council retained complete control over how the issue of addressing urban blight would be discussed by implying continuity from earlier iterations of the policies.

Ordinance 961, the first of Philadelphia's residential tax abatement policies, was passed in 1974 under the leadership of Mayor Frank. L Rizzo. It was written into Philadelphia's municipal code as Section 19:1303(2). In its preamble, its purpose is "to exempt from real estate taxes, improvements to residential property under certain conditions" (Council of the City of Philadelphia, 1974). The conditions were relatively straightforward. Eligible properties could be located in any ward within the City of Philadelphia but had to be owner-occupied and were limited to a maximum of three units. The overall value of the property had to be less than $10,000 per dwelling unit. Properties that were certified as "unfit for human habitation" or "subject of any order to be vacated, condemned, or demolished by reason of noncompliance with laws, ordinances, or regulations of the City of Philadelphia" were also deemed eligible. The available exemption on the "portion of additional assessment attributable to the actual cost of improvements to eligible property" was up to $10,000 per dwelling unit. Exemptions on eligible improvements would last for five years but would decrease by 20% each year until termination.

Ordinance 1456-A was passed in 1983 under the leadership of Mayor William Green. In its preamble, its stated purpose was "to offer exemption from real estate taxes

on new construction of residential properties" (Council of the City of Philadelphia, 1983).

It was written into Philadelphia's municipal code as Section 19:1303(4). Single homes,

twin homes, townhomes, rowhomes, duplexes, and apartment buildings with four or

fewer units were eligible for construction under this policy as long as they were built

within the City of Philadelphia. Up to $70,000 of "the assessment valuation attributable

to cost of construction of each dwelling unit" was eligible for total exemption from real

estate taxes for three years after the date of assessment.

Ordinance 970274 is Philadelphia's newest residential tax abatement policy that

passed in 1997 under the leadership of Mayor Ed Rendell. Its purpose was "to offer

exemptions from real estate taxes on improvements to convert deteriorated industrial,

commercial or other business property to commercial residential use" (Council of the

City of Philadelphia, 1997a). Unlike its counterparts, Ordinance 970274 was always

conceptualized as a ten-year tax abatement. It had very stringent requirements including a

"sixty-six and two thirds (66 2/3%) percent" vacancy rate for the conversion area, which

is defined as "the entire floor area of an eligible property above the ground level and

below the roof and any area of the eligible property to be used for parking by residents or

guests only and not by the public." It also had a clear window of availability that was set

to end on June 30, 2002.

Ordinance 1130 is the commercial counterpart to these residential ordinances

whose existence is still integral to understanding Philadelphia's residential tax

abatements. In many ways, it can be viewed as a complement to Ordinance 961. It was

written into Philadelphia's municipal code as Section 19:1303(3). Like Ordinance 961,

Ordinance 1130 passed under the leadership of Mayor Frank Rizzo, geared around

improvements to existing properties, and enacted property tax exemptions that lasted for five years and decreased by 20% each year. However, Ordinance 1130 was passed in 1978 and focused solely on "deteriorated industrial, commercial or other business properties." Ordinance 1130 also did not have a clear monetary value associated with its exemptions instead settling for defining its exemption amount as "limited to that portion of the assessment attributable to the actual cost of improvements" (Council of the City of Philadelphia, 1978).

Tying the new focus on attracting young professionals into existing legislation created for the purpose of addressing blight and deteriorated housing stock was a great decision for City Council to make because it allowed discussions about redevelopment to remain internal to City Council thus allowing City Council to retain control of the abatement policies' agenda. The use of legislation to encourage development is something that is well within the powers of City Council to accomplish without the input of outside entities including developers and community organizations even though many City Council meetings are open to the public. This is in stark contrast to the implementation of NTI, which required a degree of transparency and community engagement due to its use of federal funds and coordination across multiple government agencies thereby preventing the Street administration from maintaining control over NTI's agenda.

Abatement Changes: Managing Perceptions (Manipulation)

In discussion the "Manipulation" dimension of power, Lukes refutes the necessity of conflict the show the existence of power by stating "the most effective and insidious

use of power is to prevent such conflict from arising in the first place" (Lukes, 1974, p.

23). Lukes sums up his perspective on manipulation with this quote:

> "…is it not the supreme and most insidious exercise of power to prevent people, to whatever degree, from having grievances by shaping their perceptions, cognitions and preferences in such a way that they accept their role in the existing order of things, either because they can see or imagine no alternative to it, or because they see it as natural and unchangeable, or because they value it as divinely ordained and beneficial?" (Lukes, 1974, p. 24)

Thus, it is clear that the act of manipulation in urban politics is the act of

controlling the narrative. This section examines how the narrative of Philadelphia's

redevelopment efforts has been controlled. It is organized in two key parts. First, it is

grouped around five key changes that occurred to the abatement legislation between its

inception and 2000: increased length, increased monetary value, changes to sunset, and

increased eligibility. Then, it concludes with a stakeholder analysis, which engages the

results of this critical historical analysis with urban regime theory. The stakeholder

analysis also makes it clear how each stakeholder worked hard to shift that narrative of

the abatement policies to benefit their own causes even if City Council's choice to

modify older legislation made it difficult for other voices to have a role in the policies'

alteration. This, it is in the second part of this section where the manipulation will be

discussed.

Abatement Changes

When compared to the other ordinances that are included in this discussion,

Ordinance 970274 has a slightly different role. Although its 1997 passage precludes it

from experiencing the kinds of changes observed in Ordinance 961, Ordinance 1456-A,

and Ordinance 1130, in many ways, Ordinance 970274 served as a model for their restructuring (Kromer, 2009, p. 31).

Increased Length

At their onset, both Ordinance 961 and Ordinance 1130 had abatement lengths of five years while Ordinance 1456-A had an abatement length of three years. Ordinance 961 first saw its length extended to ten years though Ordinance 970652, which passed in 1997. In contrast, Ordinance 1130 and Ordinance 1456-A had slightly more complex journeys to their ten-year lengths. Ordinance 1130 actually had its abatement length decreased from five years to three years through the passage of Ordinance 982 under the leadership of Mayor Wilson Goode in 1990 (Council of the City of Philadelphia, 1990a). Then Ordinance 1130 and Ordinance 1456-A had length of their abatements extended through the passages of Bill No. 225 and Bill No. 226 respectively in 2000 under the leadership of Mayor John Street (Council of the City of Philadelphia, 2000b, 2000c).

Increased Monetary Value

Ordinance 961 and Ordinance 1456-A both specified monetary amounts for their exemptions. For Ordinance 961, the assessment value of the improvement could not be above $10,000 per dwelling unit and for Ordinance 1456-A, the assessment value of the new construction could not be above $70,000 per unit. In contrast, both Ordinance 1130 never had its dollar amounts tied to their exemption limits. The shift away from

legislating dollar amounts for exemptions occurred in 1990 for Ordinance 1456-A with the passage of Ordinance 983 under the leadership of Mayor Wilson Goode (Council of the City of Philadelphia, 1990b). For Ordinance 961, the shift occurred much later in 1997 with the passage of Ordinance 970652 under the leadership of Mayor Ed Rendell (Council of the City of Philadelphia, 1997b).

Changes to Sunset Provision

At their onset, Ordinance 961 had its abatements diminish by 20% each year during the five-year term. In contrast, Ordinance 1130 and Ordinance 1456-A had their abatements terminate entirely after a set period of time without a progressive decrease. The elimination of the progressive decrease for Ordinance 961 did not come officially until the passage of Bill 227 in 2000 (Council of the City of Philadelphia, 2000d).

Increased Eligibility

At its onset, it was clear that Ordinance 1456-A abatements were only available to owner occupants. This changed in 2000 with the passage of Bill 64 in 2000, which was passed under the leadership of Mayor John Street (Council of the City of Philadelphia, 2000a).

A summary of the aforementioned changes is displayed in Table 3.

Table 3: Abatement Changes

	Ordinance 961	Ordinance 1130	Ordinance 1456-A
Increased Length	Ordinance 970652	Bill 225	Bill 226
Increased Monetary Value	Ordinance 970652		Ordinance 983
Changes in Sunset	Bill 227		
Changes in Eligibility			Bill 64

Stakeholder Analysis

By 2000, the abatement policies had changed from having specialized, narrow focuses and limited monetary amounts to being available for all property types located within the City of Philadelphia. Regime theory points out that the ruling regimes in urban politics are typically made up of the local government, businesses, and community organizations (Mossberger & Stoker, 2001; Stone, 1989). This part seeks to elucidate some of the motivations and exercises of influence behind these changes by focusing on three categories of stakeholders: city politicians, developers, and community activists.

City Politicians

This analysis focuses largely on the actions of Councilman Frank DiCicco and Mayor John Street—the tax abatement policies and the architects behind the Neighborhood Transformation Initiative (NTI) respectively—and their efforts to shape the narrative surrounding their redevelopment efforts to their benefit. Frank DiCicco represented the First Council District in Philadelphia from 1996 until he announced retirement in 2011 (Graham, 2011; Saffron, 2017). Although he was a Democrat, DiCicco often pushed for tax incentives to bring about development within the City of Philadelphia. In 1998, he was quoted as saying Philadelphia "wouldn't have nearly half the development we have" without the use of tax incentives (Einhorn, 1998). As such, the use of residential and commercial property tax abatements was not Frank DiCicco's only tax-related development plan, though it was by far his most successful. He was also supportive of the ill-fated Disney development for Eighth and Market in Center City and Will Smith's ill-fated movie soundstage project in South Philadelphia (Burton, 1998;

Einhorn, 2000b, 2000a; Holcomb, 2000; R. Smith, 2001). He also attempted to pass legislation that would abate Philadelphia's wage tax for three years for first-time homebuyers (Davies, 1998).

DiCicco began with his efforts to expand Philadelphia's property tax abatements in 1997, barely a year after his election (McCoy, 1997). The passage of Ordinance 970274 proved to be foundational to his subsequent modifications to Ordinance 961, Ordinance 1456-A, and their commercial counterpart Ordinance 1130, which had existed within Philadelphia's code for over a decade prior to their amendment in 2000 (Council of the City of Philadelphia, 2000a, 2000d, 2000b; Kromer, 2009). In understanding this, it is important to note that Frank DiCicco's City Council District portions of Center City, North Philadelphia, and South Philadelphia that ended up experiencing major redevelopment as a result of the passage of the abatement policies and the existence of NTI.

Due to the location of his district in South Philadelphia, DiCicco regularly responded to complaints of residents in his district about the impact of the abatements by pointing out the "new investment and development in previously vacant or run-down property" as well as the "increase in overall neighborhood real estate values," and the "financial benefits to the city other than tax revenue" (Kromer, 2009, p. 44). Thus, it is clear that DiCicco adopted a perspective focusing more on macro-level economic costs and benefits than on the micro-level impacts facing long-term residents. Thus, despite his prior record of supporting unviable tax incentives to encourage development, DiCicco framed the abatements around improving conditions for all Philadelphia residents even if the likely outcomes of such a redevelopment policy would include gentrification and

displacement. Figure 16 is a map of Philadelphia's City Council Districts during the time of this study.

Figure 16: Philadelphia City Council Districts Based on 2000 Census
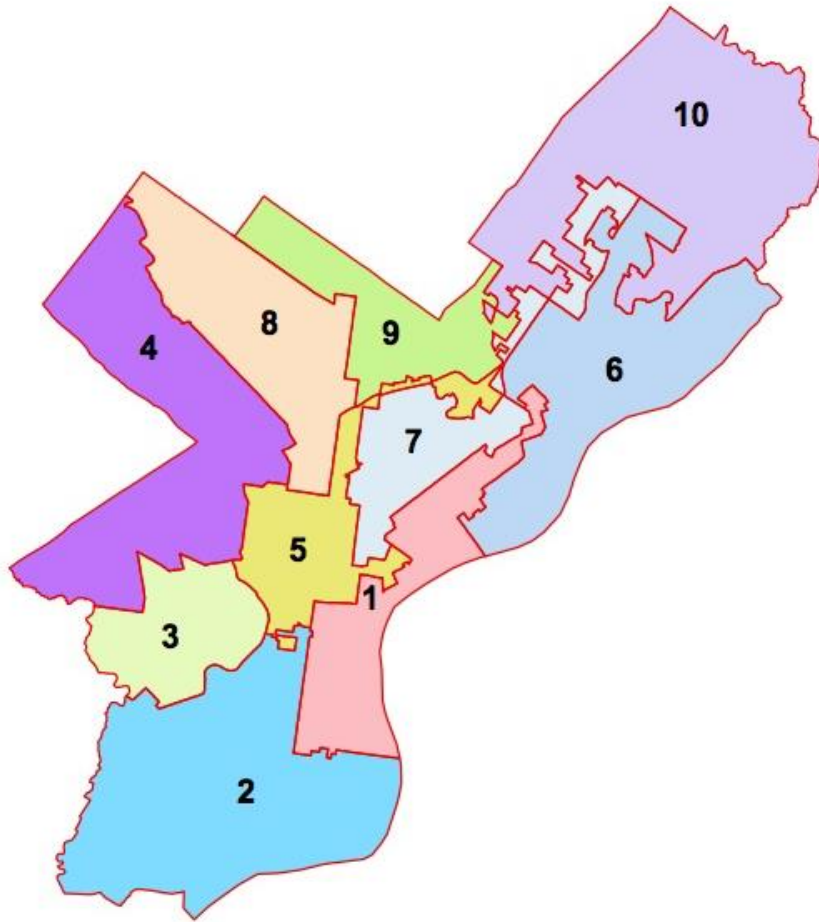
Image Source: The Committee of Seventy

Mayor John Street's political career in Philadelphia first began when he was elected to City Council as the Councilperson for the Fifth District in 1979. He became City Council President in January 1992 and Mayor in January 2000. While he started out as a liberal Democrat focused on raising taxes to fund new initiatives, Street's perspectives evolved leading to his reputation as a fiscal conservative thus explaining his penchant for the use of tax incentives (Pearson, 2017). Due to his history as an activist and connections to the black community, Street was perceived as "a candidate willing to

promote neighborhood interests" instead of focusing all major development opportunities on Center City though he was also interested in ways to slow the flight of Philadelphia's middle class to nearby suburbs (Gorenstein, 2001b; McGovern, 2006, p. 537). The implementation of NTI occurred mainly between March 2002 and the end of Mayor Street's administration in 2007. Its passage was not without struggle. Among early detractors were then City Council President Anna Verna and Councilman Michael Nutter (Couloumbis, 2004; Dilanian, 2002). When referencing NTI, Councilman Nutter said "it's a large program, but people in the community are trying to figure out when will they start to see activity" (Fleming, 2003a, p. B01)

Street was later accused of using the distribution of NTI funds to penalize then Councilman Michael Nutter, who had been one of his most vocal critics and detractors, but Mayor Street denied it and claimed that Nutter did not apply for the extra anti-blight funds for his West Philadelphia district (Twyman & Couloumbis, 2004). Nonetheless, it is possible to extrapolate that Mayor Street did indeed reward those who supported him, for three of the six areas that were cleared for acquisition and demolition were located within the Fifth City Council District, Street's former district (McGovern, 2006, p. 557).

NTI's relationship to the tax abatement policies is slightly more complex for it had been characterized as a new version of past urban renewal policies due to its emphasis on acquisition and demolition (McGovern, 2006). Its concentrated use of resources in targeted neighborhoods during its first two years had been viewed as a cause of rapidly increasing property values (McGovern, 2006). This rapid increase in property values was also related to the passage of Ordinance 970274, which encouraged "the conversion of nonresidential properties to residential use" and helped to increase demand

within Center City (McGovern, 2006, p. 548). The availability of the abatement policies was seen as an opportunity to be leveraged by the Street administration during the implementation of NTI (McGovern, 2006).

In spite of the convergence of NTI and the tax abatements, progress was slow (Burton, 2001b, 2001a; Lin, 2006b). City Council's ambivalence toward the project often made funding difficult for NTI was generally seen as "too slow moving" (Ferrick Jr., 2002; Fleming, 2003b, p. B01; Holtzman, 2007; Lin, 2006a; Sigal, 2002). Mayor Street's adversarial relationship with then Councilman Michael Nutter contributed to the poor perceptions of NTI and demonstrated that Street had lost control of the narrative surrounding his signature project. In fact, the perceived lack of progress of NTI almost made it possible for Republican Sam Katz to prevent John Street's re-election (Fleming, 2003c; Fleming & Twyman, 2003; Gorenstein, 2003).

Developers

Although politicians went to great lengths to limit the influence of outsiders on these policies, developers still interacted with politicians to influence the policymaking process in their favor. One key way they influenced policymaking was through making campaign contributions. Charles Lewis of the Washington-based Center for Public Integrity questioned Street's financial dealings and the City's overall financial leniency with the Grasso family, a family of real estate investors with believed ties to organized crime (Bunch & Warner, 1999). The implication was that the City kept granting Grasso-affiliated entities contracts, issuing an ordinance making it possible for the city to lease office space in a Grasso-owned building located in DiCicco's district for 15 years, and

overlooking their fines in exchange for political donations specifically to John Street's

mayoral campaign. Street also accepted $83,000 in donations from the developers of the

failed Disney development at 8th and Market (Bunch & Warner, 1999). Although none of

these incidents reached the threshold of criminal activity, they show that it was not

uncommon for developers to attempt to influence John Street through campaign

contributions.

　　While expressing support for Ordinance 970652, developer Carl Dranoff, then of

the Rubin Organization, stated the following about Philadelphia:

> ``These projects are very high cost and very risky projects […] We compete with
> other cities like Denver, Phoenix and Atlanta where capital is flowing in. […]
> We're not getting our fair share. Tax abatement helps us play on a more equal
> playing field and attract capital." (McDonald, 1997, p. 23)

　　This was in part because of the high costs of hiring union construction in

Philadelphia relative to the respective cost in Philadelphia's suburbs which NTI and the

tax abatements sought to alleviate (Ferrick Jr., 2002; Gorenstein, 2001a). NTI's strategy

for attracting developers led to the creation of a map that denoted which areas of

Philadelphia were prime for acquisition with NTI funding. These areas, known as

"Acquisition Zones," were determined though data analysis from The Reinvestment Fund

in what was known as their "Market Value Analysis" (Holtzman, 2007; Kromer, 2009, p.

116). While the data-driven determination of the "Acquisition Zones" was meant to

prevent political influence, three of the six "Acquisition Zones" were located in the Fifth

City Council District in North Philadelphia, where Mayor Street previously served as

Councilman. Still, the Fifth District contained "the highest concentration of poverty and

abandoned buildings in the city" thereby suggesting that the emphasis on North

Philadelphia may not have been political after all (Kelly, 2001; Lowe, 2003; McGovern, 2006, p. 557).

As Kromer (2009) pointed out, "although the tax abatements were offered citywide, most of them ended up in or near downtown and upscale neighborhoods" (Kromer, 2009, p. 40). This was in part due to the efforts of the Street Administration through NTI. While the Center City downtown area would naturally have been appealing to developers, NTI's incentives led developers to create plans for new residential units in parts of North, West, and South Philadelphia that "hadn't seen a single new unit of housing in a generation" (Holtzman, 2007, p. 33). In an effort to accommodate developers with clear redevelopment plans, financial backing, and interest in particular distressed communities, NTI used "Specific Development Projects" which enabled the administration to "help developers that were ready to proceed to acquire property and to clear land for an appropriate redevelopment project" and were meant to encourage investment in low-income communities (Lin, 2006b; McGovern, 2006, p. 550).

"Specific Development Projects" were most frequently associated with the Westrum Development company, a prominent developer whose work in neighborhoods like Brewerytown and the former Navy Base in South Philadelphia proved essential to the success of NTI and the tax abatements (Gorenstein, 2000, 2001b; Hill, 2003; Lin, 2006b). These "Specific Development Projects" differed from the traditional "Acquisition Zones" used through NTI in that the "Specific Development Projects" resulted in acquisition and demolition related to clear development plans in areas that were not previously earmarked for acquisition via NTI funds (McGovern, 2006, p. 550). By creating these "Specific Development Projects" the Street administration gave

developers the ability to use eminent domain to purchase blighted land and then sell new construction homes utilizing tax abatements. As a complement to these "Specific Development Projects," the Street administration also removed the prevailing wage requirement from housing developers that would buy land at full price—a move that was expected to make Philadelphia more appealing to developers and benefit Westrum's project in Brewerytown (Gorenstein, 2003; Lin, 2006b). Therefore, developers framed their utilization of tax abatements and special designations through NTI as largely benefitting Philadelphia residents overall even as they were set to profit greatly.

Community Groups and Affordable Housing Advocates

At its inception, NTI was a plan reflecting the neighborhood-friendly perspective of the Street Administration. NTI originated as a "plan to finance an anti-blight initiative with $250 million in bonds" (Kromer, 2009, p. 114). It had six key activity categories: "community planning; blight removal; code enforcement; real estate acquisition and conveyance; strategic investment in neighborhoods; and the leveraging of additional resources to support NTI goals" (Kromer, 2009, p. 115; Pinnegar, 2012; Schilling & Logan, 2008). However, according to McGovern (2006), "CDC leaders felt marginalized with respect to the formulation and early implementation of NTI" since Mayor Street was criticized for being vague and not giving concrete details (Burton, 2001b; McGovern, 2006, p. 552). This was likely a reflection of Mayor Street's history serving on City Council where public support was not as critical for the success of initiatives.

While community groups were able to convince the Street Administration to utilize some NTI funds for mixed income development and neighborhood preservation

programs, they felt concerned that NTI was not doing enough to improve conditions for existing residents (McGovern, 2006). Instead, they felt that NTI played a role in increasing the impact of gentrification (McGovern, 2006). The Association of Community Organizations for Reform Now (ACORN) pushed for NTI funds to be used for repair grants and loans for residents (Bahadur, 2002). The Philadelphia Affordable Housing Coalition complained about neighborhoods being left out of early NTI discussions (Burton, 2001a). Philadelphia Affordable Housing Coalition member organizations Disabled in Action and the Tenants Action Group hosted a rally to push the Street administration to put $20 million in a trust ensure that new housing built with government money … [would be] accessible to the disabled" (Twyman, 2004b, p. B03).

Neighborhood groups were also concerned that NTI's emphasis on blight would lead to the demolition of vital community assets. Preserve Pennsylvania, the Advocate Community Development Corporation, and the Preservation Alliance of Greater Philadelphia expressed concern about the proposed demolition of homes in Strawberry Mansion and the Diamond Street Historic District in North Philadelphia (Worden, 2003). This concern about preservation was bolstered in part by the issuing of a Preservation Development Initiative grant from the National Trust and the John S. and James L. Knight Foundation focused on key neighborhoods Strawberry Mansion and Brewerytown as well as Belmont and Parkside in West Philadelphia (Fleming, 2003d).

Community groups like the Songhai City Cultural Center accused the city of allowing developers like Westrum to wrongfully declare properties blighted to force existing residents and organizations out (Lin, 2006b). To make their distrust of NTI's focus on blight known, residents organized many protests including one outside of

Street's home (Twyman, 2003, 2004a). Some residents also questioned the Street's focus on housing over addressing failing schools and high taxes thus questioning Street's promise to focus on all of these issues simultaneously (Burton, 2001c; Dilanian, 2002).

In spite of their generally low opinion of NTI, community organizations and their employees did benefit in some ways from it. The NTI-funded HomeBuyNow program offered homebuyer education, home improvement financing, and financial assistance for home purchases to employees of participating institutions with two thirds of the participating employers being nonprofit organizations (Hoffman, 2006). In addition, the African American Chamber of Commerce was able to offer hands on demolition training on NTI projects for its Emerging Contractor Assistance program, which helped small minority contracting businesses build their capacity (Twyman, 2004c).

While community organizations in some parts of Philadelphia were concerned about making sure they were not left out of discussions about the implementation of NTI and the use of abatements, Northeast Philadelphia neighborhoods were far less convinced of their usefulness. In 1990, the Greater Bustleton Civic League called for the repeal of the three-year version of Ordinance 1456-A as a means of preventing an increase in taxes (Van Atta, 1990). This should not be surprising considering that while many areas in Philadelphia benefiting from the tax abatement policy were once industrial areas that had been abandoned during deindustrialization and subsequently repurposed, neighborhoods in like Bustleton in Northeast Philadelphia were solid, working class communities with relatively decent housing stock (Silcox & Hollingsworth, 2009).

Indeed, Northeast Philadelphia and South Philadelphia were among the most affected parts of the city when the Board of Revision of Taxes began reassessing property

taxes as the first round of abatements began to expire (Fazlollah & Tanfani, 2009; Kerkstraand & Fazlollah, 2010). In an effort to appease Northeast Philadelphia residents, Street's administration dedicated $2 million in NTI funds and increased city resources to Northeast Philadelphia Councilwoman Joan Krajewski's Holmesburg-based "Community Life Improvement Program" (CLIP), which was focused on quality of life issues like overgrown lawns, graffiti, and abandoned houses (Burton, 2002). CLIP's success led to its expansion throughout the entire city (Burton, 2002).

The tax abatements did not receive much negative feedback due to Councilman DiCicco's strong and positive relationship with his constituents. In contrast, the amount of criticism that NTI faced from community organizations is indicative of Mayor John Street's failure to adequately control the narrative behind the project due to his adversarial relationship with City Council.

Conclusion

This section of the dissertation sought to explore the factors that were involved in the formulation of Philadelphia's tax abatement policies and test Hypothesis 1, which related the formation of Philadelphia's tax abatement policies to the needs of urban regimes—most notably politicians, businesses including developers, and community organizations. Based on the above analysis, politicians and developers were the key groups that were exercising the three dimensions of power.

Politicians and developers exercised great influence on the formulation and implementation of the tax abatements and NTI. It was politicians who chose the topic of urban blight as a rallying issue and a cover for their desire to attract and keep young

professionals within city limits. They also set the legislative agenda, which enabled them to choose the methods of discussion as well as the voices that would be heard and worked hard to control perceptions of the projects. Likewise, developers managed to influence the political agenda, which enabled them to benefit from a special designation in NTI in addition to the tax incentives available through the abatement policies. In spite of their influence, developers were still able to portray their involvement with NTI and the abatements as a net positive for Philadelphia residents who were in need of better housing and blight remediation. However, the varying reactions to the abatement policies, NTI, and their respective architects illustrate what can happen when a politician loses control of how their project is framed.

As a councilman, Frank DiCicco had a preference for offering tax incentives for development efforts often in support of celebrities like Will Smith or large corporations like Disney, but his expansion of the existing tax abatement policies was his only tax incentive with results. Nonetheless, he used that success and relationship with his long-time constituents to ensure that the tax abatement policies were viewed positively. In contrast, Mayor Street lost control of the narrative of NTI due to his adversarial relationship with City Council. He was accused of using his political influence to benefit supportive developers like Westrum and punish detractors like Councilman Michael Nutter.

Philadelphia's community organizations did not receive much attention from City Council or from the Mayor. However, they focused their complaints on NTI partly because information about it was more accessible due to its use of Federal funding and partly because Mayor Street's troubled relationship with City Council left his program

vulnerable. They complained of being forgotten and feeling like the designation of blight

was being used to demolish strong neighborhoods. Residents of Councilwoman Joan

Krajewski's district in Northeast Philadelphia complained that they were forgotten to the

point that they were placated with a special $2 million program that represented a

miniscule portion of the over $250 million NTI budget. In contrast, the tax abatement

policies received less media attention and less protests from the community organization.

Given the information presented in the above analysis, there is strong support for

the role of urban regimes in the formation of Philadelphia's tax abatement policy even

though community organizations appear the have had much less influence than the

politician and developer counterparts. Therefore, this section of the dissertation provides

strong support for Hypothesis 2.

Chapter 5: Descriptive Analysis

This chapter is grouped into three sections. The first section explores the results of the factor analysis that led to the creation of the Gentrification index. Then, the second section focuses on the descriptive statistics for the entire dataset and examines key trends. Lastly, the third section uses GIS to examine the significant factors from the factor analysis.

Factor Analysis

A factor analysis was performed as a means of dimension reduction in order to analyze the underlying structure of the variables while focusing only on their shared variances. According to the Kaiser criterion, only the first two factors were viewed as significant because as seen in Table 4 because their eigenvalues were greater than 1 (Kaiser, 1960). Factor loadings were deemed significant if they were greater than or equal to 0.3.

Table 4: Factor Analysis Results (rotated)

Factor	Variance	Difference	Proportion	Cumulative
Factor 1	**1.95819**	0.39302	0.3649	0.3649
Factor 2	**1.56517**	0.69550	0.2916	0.6565
Factor 3	0.86968	0.15709	0.1621	0.8186
Factor 4	0.71259	0.06964	0.1328	0.9514
Factor 5	0.64295	0.42849	0.1198	1.0712
Factor 6	0.21446	0.12942	0.0400	1.1111
Factor 7	0.08503		0.0158	1.1270

N=358
Eigenvalues > 1 in Bold

Table 5: Factor Analysis Results - Factor Loadings (rotated)

	Factor 1	Factor 2
% Change Median Household Income	.1717874	.0943682
% Change Median Property Value	**.3028357**	-.0181794
% Change Median Property Tax	.2565699	-.1176057
% Change in Median Rent	.0751496	**.8169222**
% Change Population	-.0038872	**.8525207**
% Change Hispanic	-.2165871	.0356293
% Change White	**.8984699**	-.0772972
% Change Black	**-.931681**	-.1256104
% Change Other Race	-.0634188	.2199143
% Properties Built 2000 or Later	.1863701	.1686882
% New Residents 2000 or Later	.0673694	.2193422

N=358
Loadings > 0.3 in Bold

Based on Table 5, Factor 1 represents gentrification for it is positively correlated to the percentage change in median property value and the percentage change in White residents. It is also negatively correlated with the percentage change in Black residents. Factor 2 is positively correlated to the percentage change in median rent and the percentage change in population.

Factor analysis was also performed among smaller groupings of the above variables based on the themes of household characteristics and demographics. The household characteristics category includes all of the variables that had previously been categorized as household and socioeconomic in the methodology section above while the demographics section remained the same. In the end, only one significant factor was derived, and it was very similar to Factor 1. For more information, see Appendix C.

Descriptive Statistics

Table 6 displays the descriptive statistics for the dataset. All variables are available for most of the 385 Census tracts in Philadelphia. The mean percentage changes at tract level points out that most tracts in Philadelphia lost more population overall than they gained. Philadelphia's White, Black, and Other Race populations also have negative mean values. It is important to note that the magnitude of Philadelphia's White population change mean is higher than the population change means for Black and Other race groups, thus suggesting that the White population was a larger driver of the negative population change mean of the overall population and indicating the potential for a least some white flight. Nonetheless, these negative mean values support the idea that gentrification is not a uniform phenomenon and did not take place throughout the whole city of Philadelphia between 2000 and 2010. In addition, all of the other variables measuring the change that occurred between 2000 and 2010 have positive means suggesting growth overall.

The share of residents identifying as Hispanic is the only race population change that is positive overall. However, this could also be the result of more people identifying as Hispanic between the 2000 and 2010 Census as attitudes toward Hispanic and Latino ethnicity have changed over time.

Table 6: Descriptive Statistics

VARIABLES	(1) N	(2) mean	(3) sd	(4) min	(5) max
% Vacant Properties 2000	384	10.80	7.252	0	42.80
% Properties Built 2000 or Later	377	3.417	6.742	0	66.70
% New Residents 2000 or Later	376	56.18	14.25	0	100
% Change Median Household Income	375	-1.844	36.79	-63.63	308.8
% Change Median Property Value	366	84.22	63.18	-46.84	430.7
% Change Median Property Tax	361	2.490	29.55	-70.18	272.7
% Change in Median Rent	373	16.87	31.93	-40.48	499.3
% Change Population	383	-1.114	30.66	-100	437.3
% Change Hispanic	377	2.411	5.373	-13	25.50
% Change White	377	-4.254	13.70	-45.20	43.40
% Change Black	377	-0.156	11.58	-42.10	45.29
% Change Other Race	377	-2.613	11.22	-60	43
Distance from Nearest University	384	1.038	0.919	0.00589	4.576
Distance from Center City District	384	5.153	3.334	0.171	14.73
Distance from Nearest Tourist Attraction	384	3.189	3.001	0.0117	13.04
Distance from Nearest High-Speed Rail Station	384	1.661	1.740	0.0184	8.102
Distance from Nearest Regional Rail Station	384	0.987	0.623	0.0451	4.030
% Total Value of Abated Properties 2000-2010	385	1.211	2.139	0	28.31
% Total Number of Abated Properties 2000-2010	385	9.721	13.96	0.273	100
Factor 1	359	-1.09e-09	0.963	-3.262	3.233
Factor 2	359	8.81e-10	0.894	-1.551	14.89

GIS Mapping

Maps were generated to display the geographic distribution of the two derived factors and variables that are important to their derivation. Figure 17 demonstrates that Factor 1, which is gentrification, happened strongly in most Census tracts with the exception of those in Northeast Philadelphia and the southern most parts of South Philadelphia in zip codes 19112, 19153 and parts of 19142, 19145, and 19148. Its high scores in 19145 are indicative of some of the documented development that occurred at the hands of the Westrum Development Corporation on a plot of land that was once used for military housing (Hill, 2003). However, the high scores in tracts in Northeast

Philadelphia by the Delaware River in 19114 and the Northwest portion of Philadelphia,

which includes 19119, 19126, 19138, and 19144 are surprising since neither of those

areas were major beneficiaries of NTI or the abatement policies.

Figure 17: Factor 1 - Gentrification
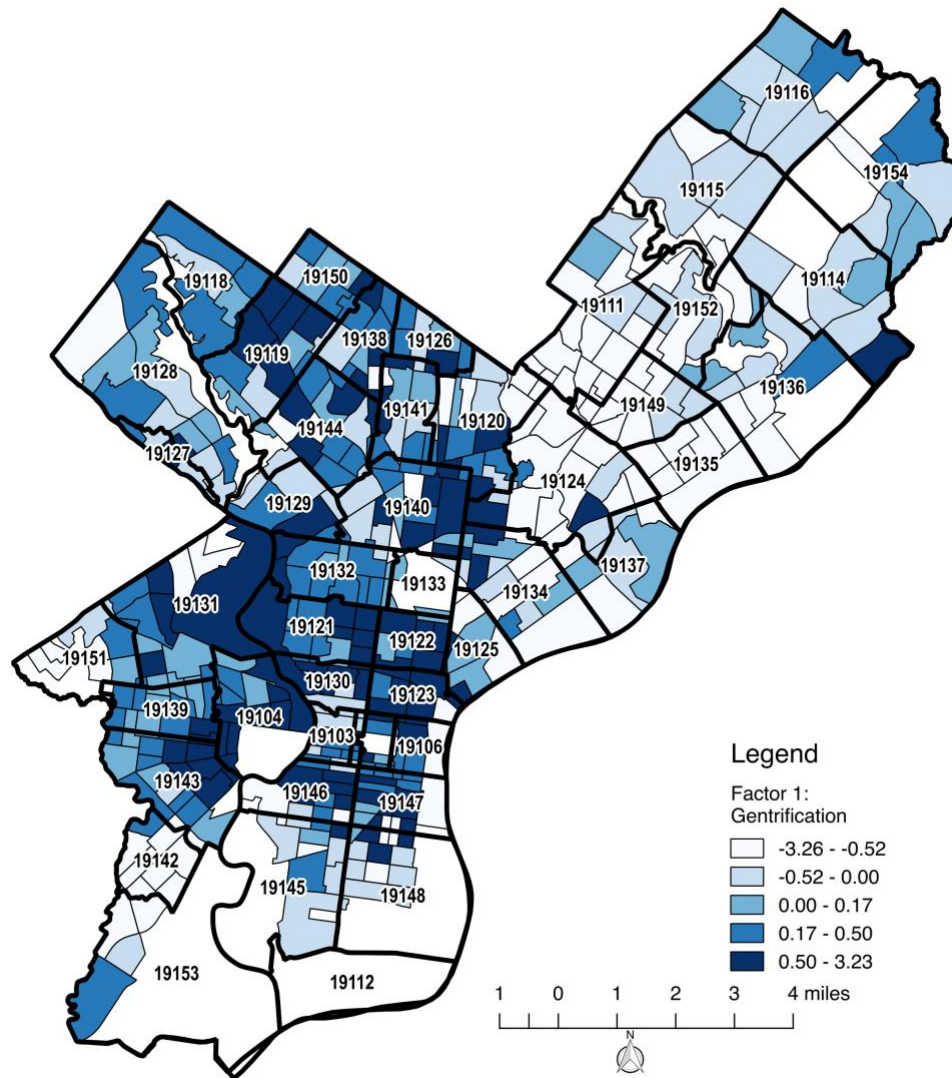
In contrast to Factor 1, which radiated out from Center City, Figure 18 shows that

Factor 2 was not as prevalent in that area. Instead, Factor 2, which represented increased

rent and increased population, occurred most strongly in Census tracts in 19123 in

Northern Liberties, 19106 in Center City, 19147 in South Philadelphia, and 19111,

19115, 19116, 19135, and 19149 in Northeast Philadelphia. While its strength in tracts in

19123, 19106, and 19147 makes sense in light of the documented level of development

that occurred in those areas along the waterfront, its strength in Northeast Philadelphia

tracts in 19111, 19115, 19116, 19135, 19136, 19149, and 19152 is also unexpected

because of the level of discontentment that was observed in those areas with respect to

NTI and the lack of prevalence of abatements based on Figure 3.

Figure 18: Factor 2 - Increased Rent, Increased Population
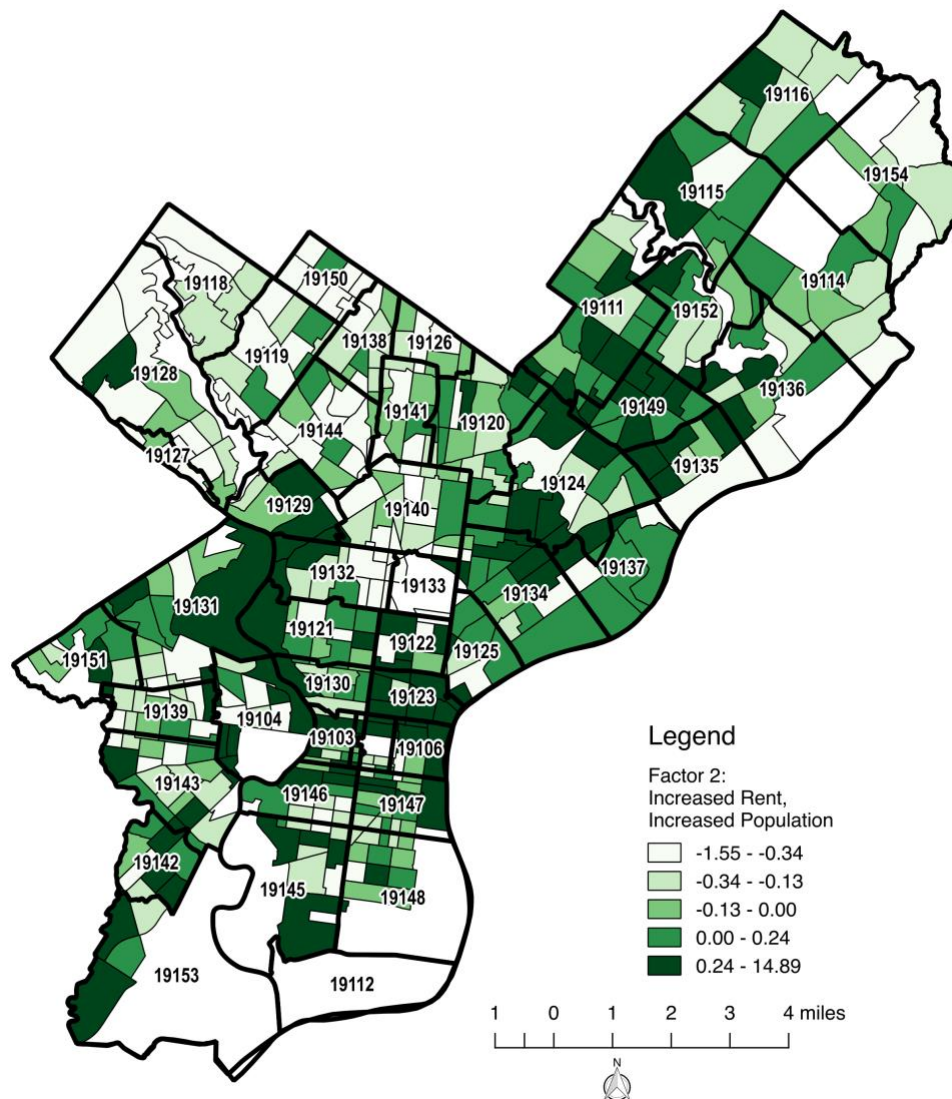
To further analyze the significant factors, maps were created to show the

geographic distribution of every variable that had a significant factor loading. Figures 19-

21 focus on the significant variables in Factor 1 while Figures 22-23 focus on the

significant variables in Factor 2. In Figure 19, it is clear that the greatest increases in

property value occur within the zip codes immediately surrounding Center City—zip

codes 19121, 19122, 19123, 19125, 19130, and 19134 to the North, 19145, 19146, 19147, and 19148 to the South. This is in line with what would be expected based on the tax abatement policy. Still, there were additional assorted tracts that indicated major increases in property value in Northeast Philadelphia zip codes 19111, 19115 19135, 19136, and 19152, Chestnut Hill zip code 19118, Mount Airy zip code 19119, Roxborough zip codes 19127, 19128, and 19129, and West Philadelphia zip codes 19104, 19131, and 19143.

Figure 19: Percentage Change in Median Property Value, 2000-2010
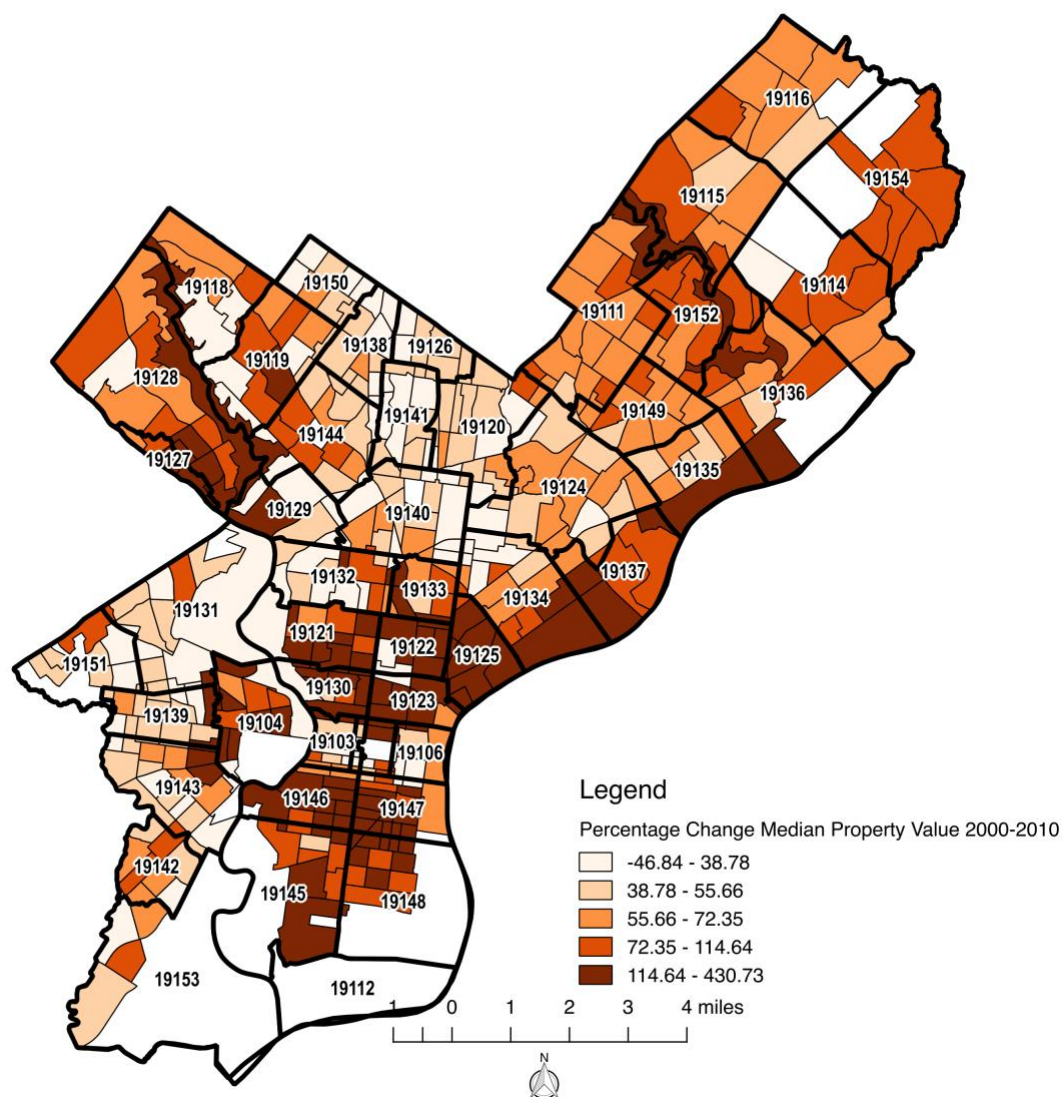
Data Source: Decennial Census, United States Census Bureau, 2000
American Community Survey, 5-Year Estimates, 2010

The general trend in Figure 20 is that the share of the White Population in

Northeast Philadelphia has decreased between 2000 and 2010 and increased in most other

places within Philadelphia city limits. The strongest increases were in the areas

immediately surrounding Center City including zip codes 19122,19123, and 19130 to the

North, and 19146 and 19147 to the South. There were also strong increases evident in zip

codes 19118 in Chestnut Hill, 19119 and 19150 in Mount Airy, and 19129 in

Roxborough.

Figure 20: Percentage Point Change in White Population Share, 2000-2010

Data Source: Decennial Census, United States Census Bureau, 2000
American Community Survey, 5-Year Estimates, 2010

As expected, based on the loadings in Factor 1, Figure 21 shows that the

distribution of population changes among the Black population in Philadelphia from

2000-2010 is almost a mirror image of the changes that took place among the White population during the same time period. Indeed, the largest increases in the Black population share seem to have taken place in lower Northeast Philadelphia zip codes like 19111, 19124 19135, 19136, and 19149 and the largest decreases took place in areas immediately bordering Center City like zip codes 19122 and 19123 to the North and 19146 and 19147 to the South.

Figure 21: Percentage Point Change in Black Population Share, 2000-2010
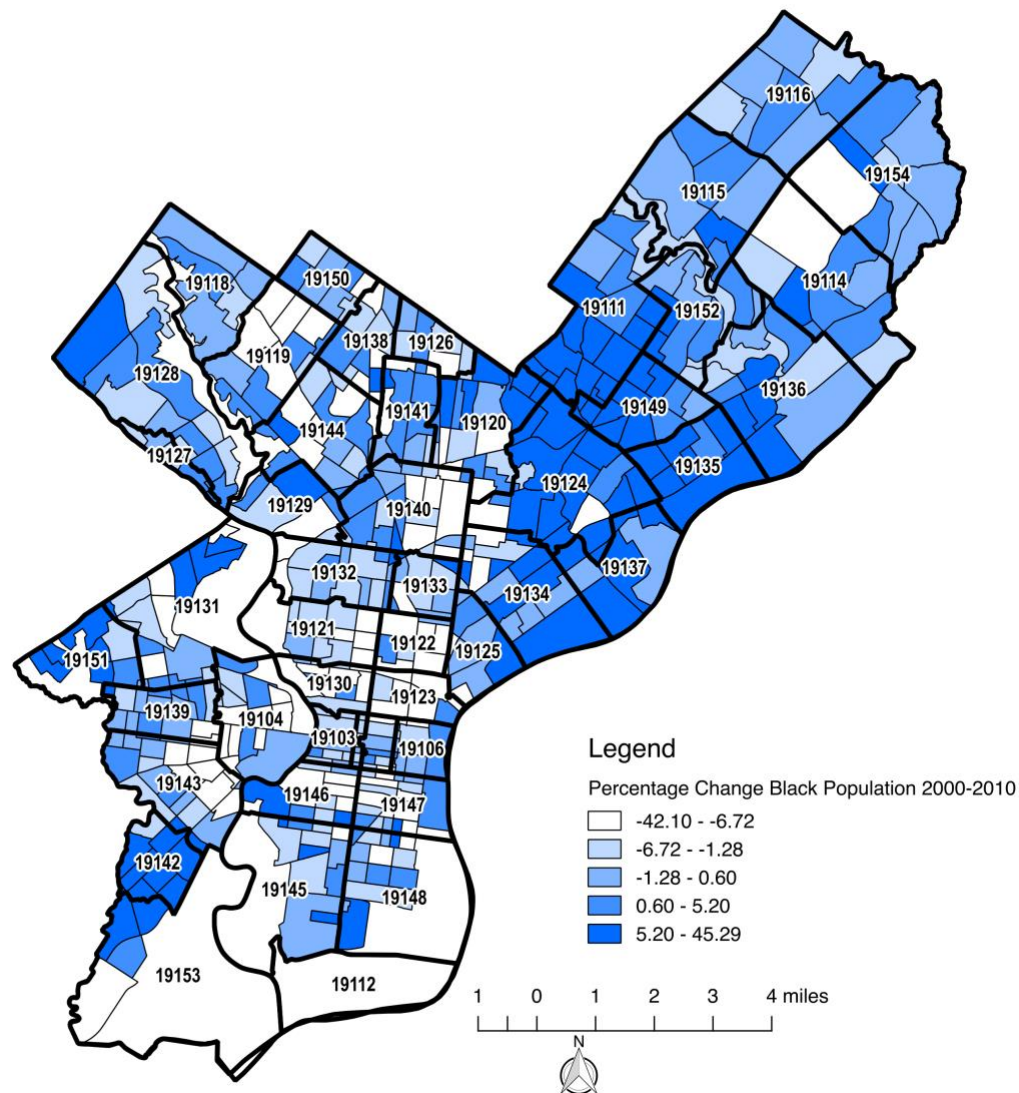
Data Source: Decennial Census, United States Census Bureau, 2000
American Community Survey, 5-Year Estimates, 2010

While Factor 2 is a combination of increased median rent and increased

population, Figure 22 shows that median rent appears to have increased throughout most

of Philadelphia with the exception of Far Northeast zip code 19114 and Chestnut Hill zip

code 19118. Therefore, it is clear that increased population must be the reason for their

geographic trend noted in Factor 2.

Figure 22: Percentage Change in Median Rent, 2000-2010
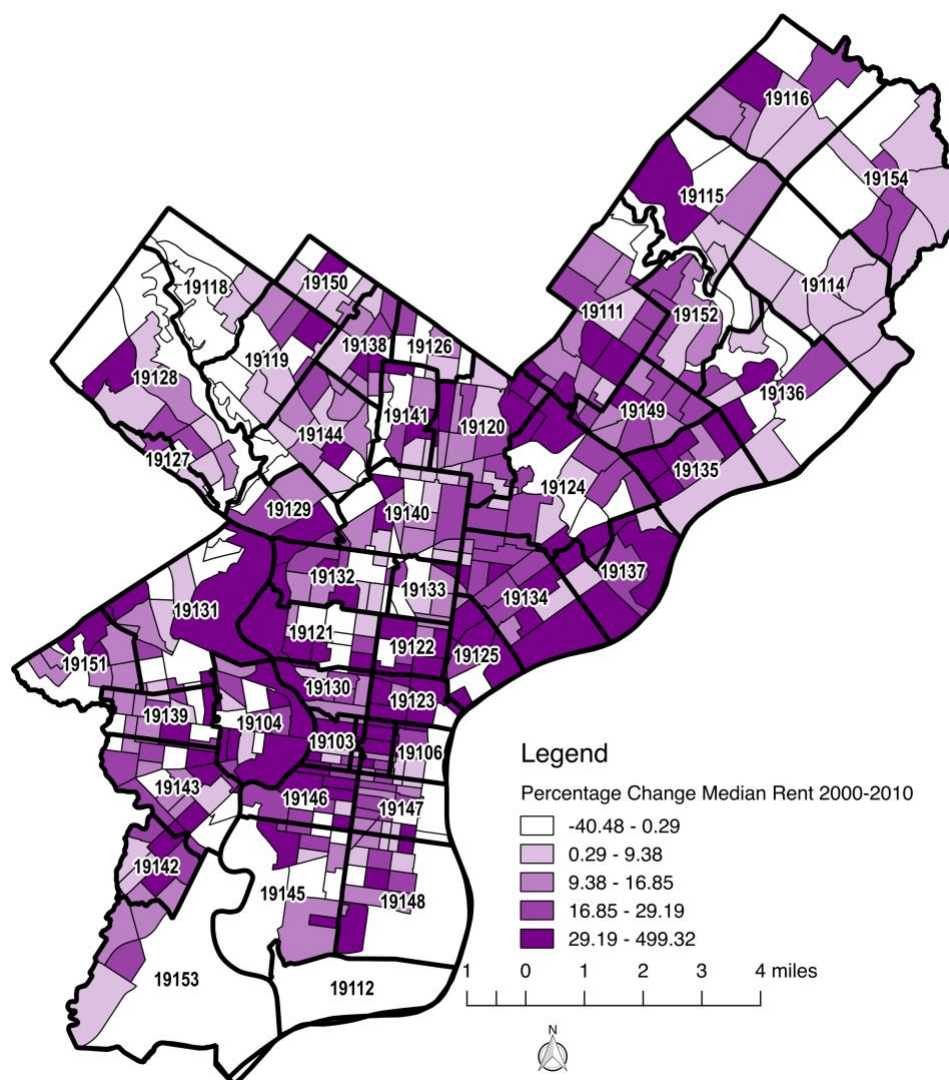
Data Source: Decennial Census, United States Census Bureau, 2000
American Community Survey, 5-Year Estimates, 2010

As expected, based on the relative uniformity of the increase in median rent noted in Figure 22, Figure 23 shows that the increase in population occurred most heavily in Northeast Philadelphia and zip codes of North and South Philadelphia immediately abutting Center City including 19123 and 19130 to the North,19147 and 19148 to the South, and 19131 to the West.

Figure 23: Percentage Change in Population, 2000-2010
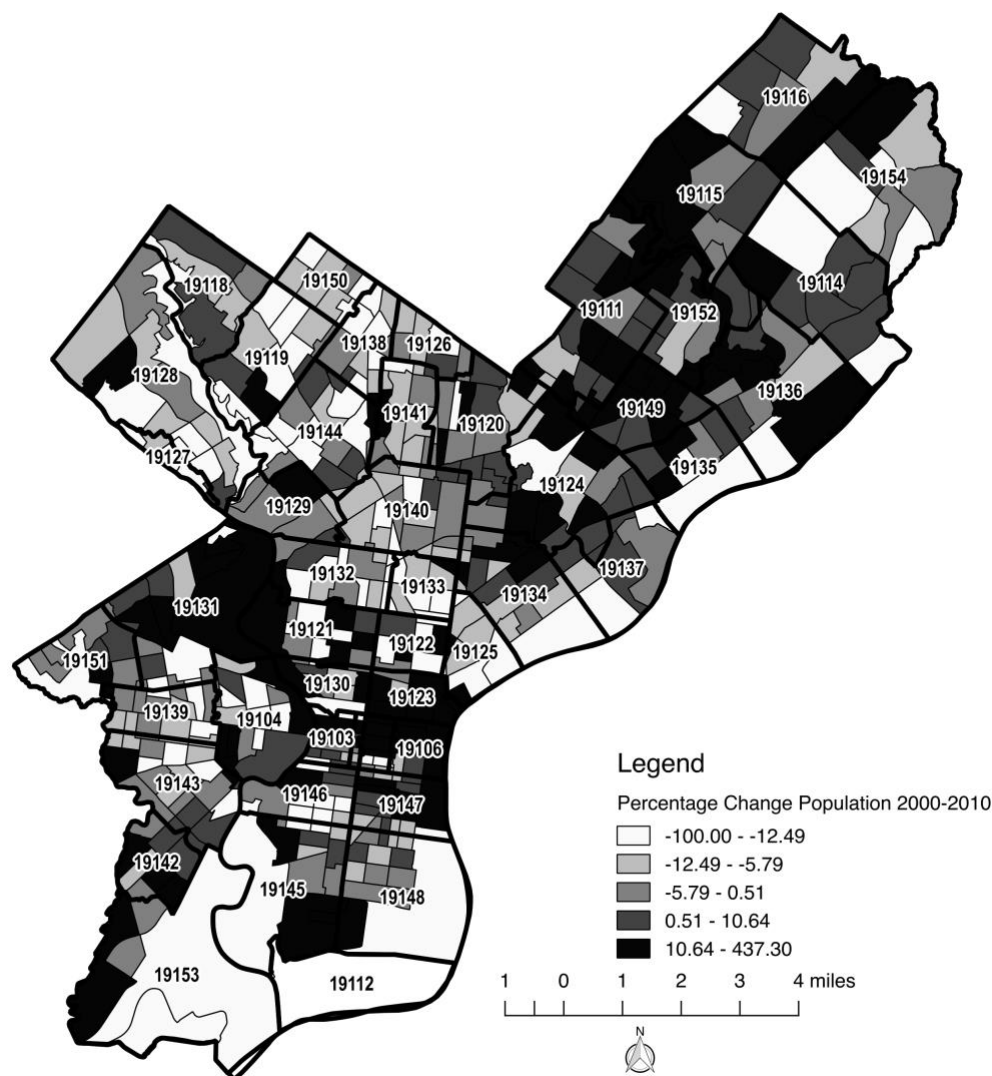
Data Source: Decennial Census, United States Census Bureau, 2000
American Community Survey, 5-Year Estimates, 2010

Conclusion

Overall, the negative means of most of the change-related variables in this data set

suggest the kinds of change that one would expect to occur over a ten-year period in a

gentrifying context—especially since the measures that were based on dollar amounts were adjusted to account for inflation. In addition, Factors 1 and 2 appear to be strongest in areas that were documented as benefitting heavily from the tax abatement policies including neighborhoods immediately surrounding Center City in North and South Philadelphia.

Chapter 6: Regression Analysis

This chapter is organized into two sections. The first section is a basic ordinary least squares regression model connecting the tax abatement prevalence directly to gentrification. The second section explores the justification of the two-stage model and breaks it down into two parts. The first section is focused on tests for the effectiveness of the instrumental variables used in the two-stage models. The second section explores the results of the first stage of the two-stage regression models.

Regression Results: Multivariate Regression

An ordinary least squares multivariate regression analysis was performed to determine if the two abatement variables could predict the two derived factors. As shown in Table 7, the Percent of the Total Number of Abated Properties between 2000 and 2010, which is the abated properties' share of all properties at census tract level is predictive of Factor 1 and Factor 2. However, the percent total value of abated properties between 2000 and 2010, which is the abated properties' property value as a share of all property value per census tract, was not a statistically significant predictor of either factor.

The statistically significant relationship between the percent total number of abated properties between 2000 and 2010 and both Factors 1 and 2 supports Hypothesis 2. In spite of this support, there is still the potential for bias within these results from the OLS regression given the potential for reverse causality and left out variable bias. Thus, it is still necessary to utilize an instrumental variable model to ensure the robustness of these results (Meyer, 1995).

Aside from the key independent variables, several control variables also had statistically significant relationships with the two factors. For all of the variables measuring distance, negative coefficients are expected because the literature suggests that gentrification occurs closer to colleges and universities, cultural attractions, business districts, and public transportation (Deka, 2017; Florida, 2014). The Distance from the Nearest College or University was statistically significant in all four models, but was negatively related in Models 1 and 2 and positively related in Models 3 and 4 suggesting it has a bit of an inverse relationship with Factors 1 and 2. As expected, the Distance from the Nearest College or University would lead to a decrease in gentrification Factor 1, but the increase in Factor 2 is surprising since increased population and rent are generally expected to occur within gentrification.

In contrast, the Distance from the Nearest University was statistically significant in three of the four models, but not when Factor 2 was the dependent variable and the percent total value of abated properties was the key independent variable, but unlike above, it is positively related to Factor 1 and negatively related to Factor 2. The Distance from the Nearest Regional Rail Station was statistically significant and negative in both models where Factor 1 was the dependent variable and in was statistically significant and positive in Model 3 while the Distance from the Center City District and the Distance from the Nearest Tourist Attraction were only statistically significant in Model 4. The Distance from the Nearest High-Speed Rail Station was not statistically significant in any of the models.

Table 7: Ordinary Least Squares Regression Results

| | (1) | (2) | (3) | (4) |
	Factor 1	Factor 1	Factor 2	Factor 2
% Total Number of Abated Properties 2000-2010	0.0175**		0.0188**	
	(2.62)		(2.73)	
% Total Value of Abated Properties 2000-2010		0.0209		0.0271
		(0.48)		(1.14)
Distance from Nearest University	-0.554***	-0.574***	0.167***	0.147***
	(-8.92)	(-8.97)	(5.42)	(5.17)
Distance from Center City District	-0.00966	-0.0513	-0.0313	-0.0750***
	(-0.21)	(-1.17)	(-1.23)	(-3.81)
Distance from Nearest Tourist Attraction	-0.0111	0.00860	0.0386	0.0592**
	(-0.33)	(0.25)	(1.65)	(3.11)
Distance from Nearest High-Speed Rail Station	0.0664	0.0937	-0.0258	0.00284
	(1.21)	(1.74)	(-1.29)	(0.13)
Distance from Nearest Regional Rail Station	-0.303***	-0.337***	0.0925*	0.0581
	(-4.11)	(-4.51)	(2.16)	(1.52)
Constant	0.708***	0.965***	-0.307*	-0.0410
	(3.86)	(5.94)	(-2.27)	(-0.49)
Observations	359	359	359	359
Adjusted R-squared	0.387	0.373	0.135	0.077

t statistics in parentheses

* $p<0.05$ ** $p<0.01$ *** $p<0.001$

Regression Results: Two-Stage Regression: Stage 1

This section reports results from the first stage of the two-stage regression model. As shown in Table 8, the percentage of vacant properties in 2000 is a statistically significant predictor of the percent total value of abated properties between 2000 and 2010. Unfortunately, these results also demonstrate that the percentage of vacant properties in 2000 is a not a statistically significant predictor of the percent total number of abated properties between 2000 and 2010. This distinction suggests that the percentage of vacant properties in 2000 is a weak instrumental variable with respect to the percent

total number of abated properties between 2000 and 2010, which would throw off the results in second stage of this Two-Stage Regression Model. The results in Model 1 in Table 8 are the First Stage of Equations 1 and 3 in Table 9. The results in Model 2 are the First Stage of Equations 2 and 4 in Table 9.

All five control variables had statistically significant relationships with the Percent Total Number of Abatement Properties 2000-2010 in Model 1. The Distance from the Nearest Tourist Attraction and Distance from the Nearest High-Speed Rail Station had positive relationships with the percent total number of abated properties 2000-2010 showing that greater distance for those variables led to more abatements. In contrast, the Distance from the Nearest University, Distance from the Center City District and the Nearest Regional Rail Station were negatively related, which demonstrates that Census tracts what are closer to Center City and Regional Rail stations have a higher percentage of abated properties overall. Only Distance from Nearest High-Speed Rail Station and Distance from Nearest Regional Rail Station had statistically significant relationships with the percent total value of abated properties 2000-2010 in Model 2 suggesting that accessibility via mass transit is most closely linked to the Percentage of the Total Value of Abated Properties 2000-2010.

Table 8: Two-Stage Regression Results - Stage 1

	(1) % Total Number of Abated Properties 2000-2010	(2) % Total Value of Abated Properties 2000-2010
Distance from Nearest University	-1.194**	-0.0996
	(-3.19)	(-1.02)
Distance from Center City District	-2.399***	-0.0885
	(-4.57)	(-1.75)
Distance from Nearest Tourist Attraction	1.182**	0.0742
	(2.97)	(1.39)
Distance from Nearest High-Speed Rail Station	1.743***	0.140*
	(6.18)	(2.12)
Distance from Nearest Regional Rail Station	-2.202**	-0.253**
	(-3.04)	(-3.01)
% Vacant Properties 2000	0.134	0.0638***
	(1.59)	(5.29)
Constant	14.21***	0.544*
	(4.61)	(2.14)
Observations	359	359
Adjusted R-squared	0.280	0.192

t statistics in parentheses

* $p<0.05$ ** $p<0.01$ *** $p<0.001$

Regression Results: Two-Stage Regression: Stage 2

The following section reports results from the second stage of the two-stage regression model. Each regression uses robust standard errors to account for heteroskedasticity. As shown in Table 9, which is instrumented, the percent total value of abated properties is a statistically significant predictor of Factor 1: Gentrification only. Neither abatement variable is a significant predictor of Factor 2. These results differ greatly from the OLS regression results in Table 7, which positioned the Percent of the Total Number of Abated Properties as the sole statistically significant predictor of gentrification, thus exemplifying the need for the use of an instrumental variable model.

The negative adjusted R-squared values are due to the use of the instrumental variable regression model, which has two stages and focuses more on structure than projections of the dependent variable (Sribney, Wiggins, & Drukker, n.d.).

Surprisingly, the control variables were not statistically significant in Model 1 or Model 3. The Distance from the Nearest University is statistically significant and positive in Model 2, but statistically significant and negative in Model 4 giving further insight into the potential inverse nature of the two derived factors. The Distance Center City and the Distance from the Nearest Tourist Attraction were only statistically significant in Model 4, while the Distance from the Nearest Regional Rail Station was only a statistically significant predictor in Model 2. Unexpectedly, the Distance from the Nearest High-Speed Rail Station is not a statistically significant predictor in any of the four models.

Table 9: Two-Stage Regression Results - Stage 2

| | (1) | (2) | (3) | (4) |
	Factor 1	Factor 1	Factor 2	Factor 2
% Total Number of Abated Properties 2000-2010	0.220		-0.0478	
	(1.57)		(-0.87)	
% Total Value of Abated Properties 2000-2010		0.463**		-0.101
		(3.06)		(-1.20)
Distance from Nearest University	-0.282	-0.499***	0.0781	0.125***
	(-1.27)	(-6.88)	(0.96)	(4.06)
Distance from Center City District	0.514	0.0269	-0.203	-0.0976***
	(1.20)	(0.50)	(-1.32)	(-3.72)
Distance from Nearest Tourist Attraction	-0.264	-0.0386	0.122	0.0728***
	(-1.14)	(-0.87)	(1.54)	(3.56)
Distance from Nearest High-Speed Rail Station	-0.276	0.0427	0.0868	0.0176
	(-1.04)	(0.70)	(0.84)	(0.67)
Distance from Nearest Regional Rail Station	0.141	-0.227*	-0.0534	0.0263
	(0.33)	(-2.45)	(-0.37)	(0.61)
Constant	-2.658	0.218	0.798	0.174
	(-1.02)	(0.75)	(0.83)	(1.04)
Observations	359	359	359	359
Adjusted R-squared	-1.445	0.190	-0.627	0.018

t statistics in parentheses

* $p<0.05$ ** $p<0.01$ *** $p<0.001$

Table 10 talks about the strength of the instrumental variables that were chosen. These Models 1 and 2 in Table 10 are the same as Models 1 and 2 from Table 8. For reference, Model 1in Table 10 refers to Equations 1 and 3 from Table 9 and Model 2 in Table 10 refers to Equations 2 and 4 in Table 9. These models were tested for underidentification using the Kleinbergen-Paap rk LM statistic due to the use of robust standard errors and weak identification using the Stock and Yogo test. As shown in Table 9, only Model 2 passed test the tests for Underidentification and Weak Identification.

Table 10: Strength of Instrumental Variable Model

	(1) % Total Number of Abated Properties 2000-2010	(2) % Total Value of Abated Properties 2000-2010
N	359	359
Underidentification	2.342	14.82
Underidentification p-value	0.126	0.000118
Weak Identification F-Statistic	2.513	27.99

The weakness of Model 1 in Table 10 helps to explain why the models in Table 9 that use the percent total number of abated properties 2000-2010 as their key independent variable are not statistically significant because the percentage of vacant properties in 2000 is a weak instrument for these models. In contrast, the statistical significance of the models in Table 10 using the percent total value of abated properties 2000-2010 as their key independent variable show that the percentage of vacant properties in 2000 was a strong enough instrumental variable for these models. Thus, it is quite possible that the differences between the Ordinary Least Squares and Two-Stage Least Squares regressions results is due to the relative strength of the percentage of vacant properties in 2000 as an instrumental variable.

Conclusion

This section seeks to answer the question of the relationship between the incidence of tax abatements and gentrification in Philadelphia and test Hypothesis 2, which clearly connected the incidence of tax abatements to increased gentrification. In the above analysis, the percent total value of abated properties between 2000 and 2010 is predictive of gentrification through Factor 1 in the instrumental model thereby supporting Hypothesis 2. In contrast, the percent total number of abated properties between 2000 and 2010 is predictive of gentrification through Factor 1 in only the OLS regression model. Results from the first stage of the two-stage regression model and the instrumental variable tests suggest that this discrepancy between the OLS and two-stage regressions could be the result of the percentage of vacant properties in 2000 not being a good instrumental variable for use with the percent total number of abated properties between 2000 and 2010.

The relationship between Factor 2 and the abatement variables is also affected by the use of an instrumental variable model. While Factor 2 had a statistically significant relationship with the percent total number of abated properties between 2000 and 2010 like Factor 1 did, it did not have a statistically significant relationship with either abatement variable in the two-stage regression model. Even though Factor 2 does not fit the definition of gentrification as well as Factor 1 does, this lack of statistical significance could still also be the result of the percentage of vacant properties in 2000 being a poor instrument choice for the percent total number of abated properties between 2000 and 2010.

In the end, the results of this portion of the dissertation find support for Hypothesis 2 while suggesting the need for further analysis using other instrumental variables that work well for both key abatement variables.

Chapter 7: Implications, Conclusions, and Avenues for Future Research

Overall, the results of this study demonstrate the complexity of the use of abatement policy to redevelop urban contexts. The evolution of the early ordinances that became Philadelphia's pivotal tax abatement policies shows how drastically legislation can change over time to keep up with the needs of varying constituencies. In addition, the divergent experiences of Mayor John Street, Council President Frank DiCicco, developers, and community activists show just how unevenly power had been distributed in the formation of the abatement policies and NTI.

Through the quantitative section of this paper, it became clear that the Percent of the Value of tax abated properties is predictive of Factor 1, which represents gentrification. It is my hope that this research will have an impact on the community development strategies of future Philadelphia City Councils. City Council's ability to use the results of this research depends on its motivation for creating the tax abatement legislation. The qualitative portion of my dissertation seeks to bring clarity to the motivation behind the tax abatement policies, which have existed in some form since the 1970s. If the motivation was to improve the quality of housing for existing residents— and there is support for this motivation in the original wording of Ordinance 961—then City Council could use this research to demonstrate a demographic shift in key neighborhoods indicating the potential for displacement. If the motivation was to lure developers to build in neighborhoods that were once filled with abandoned factories and vacant lots—and there is support for this motivation in the timing of the Neighborhood Transformation Initiative relative to the availability of tax abatements—then City Council could use this research to show how the tax abatement policies had unintended effects on

existing low-income communities. If the motivation was to increase Philadelphia's tax income by bringing in higher income residents, driving up property values, and reassessing property taxes—and there is support for this motivation based on the timing of the Actual Value Initiative relative to the passage of the tax abatement policies—then City Council could use this research to show that the tax abatement policies are working as planned.

The definition of gentrification used in this dissertation is broad and leaves open the possibility of the displacement of low-income residents. Freeman's *There Goes the Hood* shows that long-term residents approve of many of the changes that occur in their neighborhoods as a result of gentrification, though they wish their neighborhoods received the same level of attention prior to the racial and socioeconomic shift that occurred in their communities. I believe the best way to stop it is to create requirements into subsequent abatement policies mandating that a certain percentage of abated properties be dedicated to the creation of low-income units. I also believe that local governments should do a better job of providing public goods to all communities within their jurisdiction and not shortchanging poor communities in favor of their more affluent and less racially-diverse counterparts.

The results have shown that the process of the formation of tax abatement policies can be complicated. In order to bring more clarity to the process, it would be useful to conduct key informant interviews with people who were involved including Mayor John Street, Councilman Frank DiCicco, and relevant community leaders. Although the events discussed in this dissertation occurred over fifteen years ago beginning in the late 1990s, their insights would still be invaluable. After all, much of the clarity that was evident in

McGovern (2006) came from first-hand interviews, though less time had passed by the time the interviews were conducted.

Further qualitative research on this topic could focus on the aftermath of the abatement policy by interviewing long-term residents and former residents to learn its ground level effects from the people who were most heavily impacted by it. Additional research of this type would be useful in gauging the extent of displacement and unearthing some of the sociopolitical impacts that this dissertation only touched upon. It could also be beneficial to apply some of the theoretical concepts derived from this study to other urban contexts that are undergoing or have undergone policy-driven redevelopment efforts with the hope of producing more historical case studies.

Further quantitative research on this topic could start by conducting the existing project again with the use of a better instrumental variable than the percentage of vacant properties in 2000. While this variable met the analytical requirements for an instrumental variable, it was weak with respect to the percent total number of abated properties between 2000 and 2010 and could have led to the underestimation of that variable's relationship with the two gentrification factors. Conducting the same analysis with a better instrument could result in even greater support for Hypothesis 2 if the results of the two-stage regression show a greater resemblance to the results of the OLS regression. Changing the socioeconomic markers of gentrification from the dollar-based variables used in this gentrification to a percentage-based variable like educational attainment for the sake of comparison could also be a major benefit to future research since education attainment variables are typically used in gentrification studies but were left out of this dissertation due to their connection to income.

There are also many ways in which the quantitative models could be restructured as more data becomes available. Since the quantitative section ended at 2010, it would also be useful to revise many of the quantitative models once 2020 American Community Survey data become available. This project was severely limited by the availability of abatement data from Philadelphia's Office of Property Assessment. Abatement data through Open Data Philly were only available starting at 2010. Since the prior years were not available, this whole project had to be organized around the first ten years of abatement policy as one large block of time since presumably any property that applied for an abatement between 2000 and 2010 would be included in the 2010 figure because the abatements were designed to last for ten years. However, if abatement data were available for every year from 2000 to 2020, this would allow for a greater sensitivity in the quantitative models and could enable the geographic tracking of abatement activity over time. While it appears that the abatements were most used in Center City and the nearby areas in North, South, and West Philadelphia that were packaged by NTI during the duration of this study, gentrification appears to have continued to flare outward in the years after 2010. With more data, it may be possible to quantitatively and spatially demonstrate the flow of gentrification in the Philadelphia area.

It would also be useful to research the regional impacts of such abatement policies. Peterson (1981) talks about the competition that exists between neighboring municipalities and points out that the success of one municipality often has negative consequences for another. There is little thought given to the effect that accelerated gentrification would have on the social and political landscape of the Philadelphia region. Long-term racial and ethnic enclaves are vulnerable. The unique character that made

some Philadelphia neighborhoods attractive has been removed to make room for things that are deemed as trendy and popular in the name of profit. Likewise, outlying neighborhoods have to deal with their character changing as they become home to displaced former residents of heavily gentrifying communities and as their own former residents move to gentrifying areas of the core city or new suburbs in an effort to regain some sense of social comfort in the midst of this rapid change.

It is my hope that the results of this research will encourage municipalities to adopt a comprehensive approach to the redevelopment of core cities. After all, core cities serve as the economic engines for their respective regions. Despite the economic, social, and political preferences that drive sprawl, the demise of core cities would lead to the collapse of the suburban municipalities. Therefore, core cities and suburban municipalities need to work together to find solutions to issues like urban blight and poverty. Otherwise, those issues will continue to be dispersed instead of addressed.

Appendices

Appendix A: Philadelphia Neighborhoods by Zip Code

19102	Center City East		19116	Bustleton
19102	Rittenhouse		19116	Normandy Village
19103	Fitler Square		19116	Northeast Philadelphia Airport
19104	East Parkside		19116	Somerton
19104	Graduate Hospital		19118	Andorra
19104	Grays Ferry		19118	Chestnut Hill
19104	Haverford North		19118	Mount Airy, West
19104	Mantua		19118	Wissahickon Park
19104	Southwest Schuylkill		19119	Mount Airy, West
19104	Spruce Hill		19120	Crescentville
19104	University City		19120	Fern Rock
19104	West Park		19120	Lawndale
19104	West Parkside		19120	Melrose Park Gardens
19104	West Powelton		19120	Northwood
19104	Woodland Terrace		19121	East Park
19106	Old City		19121	Fairmount
19106	Riverfront		19121	North Central
19106	Society Hill		19121	Stanton
19106	Washington Square West		19121	Strawberry Mansion
19107	Center City East		19122	Fishtown - Lower Kensington
19107	Old City		19122	Kensington, West
19111	Burholme		19122	North Central
19111	Fox Chase		19123	Callowhill
19111	Rhawnhurst		19123	East Poplar
19112	Navy Yard		19123	Kensington, Old
19112	Packer Park		19123	Ludlow
19112	Stadium District		19123	Northern Liberties
19114	Academy Gardens		19123	Spring Garden
19114	Aston-Woodbridge		19123	West Poplar
19114	Modena		19123	Yorktown
19114	Morrell Park		19124	Feltonville
19114	Pennypack		19124	Frankford
19114	Pennypack Woods		19124	Harrowgate
19114	Torresdale		19124	Juniata Park
19115	Bustleton		19124	Northwood
19115	Pennypack		19124	Summerdale
19115	Pennypack Park		19125	East Kensington

19125	Port Richmond		19137	Frankford
19126	East Oak Lane		19137	Richmond
19126	Olney		19138	Germantown, East
19126	West Oak Lane		19138	Germantown, Morton
19127	Dearnley Park		19138	Ogontz
19127	Germany Hill		19139	Cobbs Creek
19127	Manayunk		19139	Garden Court
19127	Roxborough Park		19139	Mill Creek
19128	Dearnley Park		19139	Walnut Hill
19128	Roxborough		19140	Germantown, Southwest
19128	Roxborough Park		19140	Hunting Park
19128	Upper Roxborough		19140	Logan
19128	Wissahickon		19141	Fern Rock
19128	Wissahickon Park		19141	Wister
19129	Allegheny West		19142	Clearview
19130	Brewerytown		19142	Elmwood
19130	Francisville		19142	Penrose
19130	Logan Square		19143	Kingsessing
19130	Mantua		19143	Paschall
19130	Sharswood		19143	University City
19130	Spring Garden		19144	East Falls
19131	East Park		19144	Germantown, East
19131	Overbrook		19144	Germantown, Southwest
19131	Wynnefield		19144	Germantown, West Central
19131	Wynnefield Heights		19144	Germantown, Westside
19132	Glenwood		19145	Bartram Village
19132	Tioga		19145	Girard Estates
19133	Fairhill		19145	Industrial
19133	Franklinville		19145	Navy Yard
19133	Hartranft		19145	Packer Park
19133	McGuire		19145	Point Breeze
19133	Upper Kensington		19146	Bartram Village
19135	Holmesburg		19146	Graduate Hospital
19135	Tacony		19146	Grays Ferry
19135	Wissinoming		19146	Hawthorne
19136	Academy Gardens		19146	Newbold
19136	Aston-Woodbridge		19148	Dickinson Narrows
19136	Pennypack Woods		19148	East Passyunk
19136	Winchester Park		19148	Girard Estates
19137	Bridesburg		19148	Passyunk Square

19148	Pennsport		19153	Airport
19148	Stadium District		19153	Eastwick
19149	Mayfair		19153	Industrial
19149	Oxford Circle		19154	Byberry
19150	Cedarbrook		19154	Crestmont Farms
19150	Mount Airy, East		19154	Franklin Mills
19151	Carroll Park		19154	Mechanicsville
19151	Haddington		19154	Millbrook
19152	Lexington Park		19154	Normandy Village
19152	Mayfair		19154	Northeast Philadelphia Airport
19152	Pennypack Park		19154	Parkwood Manor
19152	Winchester Park			

Source: Philadelphia City Planning Commission via OpenDataPhilly.com

Appendix B: Qualitative Codes

Parent codes are bold, child codes are bold and italicized, tertiary codes are underlined, and the lowest level codes are plain text.

Table B.1: Qualitative Code Application

	Dates	Date Passed	Effective Date	Reporting Period	Termination Date	Definitions	Applicant	Board	Delinquency
*Ordinance 1130	1	1	0	0	0	3	0	0	0
*Ordinance 1456-A	2	1	1	0	0	5	1	0	0
*Ordinance 961	1	1	0	0	0	7	0	0	0
Bill 225	2	1	1	0	0	0	0	0	0
Bill 226	3	1	2	0	0	0	0	0	0
Bill 227	2	1	1	0	0	0	0	0	0
Bill 64.pdf	2	1	1	0	0	1	0	0	0
Ordinance 1202	2	1	1	0	0	4	0	0	3
Ordinance 1332	1	1	0	0	0	3	0	0	0
Ordinance 1368	2	1	1	0	0	4	0	0	3
Ordinance 1443	4	1	2	0	1	0	0	0	0
Ordinance 1744-A	2	0	2	0	0	9	0	0	0
Ordinance 201	2	1	1	0	0	2	0	0	0
Ordinance 362-A	8	1	3	2	2	2	0	0	0
Ordinance 744	2	1	1	0	0	1	0	0	0
Ordinance 970274	3	1	1	0	1	13	0	1	1
Ordinance 970652	2	1	1	0	0	3	0	0	0
Ordinance 982	2	1	1	0	0	0	0	0	0
Ordinance 983	3	1	1	0	1	0	0	0	0
Totals	46	18	21	2	5	57	1	1	7

Dwelling Unit	Eligibility	Condition	Aged	Deteriorated	Unsafe for Human Habitation	Location	Owner Occupancy	Type
*Ordinance 1130	0	2	1	0	1	0	0	0	0
*Ordinance 1456-A	1	3	0	0	0	0	0	1	1
*Ordinance 961	0	6	1	0	0	1	1	1	2
Bill 225	0	0	0	0	0	0	0	0	0
Bill 226	0	0	0	0	0	0	0	0	0
Bill 227	0	0	0	0	0	0	0	0	0
Bill 64.pdf	0	1	0	0	0	0	0	0	0
Ordinance 1202	0	1	0	0	0	0	0	1	0
Ordinance 1332	0	3	0	0	0	0	0	0	1
Ordinance 1368	0	1	0	0	0	0	0	1	0
Ordinance 1443	0	0	0	0	0	0	0	0	0
Ordinance 1744-A	1	8	1	0	1	0	0	0	7
Ordinance 201	0	2	1	0	1	0	0	0	1
Ordinance 362-A	1	1	0	0	0	0	0	1	0
Ordinance 744	0	1	1	0	1	0	0	0	1
Ordinance 970274	0	10	1	0	1	0	3	0	5
Ordinance 970652	0	3	0	0	0	0	0	0	1
Ordinance 982	0	0	0	0	0	0	0	0	1
Ordinance 983	0	0	0	0	0	0	0	0	0
Totals	3	42	6	0	5	1	4	5	19

	Commercial	Commercial Residential	Hotel	Industrial	Non-Residential	Residential
*Ordinance 1130	0	0	0	0	0	0
*Ordinance 1456-A	0	0	0	0	0	1
*Ordinance 961	0	0	0	0	0	2
Bill 225	0	0	0	0	0	0
Bill 226	0	0	0	0	0	0
Bill 227	0	0	0	0	0	0
Bill 64.pdf	0	0	0	0	0	0
Ordinance 1202	0	0	0	0	0	0
Ordinance 1332	0	0	0	0	0	1
Ordinance 1368	0	0	0	0	0	0
Ordinance 1443	0	0	0	0	0	0
Ordinance 1744-A	2	0	1	2	1	1
Ordinance 201	1	0	0	0	0	0
Ordinance 362-A	0	0	0	0	0	0
Ordinance 744	1	0	0	0	0	0
Ordinance 970274	1	4	0	0	0	0
Ordinance 970652	0	0	0	0	0	1
Ordinance 982	0	0	0	0	0	0
Ordinance 983	0	0	0	0	0	0
Totals	5	4	1	2	1	6

Value	Improvement	Edited	Added	Removed	Exemptions
*Ordinance 1130	0	1	0	0	3
*Ordinance 1456-A	0	0	0	0	5
*Ordinance 961	1	1	0	0	3
Bill 225	0	0	2	1	1
Bill 226	0	0	4	2	1
Bill 227	0	0	2	1	1
Bill 64.pdf	0	0	5	1	2
Ordinance 1202	0	0	33	22	11
Ordinance 1332	2	0	3	2	1
Ordinance 1368	0	0	78	49	6
Ordinance 1443	0	0	6	3	2
Ordinance 1744-A	0	0	19	7	4
Ordinance 201	0	0	2	2	1
Ordinance 362-A	0	0	27	13	3
Ordinance 744	0	0	2	0	1
Ordinance 970274	0	1	0	0	5
Ordinance 970652	2	0	7	4	3
Ordinance 982	0	0	5	2	1
Ordinance 983	0	0	4	1	2
Totals	5	3	199	110	56

	Authorization	Continuation	Exemption Amount	Exemption Schedule	Other Exemptions	Procedure	Termination
*Ordinance 1130	0	0	1	1	0	1	0
*Ordinance 1456-A	1	0	1	2	0	1	0
*Ordinance 961	0	0	1	1	0	1	0
Bill 225	0	0	0	1	0	0	0
Bill 226	0	0	0	1	0	0	0
Bill 227	0	0	0	1	0	0	0
Bill 64.pdf	1	0	0	0	0	1	0
Ordinance 1202	1	3	0	0	0	5	2
Ordinance 1332	0	0	0	0	0	1	0
Ordinance 1368	2	1	0	0	0	3	0
Ordinance 1443	0	0	0	1	0	0	1
Ordinance 1744-A	0	1	0	1	0	2	0
Ordinance 201	0	1	0	0	0	0	0
Ordinance 362-A	1	0	0	1	0	1	0
Ordinance 744	0	1	0	0	0	0	0
Ordinance 970274	0	1	1	1	1	1	0
Ordinance 970652	0	0	2	1	0	0	0
Ordinance 982	0	0	0	1	0	0	0
Ordinance 983	0	0	1	0	0	0	1
Totals	6	8	7	13	1	17	4

Interesting Details	Fifth District	Repeal of 970214	Mayor	Goode	Green	Rendell	Rizzo	Street
*Ordinance 1130	0	0	0	1	0	0	0	1	0

	Interesting Details	Fifth District	Repeal of 970214	Mayor	Goode	Green	Rendell	Rizzo	Street
*Ordinance 1130	0	0	0	1	0	0	0	1	0
*Ordinance 1456-A	1	1	0	1	0	1	0	0	0
*Ordinance 961	0	0	0	1	0	0	0	1	0
Bill 225	0	0	0	1	0	0	0	0	1
Bill 226	2	0	2	1	0	0	0	0	1
Bill 227	0	0	0	1	0	0	0	0	1
Bill 64.pdf	0	0	0	1	0	0	0	0	1
Ordinance 1202	0	0	0	1	1	0	0	0	0
Ordinance 1332	0	0	0	1	0	0	0	1	0
Ordinance 1368	0	0	0	1	1	0	0	0	0
Ordinance 1443	0	0	0	1	1	0	0	0	0
Ordinance 1744-A	0	0	0	1	0	1	0	0	0
Ordinance 201	0	0	0	1	1	0	0	0	0
Ordinance 362-A	1	1	0	1	1	0	0	0	0
Ordinance 744	0	0	0	1	1	0	0	0	0
Ordinance 970274	0	0	0	1	0	0	1	0	0
Ordinance 970652	0	0	0	1	0	0	1	0	0
Ordinance 982	0	0	0	1	1	0	0	0	0
Ordinance 983	0	0	0	1	1	0	0	0	0
Totals	4	2	2	19	8	2	2	3	4

Motivations	Age of Property	Condition of Area	Condition of Property	Enhance Neighborhood Communities	Improve Economic Base
*Ordinance 1130	1	0	1	0	0
*Ordinance 1456-A	1	0	0	0	0
*Ordinance 961	1	1	0	0	0
Bill 225	0	0	0	0	0
Bill 226	0	0	0	0	0
Bill 227	0	0	0	0	0
Bill 64.pdf	0	0	0	0	0
Ordinance 1202	0	0	0	0	0
Ordinance 1332	0	0	0	0	0
Ordinance 1368	0	0	0	0	0
Ordinance 1443	0	0	0	0	0
Ordinance 1744-A	0	0	0	0	0
Ordinance 201	0	0	0	0	0
Ordinance 362-A	0	0	0	0	0
Ordinance 744	0	1	1	0	0
Ordinance 970274	7	0	0	1	0
Ordinance 970652	0	0	0	0	0
Ordinance 982	0	0	0	0	0
Ordinance 983	0	0	0	0	0
Totals	10	2	2	1	0

	Improve Social Conditions	Increase Residents	Vacancy	Other Legislation	Preamble	Create 970274 / 19-1303 (5)
*Ordinance 1130	0	0	0	1	2	0
*Ordinance 1456-A	0	0	0	3	2	0
*Ordinance 961	0	0	0	2	2	0
Bill 225	0	0	0	0	2	0
Bill 226	0	0	0	0	2	0
Bill 227	0	0	0	0	2	0
Bill 64.pdf	0	0	0	0	2	0
Ordinance 1202	0	0	0	0	2	0
Ordinance 1332	0	0	0	0	2	0
Ordinance 1368	0	0	0	0	2	0
Ordinance 1443	0	0	0	0	2	0
Ordinance 1744-A	0	0	0	0	2	0
Ordinance 201	0	0	0	0	2	0
Ordinance 362-A	0	0	0	1	2	0
Ordinance 744	0	0	0	0	2	0
Ordinance 970274	1	1	0	2	2	1
Ordinance 970652	0	0	0	1	2	0
Ordinance 982	0	0	0	0	2	0
Ordinance 983	0	0	0	0	2	0
Totals	1	1	2	10	38	1

	Create or Modify 1130 / 19-1303 (3)	Create or Modify 19-1303 (4)	Create or Modify 1456-A / 1303 (2)	Create or Modify 961 / 19-1303 (2)	Totals
*Ordinance 1130	1	0	0	0	24
*Ordinance 1456-A	0	1	0	0	39
*Ordinance 961	0	0	0	1	40
Bill 225	1	0	0	0	15
Bill 226	0	1	0	0	25
Bill 227	0	0	1	1	15
Bill 64.pdf	0	1	1	0	25
Ordinance 1202	1	1	1	1	108
Ordinance 1332	0	0	1	1	25
Ordinance 1368	1	1	1	1	188
Ordinance 1443	0	1	1	0	29
Ordinance 1744-A	1	0	0	0	90
Ordinance 201	1	0	0	0	23
Ordinance 362-A	0	1	1	0	89
Ordinance 744	1	0	0	0	21
Ordinance 970274	0	0	0	0	78
Ordinance 970652	0	0	0	1	40
Ordinance 982	1	0	0	0	21
Ordinance 983	0	1	1	0	23
Totals	8	8	8	6	0

Appendix C: Housing and Demographic Factors

Table C1 demonstrates that none of the derived Housing-Only factors meet the minieigen criterion. Thus, the factor loadings in Table B2 are not relevant to this dissertation overall.

Table C1: Housing-Only Factor Analysis Results (rotated)

Factor	Variance	Difference	Proportion	Cumulative
Factor 1	0.86982	0.05548	0.7493	0.7493
Factor 2	0.81344	0.81230	0.7014	1.4507
Factor 3	0.00114		0.0010	1.4517

N=358
Eigenvalues > 1 in Bold

Table C2: Housing-Only Factors Loadings (rotated)

	Factor1	Factor2	Factor3
% Change Median Household Income	.246615	**.3314867**	.0275116
% Change Median Property Value	**.6398522**	.285505	.0066471
% Change Median Property Tax	**.5648862**	-.1042886	-.0068461
% Change in Median Rent	-.0444695	**.3216057**	.0134857
% Properties Built 2000 or Later	.2469432	**.4349247**	-.0075427
% New Residents 2000 or Later	.1289854	**.5644242**	.0072198

N=358
Loadings > 0.3 in Bold

Table C3 demonstrates that only Factor 1 of the Demographics-Only factors meets the minieigen criterion. Table C4 shows that the Demographic Factor 1 is primarily based around a strong decrease in the White population and a slightly stronger increase in the Black population. This is similar to the relationship between the Black and White populations evident in Factor 1 during the main factor analysis.

Table C3: Demographics-Only Factor Analysis Results - Rotated

Factor	Variance	Difference	Proportion	Cumulative
Factor 1	**1.71128**	**0.92721**	**0.6239**	**0.6239**
Factor 2	0.78407	0.35747	0.2859	0.9098
Factor 3	0.42660		0.1555	1.0654

N=358
Eigenvalues > 1 in Bold

Table C4: Demographics-Only Factor Loadings (rotated)

	Factor1	Factor2	Factor3
% Change Population	.0032887	.1031008	.4534548
% Change Hispanic	.1938532	**.7833787**	-.0043245
% Change White	**-.8860424**	-.3763314	-.1695204
% Change Black	**.9410851**	-.0584254	-.1111471
% Change Other Race	.0545452	-.1213246	.4241149

N=358
Loadings > 0.3 in Bold

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Yin, R. K. (2016). *Qualitative research from start to finish* (Second Edi).

Curriculum Vitae

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EDUCATION:
- *The Graduate School, Rutgers University-Camden,* Camden, NJ
  2019 *Ph.D. in Public Affairs* (Expected)
- *Fox School of Business, Temple University,* Philadelphia, PA
  2008-2011 Completed coursework requirements for Ph.D. in Strategic Management
- *Yale Divinity School*, Yale University, New Haven, CT
  2008 *Master of Divinity*
- *Yale College, Yale University,* New Haven, CT
  2005 *Bachelor of Arts, Psychology*

FIELDS OF INTEREST:
Gentrification, Tax Abatements, Anchor Institutions in Community Development

RESEARCH EXPERIENCE:
Rutgers University, Camden, NJ *Research Assistant,* 2013-2017
- Conducted data analysis for the Walter Rand Institute of Public Affairs.
- Aided in the collection of field research data and the utilization of spatial regression.
  techniques for the Mapping Risk Project under the direction of Principal Investigator Dr. Stacia Gilliard-Matthews.
- Aided in the collection of employee data on behalf of the Camden Healthcare and Higher Education Taskforce under the direction of Principal Investigator Dr. Paul Jargowsky through the Center for Urban Research and Education.

Temple University, Philadelphia, PA *Research Assistant*, 2008-2011
- Aided in the formulation and implementation of organization theory research for Professor TL Hill and Professor Robert McNamee.

ACADEMIC PRESENTATIONS:
- Spencer T. Clayton "Tax Abatements and Gentrification: How Government Policy Disrupts Communities." Paper presented at the 47th Annual Conference of the Urban Affairs Association held April 19-22, 2017 in Minneapolis, MN.
- Shauna Shames, Ph.D. and Spencer T. Clayton "Is South Jersey Receiving its Fair Share?" Paper presented at the Walter Rand Institute Forum about South Jersey held December 6, 2016 in Camden, NJ.

- Spencer T. Clayton "Gentrification and Tax Abatements: A Case Study of Philadelphia." Paper presented at the 46th Annual Conference of the Urban Affairs Association held March 16-19, 2016 in San Diego, CA.
- Spencer T. Clayton "Tax Abatements and Suburban Poverty: An Analysis of the Philadelphia Area." Paper presented at the 45th Annual Conference of the Urban Affairs Association held April 8-11, 2015 in Miami, FL.
- Spencer T. Clayton "Tax Abatements and Suburban Poverty: An Analysis of the Philadelphia Area." Paper presented at the APPAM Annual Conference held November 6-8, 2014 in Albuquerque, NM.
- Spencer T. Clayton, "CDCs Navigating the Complexity of Changes in Legislative District Boundaries: A Case Study of Philadelphia, PA." Paper presented at the 44thAnnual Conference of the Urban Affairs Association held March 19-22, 2014 in San Francisco, CA.
- Spencer T. Clayton, "Religious Congregations and Neighborhood Stability: A Case Study on Philadelphia, PA." Paper presented at the ARNOVA Annual Conference held November 21-23, 2013 in Hartford, CT.
- Spencer T. Clayton, "Partisanship and the Splitting and Trading of Neighborhoods Across Electoral Districts." Paper presented at the Northeastern Political Science Association's Annual Conference held November 14-16, 2013 in Philadelphia, PA.
- Spencer T. Clayton, "Religious Congregations and Neighborhood Stability: A Case Study on Philadelphia, PA." Paper presented at the Federal Reserve Bank of Philadelphia's Community Development Graduate Research Forum on October 22, 2013 in Philadelphia, PA.
- Stacia G. Matthews, Robin Stevens, Straso Jovanovski, and Spencer T. Clayton, "Mapping Risk: A Spatial Analysis of Adolescent Marijuana Use in Camden, NJ." Paper presented at the Society for the Study of Social Problems' Annual Conference Held August 9-11, 2013 in New York, NY.
- Spencer T. Clayton, "The Connection Between Partisan Gerrymandering and Minority Vote Dilution: A Case Study on Philadelphia Area Congressional Districts." Paper presented at the 43rd Annual Conference of the Urban Affairs Association held April 3-6, 2013 in San Francisco, CA.
- Spencer T. Clayton and Straso Jovanovski, "Nonprofit Strategy Formation: The Story of Women of Faith and Hope." Poster presented at the 43rd Annual Conference of the Urban Affairs Association held April 3-6, 2013 in San Francisco, CA.
- Spencer T. Clayton, "The Role of Universities and Tax Abatements In Neighborhood Redevelopment Efforts: A Case Study on Philadelphia, PA." Paper presented at the Midwest Political Science Association Conference held April 10-13, 2013 in Chicago, IL.

AWARDS AND FELLOWSHIPS:
- Graduate Assistantship (2013-2017), Department of Public Policy and Administration, Rutgers University-Camden
- Governor's Executive Fellowship (2013-2014), Eagleton Institute of Politics, Rutgers University

WORKING PAPERS:
- Spencer T. Clayton, "The Connection Between Partisan Gerrymandering and Income Disparities: A Case Study on Philadelphia Area Congressional Districts."
- Spencer T. Clayton, "The Evolution of Charitable Choice Through the Presidential Administrations of George W. Bush and Barack Obama."
- Spencer T. Clayton, "Toward a Model of Faith-Based Competitive Advantage."

RELATED EXPERIENCE

Research Economist II, Division of Local Government Services
New Jersey Department of Community Affairs (2017- Present)
- Prepare reports and data requests using budget data from New Jersey's 565 municipalities.
- Facilitate state aid calculation and distribution.
- Calculate property tax data for all New Jersey municipalities.

Graduate Assistant, Rutgers University-Camden (2013-2017)
- Conducted quantitative and qualitative research for various public policy-related projects at the Walter Rand Institute for Public Affairs.
- Maintained data and oversaw updates for the municipal infographics project.
- Assisted in the maintenance of the contacts database in Microsoft Access.

Administrative Assistant / Grant Writer Trainee, JAE Enterprises (2009-2012)
- Conducted research relevant to grants being written for clients. Assisted in the writing of business plans. Used QuickBooks to pay company bills, process invoices, and reconcile accounts.

Research Assistant, Fox School of Business, Temple University (2008-2011)
- Assisted professors with research on factors impacting management dynamics within various industries.

INTERNSHIPS

Intern, Councilman Bobby Henon, Philadelphia City Council (2014-2017)
- Attended meetings related to the formation of the Castor Avenue Business Group.
- Took photographs of nuisance properties for use at Problem Property Advisory Council (PPAC) meetings.

Governor's Executive Fellow, Eagleton Institute of Politics
Rutgers University-New Brunswick (2013-2014)
- Conducted quantitative research on suburban poverty in the Philadelphia area while interning with the Delaware Valley Regional Planning Commission.
- Attended special sessions about the legislative process in New Jersey.

Intern, Capitol Region Conference of Churches (2006-2007)
- Created a database of Connecticut's faith-based community leaders. Organized and administered curriculum for the FaithWorks Summer Leadership Institute organized by the Capitol Region Conference of Churches, which served as the Office of Faith-Based and Community Initiatives for the State of Connecticut.

ACTIVITIES

Executive Pastor, Your Will Christian Ministries (2009-Present)
- Assist in the formulation of strategic objectives for the church. Facilitate meetings and logistics.

National Financial Director, Gamma Phi Delta Christian Fraternity (2012- present)
- Maintain financial records using QuickBooks. Prepare financial reports. Maintain organizational budget. File State tax forms and 990-PC.

Yale College Alumni Interviewer, Yale Alumni Schools Committee (2014- present)
- Interview prospective Yale College students on behalf of the Yale College Admissions Office

REFERENCES:

Available upon request.