Redefining Success:

Addressing Displacement Associated with Transit Extensions

A thesis submitted by
Jason J. Kurian

In partial fulfillment of the requirements
for the degree of

Master of Arts

in

Urban and Environmental Policy and Planning

TUFTS UNIVERSITY

February 2013

Adviser: Ann Rappaport
Reader: James Jennings

ABSTRACT

This thesis examines linkages between transit extensions and displacement through gentrification and explores Somerville's readiness to address displacement associated with a proposed transit extension. Somerville, Massachusetts, experienced economic growth and gentrification following the 1984 Red Line transit extension to Davis Square and now is anticipating a Green Line extension. This study includes a review of gentrification literature, a case study of planning for Davis Square in Somerville prior to the Red Line extension, and recent interviews with practitioners from the Somerville community in the areas of affordable housing, transportation, and planning to identify measures being taken to prevent displacement associated with the proposed Green Line extension. Displacement prevention measures are being implemented in Somerville, suggesting that lessons learned from the 1984 transit extension are being applied, within the limits of political feasibility and available funding.

.

ACKNOWLEDGEMENTS

I would like to thank my thesis adviser, Ann Rappaport, and my thesis reader and academic adviser, James Jennings, for their patience, knowledge, and guidance. I would also like to thank my interviewees who all donated the time to talk with me and discuss a difficult issue.

Additionally, I would like to thank my partner, friends, parents; all of whom were unbelievable and vital sources of support throughout this process. Lastly, I would like to thank UEP for providing me with an amazing group of friends and colleagues who are helping to create a more just and sustainable world. I am incredibly lucky and grateful. Thank you all for helping me through this challenging process.

TABLE OF CONTENTS

Redefining Success:

Addressing Displacement Associated with Transit Extensions

CHAPTER 1: INTRODUCTION

This thesis examines the linkages between transit extensions and displacement through gentrification and what can be done to address it. The new transit extensions mentioned are typically rail transit, light or heavy rail lines, connecting central business districts to other areas, mainly residential areas. This research is focused on transit extensions in gentrifying areas with residents that are considered vulnerable to displacement. This concept is explored through the experience of Somerville, Massachusetts and the Red Line transit extension of the 1980s. Currently, an extension of the Green Line through Somerville is being built and Somerville's readiness is explored.

New transit line construction means different things to different urban areas. For metropolitan areas in the United States whose growth has been car-dominated, particularly cities that are currently growing, new transit operations are attempts to diversify the travel modes of commuters. These areas attempt to leverage new transit stations as an anchor for transit-oriented development, typically mixed-use developments for residential and commercial uses. Transit is meant to encourage urban-style development with its accompanying density of population. This can be difficult and there is perhaps too much literature on how to achieve this growth and questioning whether it is even possible to encourage transit-use and density (Hess 2004). Other areas, usually cities that experienced substantial growth stemming from transit before the age of the automobile dominance like New York and Boston, have extensive transit systems that have

been in use for decades. Many neighborhoods of the metropolitan area are the model of what new transit-oriented development is meant to emulate in terms of density of different land-use types surrounding transit stations. Many centers of population in these urban areas currently without transit stations used to be served by streetcar or train lines that have since been removed. These are looked back on as "streetcar suburbs" which developed in Boston, Los Angeles, and other older-growth American and Canadian cities. They are basically transit-oriented development with the transit taken away. When new urban rail lines (light rail or subways) are slated to reach these areas, there may be redevelopment but in general the communities will be similar to those areas already served by transit. These areas would then seem to be the ideal place for a transit extension. However, can the transit extension have undesirable consequences?

Transportation Benefits

Public transportation in urban areas has the ability to decrease automobile congestion on the roads thereby decreasing the amount of pollution emitted into communities and the atmosphere. While technology is making progress in limiting the amount of air pollution produced by automobiles, immediate reductions can be made by reducing the amount of vehicle-miles traveled (VMT). According to the U.S. Environmental Protection Agency (EPA), reducing VMT with the accompanying emissions makes an impact from improving public health to reducing the amount of greenhouse gases that contribute to climate change. Transit-oriented development aims to reduce VMT by reducing the need for automobiles by providing housing, jobs, and amenities within easy walking

distance or by public transportation. Boston's transit system reduces approximately 2.9 motor vehicle-miles per transit passenger-mile (Litman 2010). By having a comprehensive transit system combined with dense development, individuals living in the Greater Boston area are more likely to drive less or not at all.

Automobile emissions can cause a variety of negative health outcomes. As indicated on the website of the Centers for Disease Control and Prevention (CDC), air pollution produced by motor vehicles "contributes to adverse respiratory and cardiovascular health effects," deaths related to crashes, and obesity from a lack of physical activity. A benefit of transit when it is effectively included in a community ("walk and ride" as opposed to "park and ride" stations, the distinctions of which will be covered later) that dovetails with the economic and environmental benefits of transit use is boosting public health. Transit station usage is usually determined to benefit those living within a half-mile of a station. The amount of walking that can be provided by half-mile or less walk to a station has been shown to have health benefits (Besser 2005). In Somerville, individuals tend to walk even when a station is more than a half-mile away (Reconnecting America 2009). There is also an economic benefit since transit can represent a great savings to the public by bringing people closer to jobs without the accompanying cost of gas, tolls, time in congestion, and parking.

Transit and Gentrification

In certain communities, this increased ease of mobility can lead to the displacement of communities that are being newly treated to rapid transit access.

Certain communities have been able to maintain housing affordability due to a lack of amenities. In Boston, the Massachusetts Bay Transportation Authority's (MBTA) elevated heavy rail Orange Line (El) was removed from the South End and Roxbury neighborhoods. In the aftermath of this, there was a fear among some community members that that an improved replacement transit service would serve to price them out of their homes (McKinnon 1988). The reasoning behind this lay in the unattractive nature of the El which, in spite of providing a quick connection to downtown Boston, was loud, dirty and otherwise undesirable to live near. It literally created the "wrong side of the tracks" which would ostensibly be undesirable for higher-income households. If the replacement service was the same or better it might remove the formerly negative aspects of living in the area and the communities served would suddenly become more desirable. The depressed housing prices of the area can seem attractive to higher-income individuals. This could create pressures that can lead to the displacement of the current residents.

This fear of transportation improvement poses a rather unfortunate question: Does improved transit access in these areas necessarily equal gentrification? If so, what, if anything, can be done to reduce displacement? Echoes of this question still linger today. This resonates more in a metropolitan area like Boston with an established and extensive rapid transit system as well as high density areas of population and development. This question has much significance for a current project, the proposed Green Line light rail transit extension through Somerville.

CHAPTER 2: SOMERVILLE BACKGROUND

MBTA expansion has had an impact on Somerville. Its history is intertwined with that of railroads and streetcars. Somerville was served by multiple streetcar lines and commuter rail stations that helped shape the city's dense housing development. These rail systems provided connectivity to the rest of the Boston metropolitan area. In a process that occurred in the Boston region and the rest of the United States after World War II, automobile usage rose and streetcars and railways declined in ridership. In the late 1950s, the streetcar lines were replaced by buses (City of Somerville 2009). Between 1958 and 1984, Somerville had no rail stations of any kind. The commuter rail system ran through the city, but did not make any station stops.

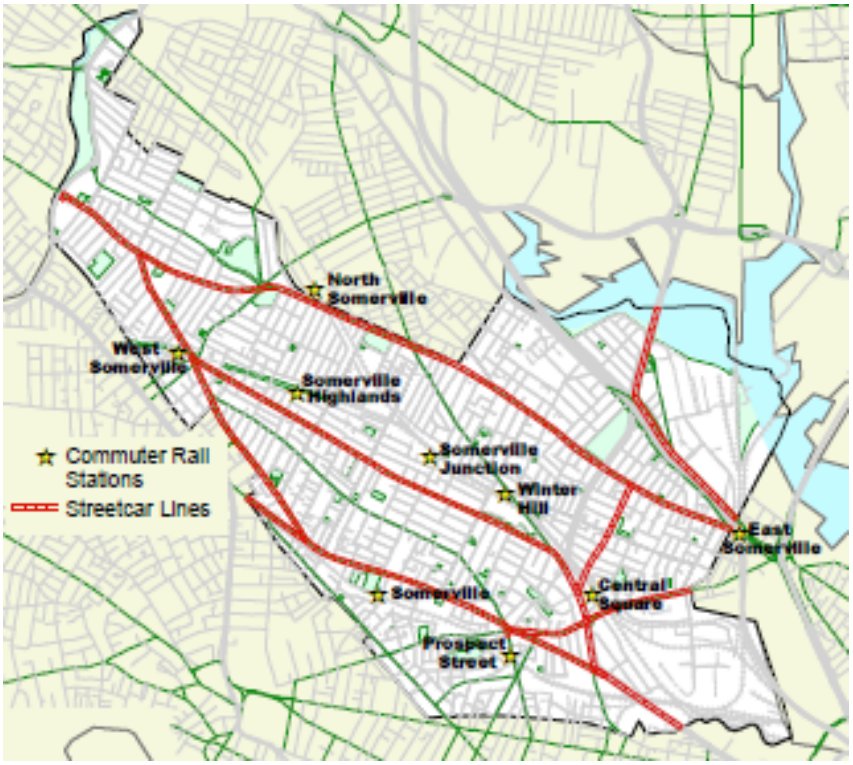

Figure 1: Past streetcar lines and commuter rail stations in Somerville (City of Somerville 2004).

The Red Line subway station at Davis Square opened in 1984 at a time when Somerville was more of a backwater in terms of transit access. Davis Square was a depressed area with boarded-up storefronts and was not generally an area known for the amenities it is now associated with. Recently the Somerville Community Corporation (SCC) has released a report stating, in terms of economic indicators such as income and property value, the Davis Square area currently has more in common with the rest of the Boston region in contrast with other areas of Somerville (Reconnecting America 2009). In fact, the Davis Square station area has a higher median income than the rest of the region. This can be attributed to the effect that providing convenient transit access to jobs and amenities combined with the particular benefits that living in Somerville provides. In particular, the restaurants, shops, and housing stock made largely of pre-World War II homes (City of Somerville 2008).

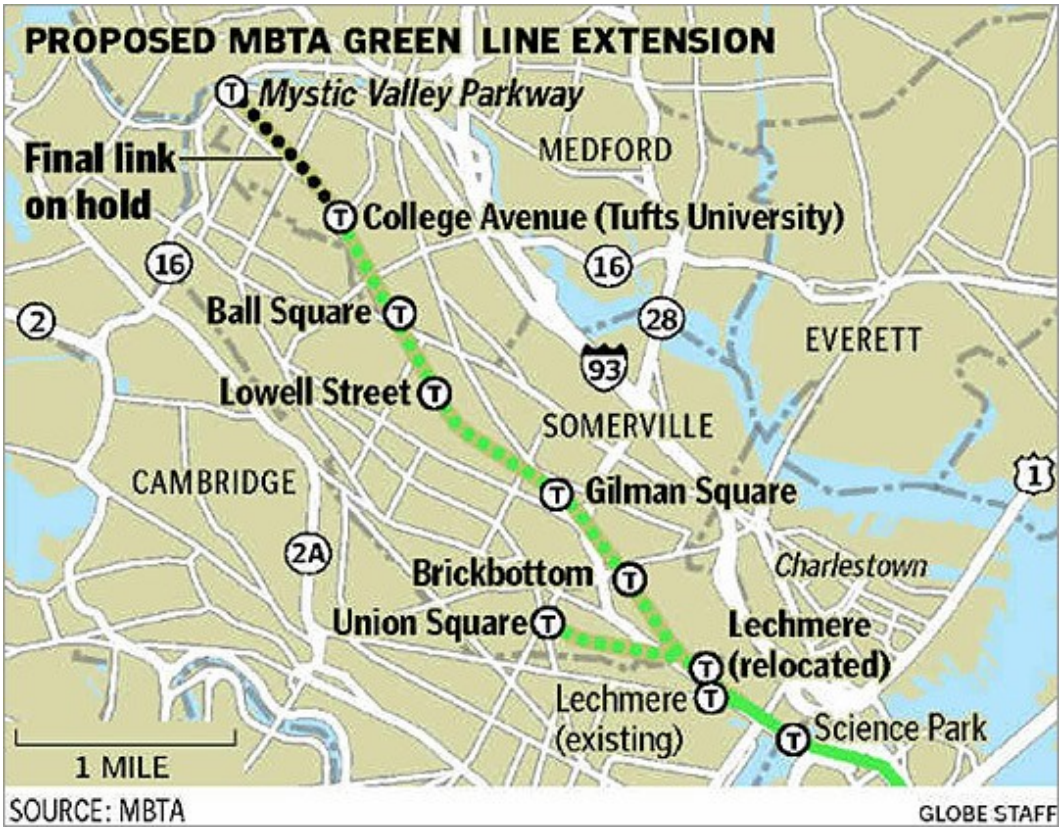

Figure 2: Planned Green Line extension through Cambridge, Somerville, and Medford (Boston Globe) (http://www.boston.com/yourtown/somerville/gallery/green_line_extension?pg=2)

Presently, the MBTA Green Line is due to extend from its current northern terminus of Lechmere Station in neighboring Cambridge through the city of Somerville with one branch possibly terminating at Route 16 by the Mystic River or in Medford at College Avenue near Tufts University and the other branch terminating in Union Square in Somerville. Like the Red Line, the Green Line will provide these communities with rapid transit access to downtown Boston with its jobs and amenities therein. This project has been anticipated in one form or another for decades. The current project is being built as a requirement to use public transit in order to mitigate the environmental cost of the

construction of the Central Artery/Tunnel (also known as the "Big Dig") highway in Boston (Massachusetts 310 CMR 7.36).

In Somerville, the Green Line will make stops, going east to west from Lechmere Station in Cambridge, at Union Square on one branch and Brickbottom (Washington Street), Gilman Square, Lowell Street, Ball Square, after which the line proceeds into Medford. The Union Square Green Line branch will follow the right-of-way (ROW) of the Fitchburg MBTA Commuter Rail line from Cambridge into Somerville. The Medford Green Line branch will follow the Lowell MBTA Commuter Rail from Cambridge into Somerville and finally into Medford.

Actions of the Major Community Actors

Local government and community organizations can play a role in providing assistance to those vulnerable to increased financial pressure from higher housing prices. Non-profit community organizations including Somerville Community Corporation, Somerville Transportation Equity Project (STEP), Groundwork Somerville, and Somerville Health Agenda created a coalition called the Community Corridor Planning (CCP) collaborative. CCP is holding a series of workshops dedicated to different issues the community will face, including one set of workshops dealing with issues of affordability and diversity; another workshop centered on jobs, local businesses, and economic development; and a third convening around green space, open space, and sustainability. In terms of promoting asset-building for low-income residents, Somerville Community Corporation (SCC) offers financial education programs and homebuyer

counseling. SCC also creates, rents, and sells affordable housing units (Regan 2010). The tools for asset-building will be discussed later.

The City of Somerville is also holding public meetings for input. Their Office of Strategic Development and Planning released studies identifying needs of the community and station design. Somerville has several programs aimed at increasing and preserving the amount of affordable housing available, which can be helpful when dealing with the economic pressures on housing related gentrification. In terms of asset-building programs, Somerville provides a first-time homebuyer assistance program and down payment and closing cost assistance program. Somerville's programs for affordable housing retention include zero-interest loans for lead abatement and housing rehabilitation, a property tax exemption for owner-occupants, mortgage foreclosure prevention program, tenant-landlord dispute mediation program, and monitoring of Expiring Use (of federal housing subsidy) properties. Programs to create affordable housing include an inclusionary zoning ordinance, commercial development linkage fees, and fees related to condominium conversion which pay into the Somerville Affordable Housing Trust Fund which provides funding for affordable housing efforts (Rawson 2011).

The Vulnerable Communities

Demographic groups that are most likely to use transit like the Green Line extension include minorities, low-income households, and renters. These groups are most likely to face displacement pressure from gentrification (Pollack, Bluestone and Billingham 2010). A report by Vanasse Hangen Brustlin, Inc.

(2005) for the MBTA shows that the branches of the Green Line extension in Somerville are nearly contiguously alongside environmental justice (EJ) communities of low income, high minority, and foreign born residents as defined by the Massachusetts Executive Office of Environmental Affairs and the Boston Metropolitan Planning Organization using 2000 U.S. Census data. It is important to consider the effect that increased housing demand from higher-income gentrifiers can have on these populations.

According to the 2010 U.S. Census, in Somerville 58.2% of households are nonfamily households, 67.4% of households are rented. 95.2% of housing units are occupied, 4.8% are vacant, with 2.4% available for rent. In Massachusetts, 37% of households are nonfamily; 37% are rented. 90% of housing units are occupied, 9.3% vacant 2.4% available for rent. Somerville has a higher percentage of nonfamily households, higher rate of renting, lower vacancy rate, and similar rate of units available for rent compared to the rest of Massachusetts.

To see the demographics around the proposed station areas, I utilized 2010 U.S. Census Block and 2005-2009 American Community Survey 5-Year Estimates 2009 Census Block data aggregated and constrained to a half-mile diameter around the proposed station areas with GIS mapping from the Center For Transit-Oriented Development's TOD Database website. The proposed station areas which have the highest concentration of minority populations, lowest

median household income[1], highest percentage of households with income less than $25,000, lowest rate of owner-occupied households, and highest percentage of renter-occupied households are Brickbottom, Gilman Square, and Union Square. They possess these characteristics with a higher intensity than the transit region of Boston and that of the other proposed Green Line stations (including College Avenue in Medford) and Davis Square.

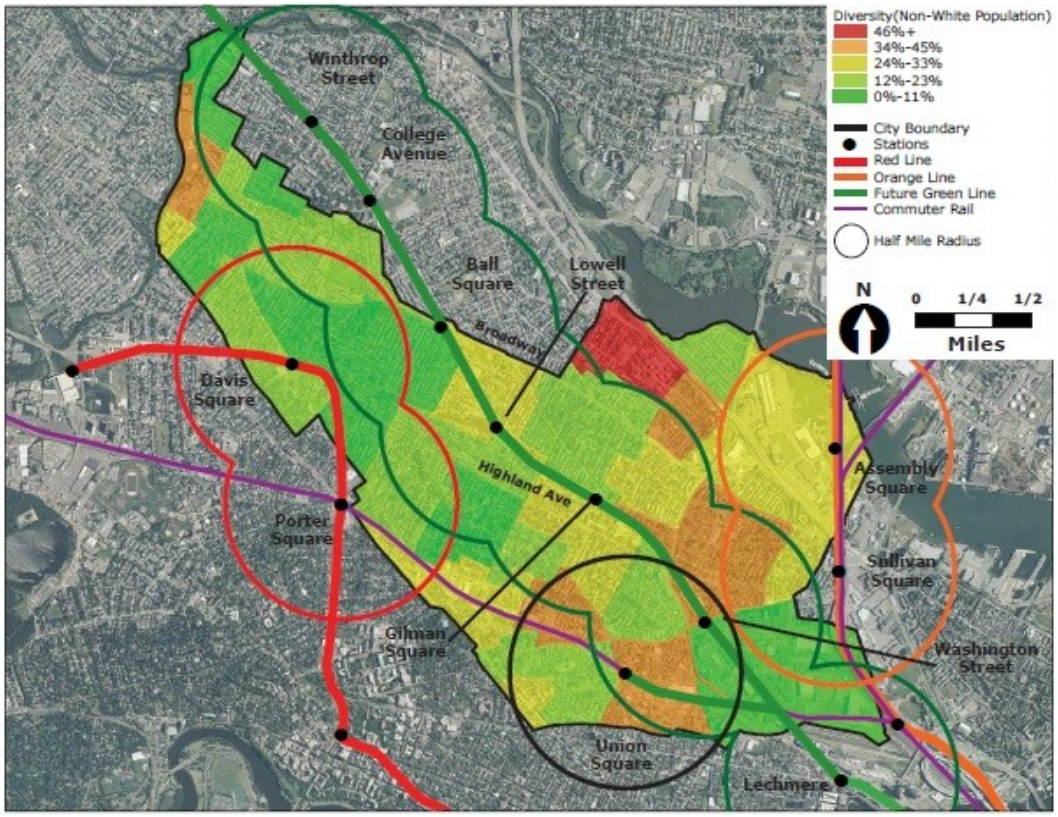

Figure 3: Map of Transit Lines in Somerville. Non-White populations by 2000 Census tract in relation to half-mile radii around proposed Green Line extension stations as well as other nearby transit stations (Reconnecting America 2008).

[1] The percentage of minority households and median household income in a given area are not necessarily associated; minority households may have a drastically different household income than the overall median household income.

Station Name	Percent Minority[2]	Median household income[3]	Percent household income less than $25,000[4]	Percent owner occupied[5]	Percent renter occupied[6]
Brickbottom	**44.70**	**$48,838.00**	**31.04**	**30.75**	**69.25**
Gilman Square	**33.60**	**$57,763.00**	**21.27**	**33.19**	**66.81**
Union Square	**33.50**	**$59,129.00**	**20.89**	**30.52**	**69.48**
Transit Region	25.20	$66,223.00	19.95	60.53	39.47
Lowell Street	24.70	$72,644.00	15.51	37.07	62.93
Ball Square	23.50	$74,038.00	15.09	38.86	61.14
Davis Square	18.00	$74,196.00	14.87	37.94	62.06
College Avenue	20.30	$74,928.00	15.53	41.64	58.36

Table 1: Demographics in a half-mile radius from proposed Green Line extension stations compared with the Boston transit region and Davis Square Red Line station half-mile radius area; ordered by median household income (U.S. Census Bureau 2010; Center for Transit-Oriented Development 2012).

[2] Census 2010 Summary File 1 (p0050004 + p0050005 + p0050006 + p0050007 + p0050008 + p0050009 + p0050010)/p0050001 aggregated from Census 2010 Blocks
[3] American Community Survey 2005-2009 5-Year Estimates b19013_001 aggregated from Census 2009 Block Groups
[4] American Community Survey 2005-2009 5-Year Estimates (b19001_002 + b19001_003 + b19001_004 + b19001_005) / (b19001_001) aggregated from Census 2009 block groups
[5] Census 2010 Summary File 1 (h0040002 + h0040003) / h0040001 aggregated from Census 2010 Blocks
[6] Census 2010 Summary File 1 h0040004 / h0040001 aggregated from Census 2010 Blocks

CHAPTER 3: METHODOLOGY

In the course of my research, I conducted three types of analysis in order to better hone my research questions and attempt to find common ground on policy solutions. First, I performed a literature review of germane issues related to gentrification and transportation. Beginning with securing a good working definition of gentrification, I delve into the debate surrounding the concept. I also look at how the provision of transportation affects these issues. Second, I created a case study of the Davis Square area and its experience with the expansion of the MBTA Red Line subway. Carefully examining the Red Line experience in Somerville may yield valuable insight to inform decisions related to the Green Line extension. Third, I conducted interviews with three individuals working in or with the community on the issues that are being researched here. I interviewed key informants representing key voices who are highly knowledgeable about the issues discussed in this thesis. I sought actors in local community organizing with regard to housing and transportation and local government. Finally, in the conclusion, I analyze to the extent possible whether the measures in place in Somerville are consistent with the literature on mitigating displacement.

For the literature review, I queried various academic databases in order to find scholarly articles which discussed gentrification. I was concerned with four aspects: defining gentrification; debates about the positives and negatives associated with this concept; tools that could be used by Somerville to mitigate the negative effects of gentrification; and the role transportation plays.

I chose the Red Line extension to Davis Square as a case study because it was a contemporary event, complex in nature and not containable. It is difficult to create an experiment with a control group as I am not looking at random treated sample, but a specific instance. As Yin (2003) describes, a case study is helpful when asking "how? and why?" questions that are explanatory as opposed to stating a correlation. I wanted to better understand how the planning process for the Red Line affected the community. Similarly, I wanted to know why the process occurred the way it did. I assembled journal articles from the databases of Tufts University libraries and Somerville Public Library's collection of newspaper articles, community meeting minutes, community organization documents, and master plan data from the Red Line extension era. Through this I was able to create a historical accounting of the priorities and decisions made by community and governmental actors.

In order to further parse out the questions derived from the case study of Davis Square and the gentrification research, I conducted interviews with three individuals working on different aspects of the Green Line extension in Somerville.

- Affordable Housing: Mary Regan, Community Organizer, Somerville Community Corporation (SCC)
- Equitable Transportation: Ellin Reisner, President, Somerville Transportation Equity Partnership (STEP)
- City Planning: Bradley Rawson, Economic Development Planner, City of Somerville

These respondents were selected based on a non-random, snowball methodology mainly based on referrals after discussing possibilities with a range

of professionals and community organizers engaged in activities related to environmental and social justice initiatives in Somerville. In interviews conducted in late 2010 and early 2011, I queried individuals about their views of gentrification, the Red Line expansion into Davis Square, and the links between transit and gentrification, and what, if anything, can be done to mitigate the adverse effects of the processes involved. These interviews were conducted in order to gain an understanding of what different interest groups are hoping to achieve in planning around the Green Line extension.

CHAPTER 4: LITERATURE REVIEW

WHAT IS GENRTRIFICATION?

Definition

Sociologist Ruth Glass is largely credited for coining the term "gentrification" in her 1964 book *London: Aspects of Change* describing the displacement of the original constituents of working-class neighborhoods in London:

> One by one, many of the working-class quarters of London have been invaded by the middle classes—upper and lower. Shabby, modest mews and cottages—two rooms up and two down—have been taken over, when their leases have expired, and have become elegant, expensive residences. Larger Victorian houses, downgraded in an earlier or recent period—which were used as lodging houses or were otherwise in multiple occupation—have been upgraded once again … Once this process of "gentrification" starts in a district it goes on rapidly until all or most of the original working-class occupiers are displaced and the whole social character of the district is changed. (Glass 1964, xviii)

Since Ruth Glass coined the term, gentrification has meant either the economic displacement of a socioeconomic class of people from their traditional neighborhoods by more affluent classes, or just the in-migration of affluent classes into neighborhoods occupied by lower-income classes. However, as decades have passed since Glass's observations, various authors have attempted to create more nuanced definitions of the process and its effects. The ongoing debate on what gentrification is and what it does will be discussed in the next section.

Vigdor (2002) cites the conditions previous authors used to define the process, including "private sector–initiated residential and commercial investment

in urban neighborhoods accompanied by inflows of households with higher socioeconomic status than the neighborhood's initial residents", original residents being displaced, and change in the "the essential character and flavor of the neighborhood." Levy, Comey, and Padilla (2006a) acknowledge the class-based character and add that often another component of gentrification is change in ethnic and racial composition. Combining these statements into a coherent definition of gentrification, I define gentrification as the class-based displacement of a lower-income community through the purchase and improvement of housing stock by those of higher incomes, thereby changing the character of the community.

Not all viewpoints on gentrification agree distinctly on what seem to be established parts of a definition of gentrification. Redfern (2003) identifies gentrification as a synecdoche (simplified term referring to a greater whole by a lesser part or vice versa) for the anxieties that persist between displacers and the displaced in the search for identity. We are all looking for a place that is 'ours' and provides a sense of place. This is opposed to theories of gentrification placed in a simple system of supply, demand and class antagonism (Smith 1996). At its core are groups of different status in a capitalist society; one is able to pursue their idea of place at the expense of another. Regardless of whether one accepts or rejects this argument, the anxiety gentrification-induced displacement produces is what makes the phenomenon contentious.

Displacement

An essential characteristic in the discussion of gentrification is the displacement of a lower-income group by a higher-income population. Levy, Comey, and Padilla (2006a) identified three distinct types of displacement: direct, secondary, and exclusionary.

Direct displacement occurs when one group is succeeded by another through process, policy, or program. Examples of this are destruction of neighborhoods through the urban renewal and highway building programs from the 1950's and 1960's (Lees and Ley 2008). Marcuse (1985, 205) refers to this process as "physical displacement" using the example of a landlord cutting off the supply of heat to a building. Levy, Comey and Padilla (2006a) include landlord harassment in the category of secondary displacement. I include it in the direct displacement category due to the physical inducement of the landlord in these instances.

Secondary displacement is the process by which households are made to relocate due to the inability to afford to live in their current unit due to factors such as increased rents or taxes. This is the type of displacement which concerns this paper and is frequently the form of displacement discussed in current literature on gentrification. It can be referred to as economic displacement because of the emphasis on affordability rather than being physically displaced (Marcuse 1985).

Exclusionary displacement occurs when the forces that create the above types of displacement in neighborhoods make it impossible for other households to live there (Marcuse 1985).

Unfortunately, once a population has been displaced it is very difficult to measure impacts of gentrification (Wyly and Hammel 1998). One may measure census tracts and discover that over time these demographics have changed, but it is difficult to say where these populations have moved and why they moved. Without this information, the area being affected can be measured for change in its inhabitants. Census data are able to reveal changes in income levels, ethnic and racial composition, and college degrees. Real estate data can be used to reveal changes in real estate value. Municipal data can reveal permit data for property improvements. From these sources change in the demographics of an area can be determined and a good idea of displacement can be inferred. A useful term to refer to this process is "inductive empiricism" (Wyly and Hammel 1998, 305). The displaced population can be somewhat derived by shifts in the data about populations.

Urban areas that have seen a process of development starting over a century ago tend to have stocks of improvable housing that were at one time disinvested and/or abandoned and then realized later for an enhanced value. In particular, this happens for housing developments that have distinctive and aesthetically valued architecture (Ley and Dobson 2008). This realization of the potential value of improvable housing stock comes at the expense of lower-income residents who came to rely on the deflated price of often neglected properties. The difference between the income generated by a property upon on which housing is rented and the potential income generated by the property is referred to as a rental gap or investment gap (Smith 1986). A landlord owning an

urban dwelling that has been neglected and rented at low prices could earn much more by selling the property to someone who can renovate it. Depending on the reason for the purchase, if the current renters are low-income they will most likely not be able to purchase the unit or rent at a higher price.

Stages of Gentrification

Levy, Comey, and Padilla (2006a) identified three stages in gentrification: early, middle, and late. According to this view neighborhoods in the early stage gentrification are beginning to witness housing improvements and higher property values while being near other gentrifying neighborhoods. Weesep (1994, 79) considers the early stage as when the gentrifiers begin moving into the neighborhood because of "the appeal of the dwellings and the local atmosphere." These gentrifiers tend to be artists and students (Ley and Dobson, 2008). In the middle are neighborhoods showing large increases in housing prices, but still possessing affordable housing and developable land (Levy, Comey, and Padilla 2006a). In these cases, median income in the affected neighborhood rose faster than the surrounding area, social tensions flared, and residents made complaints of landlord intimidation. At the late stage are neighborhoods with little affordable housing or the land to create any (Levy, Comey, and Padilla 2006a). In addition, any available land is very expensive.

THE GENTRIFICATION DEBATE

Theory of Gentrification

Since Ruth Glass amalgamated a large complex process into the term "gentrification", its definition has tended to vary. Since it is a term which was derived from a description and used to describe a controversial issue there is debate regarding what it is and whether its effects are truly good or bad for low-income or low-status households. Academic discussion and traditional cultural assumption has tended to view the process as being negative due to a focus on resident displacement and its many forms. In the decades since gentrification became an area for study as well as an issue which affects real estate, capital, and livelihoods, other viewpoints have emerged.

One of the premier arguments that attempt to get at the heart of why gentrification happens is between Neil Smith and David Ley (Slater 2006). Smith proposes an economic or production-side theory that sees gentrification as an outgrowth of a structural phenomenon called the rent-gap. The gap in the rent-gap is the difference between the potential value of land and its current realized value in terms of rent (Smith 1996). The gap is created when capital investments are made with the focus on suburbs at the expense of urban areas. A variety of ailments occur to the then-neglected urban neighborhood in order to devalue it. Once this rent-gap becomes sufficiently large and the land is cheap enough, capital comes back in order to make the potential value real. David Ley sees gentrification as a cultural or consumption-driven phenomenon driven by the desires of the gentrifiers themselves. For example, Freeman (2009) showed a very

slight correlation between diversity and gentrification. This result goes toward confirming Ley's position as diversity has been identified as an attraction for gentrifiers of a neighborhood (Florida 2003). It has been argued that, in spite of their differences, Smith and Ley see a role of both of capital markets and consumer choice in gentrification (Slater 2006; Hamnett 1991).

Proponents of Gentrification

When gentrification occurs, there are effects that can be labeled as positive. Commentators such as Freeman, Braconi, and Vigdor are of the conviction that "gentrification might bring new proximity to job opportunities, a larger tax base and better public services, improved retail environment, and other changes in neighborhood quality such as reductions in crime" (McKinnish and Walsh and White 2010, 182) Vigdor (2002) cites a litany of benefits that gentrifiers can bring. Local governments can have more revenue without the need to raise property tax rates and can perhaps lower them. Since the gentrifiers tend to have fewer children, schools are unaffected by increased enrollment. Reducing the concentration of poverty reduces expenditures per capita on fire services and police. These households of higher income are thought to bring businesses that want to cater to them. These new businesses would then create increased job opportunities. In particular, Freeman (2009) feels that gentrification puts underserved minority groups within reach of economic opportunity.

These proponents view gentrification as a process with positive results. If the phrase is considered a "dirty word", it is not gentrification per se, but "redevelopment, renewal, revitalization, regeneration and reinvestment"

(Newman and Wyly 2006, 23-25). Since the 1990s several ideas romanticized the process. Of particular importance were Richard Florida's books and articles regarding the "rise of the creative class" living in cities, drinking coffee, making art, living a generally more edgy experience than the homogenous suburbs (Slater 2006). The regeneration process was also seen to be breaking up poverty, the concentration of which seemed to many as the explanation for the long decline of inner-city neighborhoods. Similarly, gentrification is seen as an agent that allows racial integration, helping to diffuse racial antagonism (Freeman 2009). These processes would make gentrification seem like a remedy for urban ills.

The key difference in how commentators view gentrification on either side of the issue is the matter of displacement. Proponents of gentrification point to studies which show gentrified neighborhoods as not losing a sizable amount of low-income households (Vigdor 2002). A study conducted by Freeman and Braconi (2004) used the New York City Housing and Vacancy survey in gentrifying and gentrified neighborhoods in New York City between 1991 and 1999 concluded that displacement was not a problem because the percentage of moves that were due to displacement was less in gentrifying neighborhoods than in other neighborhoods.

Opponents of Gentrification

Displacement is at the heart of the argument against gentrification. Newman and Wyly (2006) consider Freeman and Braconi's study, showing displacement to be low, misleading because they studied neighborhoods that had already gentrified. In fact, the number of households possibly displaced was still

small, but significantly higher. It is alleged that the proponents of gentrification are not quite aware of "insecurity, anxieties and stresses" displacement can impose on individuals emotionally (Smith 2008, 2543). Lees (2008) alleges that gentrification can lead to self-segregation, with the initial mix of middle-class gentrifiers and the working-class gentrified keeping to their respective social groups. Also at issue is the idea of the gentrifiers as being a sort of solution for the metaphorical problem of the gentrified. Proponents of gentrification create a vision that gentrification is the best hope for low-income communities. This is opposed to policies that could directly help low-income communities.

In Neil Smith's book The Urban Frontier (1996), he speaks of the gentrifying city as the revanchist city. Revenge, being the English translation of the French "revanche", is meant to be against the poor who are thought to have taken the city (Lees 2000, 399). Curran (2004), coming from this perspective, feels that the historical deindustrialization that has occurred in urban areas, depriving working class people of work, is a part of this process. These are the low-income individuals who had previously made living in cities undesirable. Wacquant (2008, 199) sees the process as "cleansing" the working class, disempowered by an economic system that has failed them, from the city; allowing local government to move away from social support and towards supporting business and higher-income classes. Smith (1996, 186) creates a metaphor where the displaced are in a similar role as the native people of the Americas as the "frontier" of gentrification encroaches. Smith punctuates this metaphor of frontier with real examples of violent police such as the crackdowns

on protests against the clearing of homeless people from Tompkins Square Park in New York City in the late 1980s.

The Centers for Disease Control and Prevention (CDC) provides information identifying gentrification as something that can negatively affect the health of those who experience it. Displacement of vulnerable populations, such as the "poor, women, children, the elderly, and members of racial/ethnic minority groups" can make them more prone to a host of illnesses and shorter life expectancy (Centers for Disease Control and Prevention 2012). The frontier mentality and the view of gentrification as a boon for low-income communities combined with the emotional and physical toll of displacement is problematic for opponents of gentrification.

Conclusion

While the opposing sides differ on whether gentrification is good or bad, there is some agreement that more must be done to safeguard vulnerable low-income families. There are researchers with a favorable view of gentrification that understand that when property values rise, they coincide with higher rents and property taxes. They do not feel that displacement will necessarily occur (though it will happen in some cases), but this will cause more of a low-income household's income to be spent on housing. In the end, there will be low-income households that will be displaced as a result of gentrification.

LINKAGE BETWEEN TRANSIT AND GENTRIFICATION

In the Boston area, anecdotal evidence around transit extensions is that they bring about gentrification. Somerville's community organizations prepare for gentrification and its effects. Community meetings such as the workshops set up by Somerville Community Corporation are centered on having access to affordable housing in the wake of the Green Line extension. However, most academic and policy discourse I am able to find focus more on the impact of transit and transit-oriented development (TOD) in areas that currently do not possess anything similar (Hess and Lombardi 2004). Transit and TOD are provided as a way to change current behavior in the area in which they are being prescribed. If land use is sprawling and automobile use is too high, then transit and TOD offer a way to fix those problems. The literature then focuses on whether these prescriptions had their intended effect in changing the behavior of individuals in using the automobile less and public transit more. It is rare to find a study that takes into account older urban development in the United States that already have this behavior (Hess and Lombardi 2004). This is important because "most studies are unique to a given locale and do not provide a firm basis to judge future impacts" (Hess and Almeida 2007, 1042). It is rare to find studies on gentrification that has occurred because of property values that have increased due to improved transit.

Nearly all research commenting on the impact of rail transit on property values mentions Alonso (1964 quoted in Debrezion and Pels and Rietveld, 2007, 162) who enshrined the idea that rents will decrease the further away the property

is from the central business district (CBD) of a city. This is expanded upon with the assertion that transportation infrastructure can function the same way when a station can provide quick access to the CBD; rents will then decrease the further a property is away from the station (Debrezion and Pels and Rietveld 2007). Benjamin and Sirmans (1994) found that apartment buildings in the Washington DC area close to Metrorail stations had rents that decreased the further the distance from the station. Hess and Almeida (2007) found that Buffalo's light rail line did not show any significant effect on property values with relation to distance from rail stations, possibly as a result of its short running distance, lack of development on the line, and lack of access to regional opportunities. Although they add that this gives an opportunity for low-income households to take advantage should Buffalo's remaining economic interests decide to invest in development along the light rail route (Hess and Almeida 2007).

Kahn (2007) used census data from 1970 to 2000 in order to track gentrification trends around new rail transit stations. He chose fourteen cities in the United States that possessed census tracts that did not have rail transit (light rail, subway/metro, or commuter rail) within a mile before 1970 and received new transit extensions between 1970 and 2000. In this study, the treatment group was made up of census tracts receiving rail transit extensions and the control group was made up of tracts that were equidistant to the central business district (CBD) of the city but were not close to rail transit (Kahn 2007, 168). He then analyzed census tract data for changes in housing values and number of college students around new station and control areas. Increased home values and increased

numbers of college graduates represented gentrification in this analysis. College graduates were selected as a "key indicator" of gentrification (Kahn 2007, 174). It is important to note that the displacement aspect of gentrification is not explicitly measured here because it is difficult to measure directly; instead it is easy to measure the after effects.

In this analysis, Kahn also considered the type of station constructed. One station type is referred to as "Park and Ride," which are stations with parking lots allowing rail passengers to drive to the station and park their automobile. The other station type is "Walk and Ride," which is prioritized around pedestrian access at scale with the surrounding neighborhood and does not feature parking or parking lots prominently. An interesting finding was that "Park and Ride" stations did not raise property values and actually tended to decline compared to similar areas without transit. This is opposed to "Walk and Ride" stations which tended to increase property values. This is slightly unsurprising considering the preponderance of parking lots in "Park and Ride" stations. Jane Jacobs would have referred to parking lots as "border vacuums" which serve to disrupt "lively areas" (Manville and Shoup 2005, 244). Accordingly, a station that is woven into the community like a "Walk and Ride" has an advantage by the potential to be aesthetically pleasing.

The results for Boston fit with the evidence from Davis Square. In the study, Kahn refers to the city of Boston itself but the tracts he refers to are also in surrounding areas of Boston including tracts along the Red Line extension through Somerville and Cambridge. Kahn (2007, 173) states, "Boston is the city

exhibiting the strongest evidence of poverty magnet effects in new 'Park and Ride' communities and gentrification in new 'Walk and Ride' communities." Kahn shows, when compared to similar areas without a transit station, a decline of 5% in home prices around "Park and Ride" stations and a 7% increase in home prices around "Walk and Ride" stations in the Boston area (Kahn 2007, 173). In particular, he mentions the experience of Davis Square having greatly increased its share of adults who are college graduates, going from 8.2% in 1970 to 18.4% in 1980 which is prior to the opening of the Red Line station; after the station opened, the share of adults who were college graduates rose to 35.7% in 1990 and 49.7% in 2000 (Kahn 2007, 177). Compared to the share of adults who are college graduates in the greater Boston metropolitan area in general over the same time period, Davis Square had a lower share before the Red Line extension and a higher share after. One last important note is that in Kahn's (2007) study, Boston was one of only three of fourteen metropolitan areas that built rail transit extensions in the country that produced this effect, the others being Chicago and Washington DC. The Boston metropolitan area is unique with households being affected by the type of rail transit station built as opposed to most metropolitan areas in the country.

CHAPTER 5: DAVIS SQUARE CASE STUDY

While the impacts of the MBTA Green Line extension through Somerville are being studied and debated, it is important to look at the last rapid transit extension to come to this city: the MBTA Red Line subway station in Davis Square. Discussions took place in the 1970s and early 1980s that are similar to today with regard to maintaining neighborhood stability while capturing the effects of the transportation improvements. Historic events leading up to the Red Line extension substantially aided the affected community in their ability to be part of the planning process, a factor that remains in play today.

The focus of this discussion will be on the events leading up to the Red Line extension and their importance and the subsequent plans made by the Somerville Office of Planning and Community Development (OPCD) and neighborhood groups to prepare for the Red Line. This will give a picture of the opening up of community involvement and how the development plans looked to leverage the success of the MBTA station.

Present

> Out in Somerville, a blue-collar suburb of Boston awash in artistic-energy spillover from Cambridge, something is happening. Two of the 20 young writers in Granta's fiction issue last year hail from here, and a lively cultural milieu has popped up around Davis Square. With its bookstores, Irish pubs, and adventuresome Somerville Theater, it's an alternative to franchise-filled Harvard Square. (Walljasper and Kraker 1997)

As a result of the planning process coinciding with the opening of the Davis Square Red Line station in 1984, an area once considered blighted became

successful (Transportation Research Board 1998). Compared to the 1970s, the 1990s narrative of Davis Square had a much different tone. The quote from Walljasper and Kraker (1997) in *The Utne Reader* was from a listing of the "hippest" areas in the United States to live in. However, with the increased public sensitivity about gentrification, instead of worrying about the health of the square, there are worries about the effects of success. According to a resident interview by Howley (1999), "If Somerville were a little less hip, there would be a lot more people who could stay here. I have friends who were forced out - and had to take their kids out of the school system - because they could not afford the escalating rents". I witnessed similar complaints of how the city has changed in an August 12, 2009 meeting of the Community Corridor Planning project (CCP) in the Gilman Square neighborhood of Somerville. This was the only documented occurrence I witnessed, but I have in the past heard numerous similar complaints. No longer did community members with roots in Somerville see familiar faces, particularly in Davis Square; most acquaintances have moved to ostensibly more affordable neighborhoods in the nearby cities of Malden and Everett. As of this writing, CCP is convening a working group of community members to create housing policy recommendations with this history in mind.

In Reconnecting America's May 2008 study "Somerville Equitable Transit-Oriented Development Strategy" it was shown that Davis Square (in addition to nearby Porter Square in Cambridge which also has a Red Line station from the extension) had experienced a demographic shift in the Red Line station areas since their opening that distinguishes the areas from the rest of Somerville.

Between 1990 and 2000, there had been an upward shift of 60% in median incomes. The study shows that property values and rents are higher than the rest of Somerville. By the 2000 Census, median incomes in Somerville's Red Line station areas are not only are higher than in other parts of Somerville but the Boston region as a whole. These are powerful indicators of displacement (Cravens, et al. 2009). The plans put in place by the time of the opening of the Red Line station in Davis Square do not seem to have stemmed this outflow.

Background

Davis Square is located in the city of Somerville in close proximity to Cambridge and Tufts University. According the US Census, Somerville is a city with the highest population density in New England. Somerville is located to the northeast of downtown Boston between Cambridge, Arlington, Medford, and the Charlestown neighborhood of Boston. It was a streetcar suburb, in that its growth was heavily influenced by the path of streetcars before automobiles became the prevalent form of transportation and a major destination in the area (Transportation Research Board 1998). After the streetcars were removed, buses were the primary method of reaching Boston until the Red Line extension into the area opened (Clarke 2003).

From the mid 20th century until after the extension of the MBTA Red Line, Davis Square had a reputation for being a decaying urban area. Traffic through the area was impeded frequently by a freight rail line that ran through the middle of the square (Transportation Research Board 1998). It was also a congested intersection of several well-traveled streets (Holland and Elm Streets,

College and Highland Avenues). Davis Square retailers suffered from nearby competition from Massachusetts Avenue and shopping mall in Porter Square (City of Somerville 1978). Somerville Mayor S. Lester Ralph (1973) called the possible arrival of the Red Line a "shot in the arm" for the Davis Square community by stemming the loss of stores, jobs, and tax base which had been occurring in the area for years previous.

Davis Station opened in Somerville's Davis Square in 1984 as part of an expansion on the MBTA's Red Line from Harvard Square to Alewife. While this is a rather mundane statement, it was part of one of the most important sea changes in US transportation history. It is essential to understand that the success of Davis Square was due to, in part, a paradigm shift in planning. This allowed the Red Line to expand and encouraged a plan to be put in motion devised by a variety of actors in Davis Square, notably those in the community who would have been pushed aside in previous eras. They created a blueprint by which community members affected by the Green Line expansion benefit from today in terms of being able to have input in the process. One crucial area to be investigated, however, is whether the plans for Davis Square had anticipated the gentrification which would occur later.

The Anti-Highway Revolt and Red Line Expansion

For decades until the early 1970s, there had been plans to extend Interstate 95 (I-95) through the Boston metropolitan area and create an "Inner Belt" (as opposed to the outer highway belt of Route 128 around Boston's inner suburbs) to circulate highway traffic through Boston, Cambridge, and Somerville. The Inner

Belt was to cut through the Jamaica Plain, Roxbury, South End, Fenway/Kenmore, and Charlestown neighborhoods in Boston as well as Cambridge and Somerville with the belt meeting other highways in a thirty-five acre, five story interchange in Roxbury (Lupo, et al. 1971). As was historically the case with the interaction of the Interstate Highway System and urban areas, it would have cut through viable neighborhoods for the purpose of moving car traffic quickly through these areas. In similar instances, the elevated Central Artery highway was responsible for leaving a gash running through downtown Boston leading to the remains of the West End neighborhood that was destroyed by urban renewal; nearby the Tobin Bridge which cut a massive swath through downtown Chelsea.

In the past, highway-building and urban renewal projects were the products of a planning process determined by the politically powerful and approved by hand-picked community members (Tuloss 1995). This made the destruction of urban neighborhoods easier, as powerful institutional actors would see massive projects and their collateral damage as being for the greater good. As depicted in the book *Rites of Way*, it had not occurred to the planners that a highway may not have been necessary (Lupo, et al. 1971). By the late 1960s it became clear to many area residents that the potential destruction to be caused by the Inner Belt far outweighed the benefits. By the time the planning stages were to become reality in the Inner Belt areas, citizen and institutional opposition had reached a scale where it could not be ignored in what has been called an "anti-highway revolt."

Unlike the previous decades in which opposition to urban destruction was unheeded, the revolt managed to create enough pressure to force a change (Lupo, et al. 1971). In 1970, Governor Francis W. Sargent called for a moratorium on new highway construction within the Route 128 region and helped initiate the Boston Transportation Planning Review (BTPR) to bring about a reevaluation of the transportation needs of the state. The BTPR resulted in two historic changes for planning: federal transportation dollars were converted from highway to rapid transit use and the planning process was more open to affected stakeholders as opposed to being a mainly technical exercise (Gakenheimer 1976). Part of the shift in highway funding to transit created the Red Line extension to the Alewife Brook Parkway in Cambridge via Davis Square (Salvucci undated).

Davis Square Planning Process

After the BTPR there was a shift in tone from primarily institutional actors towards inclusion of outside voices (Salvucci undated). At the same time, there had been more than a decade of increased mobilization and success of constituencies affected by transportation plans (Tuloss 1995). This was the era that Davis Square's community worked in towards the construction of the new Red Line station.

Around 1980 Somerville United Neighborhoods (SUN), an organization of Somerville community activists, issued a pamphlet detailing proposed development plans for Davis Square in order to increase awareness in the community and allow them to take action. A range of actors from the Somerville's Office of Planning and Community Development (OPCD), Tufts

University's Urban and Environmental Policy department (UEP) and resident groups both created and solicited a number of plans in order to maximize the potential benefits of the arrival of the Red Line. Here are five plans and their recommendations for Davis Square from SUN's pamphlet:

Plans for Davis Square 1973-1982 (Geiser 1978)

1973: Somerville OPCD: Davis Square Redevelopment Plan

- Encourage medium density in the core, low density in the residential area, varying density in the buffer zone.
- Promote multi-family housing in the buffer zone (between residential and commercial areas) for elderly and small families.
- Conserve, rehabilitate, and demolish housing according to its physical condition.
- Promote air rights development.
- Encourage office construction in the buffer zone.
- Encourage implementation of TOPICS (traffic) plan.
- Create seating for the elderly.

1977: Tufts UEP Analysis for the Residential Community

- Condominium conversions
    1. Discuss conversions in neighborhood group meetings.
    2. City should enforce parking minimums; condominium conversion taxes; use policy to limit "certain types of conversion."
    3. "Discuss the possibility of… low-rise apartment buildings… to take pressure for rental units off of existing housing stock."

- Assessments – Fix property tax system to stay current and uniform.
- Neighborhood Conditions – Encourage community participation in advisory committee in community development office. Keep informed on CDBG and rehabilitation loans/grants.

1978: MAPC & Somerville Chamber of Commerce: Urban Design Study

- Increase visible surface parking.
- Improve traffic circulation to reduce congestion.
- Improve crosswalks for pedestrian safety.
- Storefront facades “will be cleaned up” and “uniform”.
- Signage will be made uniform.

1980: UEP report for SUN: “Development Alternatives”

- Improve data collection
- Determine resident concerns
- Critically evaluate development proposals
- Recognize conventional and confrontational citizen participation
- Discover alternative development plans that SUN can implement
- Identify organizational and written resources for SUN in development planning

1980: Somerville Engineering Incorporated report written for Somerville OPCD.

- Build four-story office building near Davis Square station.
- Build three to four-story parking garage next to the proposed office building.
- Build subsidized elderly housing on Woodbridge Inn site.

- Bring supermarket to Telephone Building.
- Upgrade building facades.
- Street and playground improvements.

SUN had three recommendations for residential stabilization (Geiser 1978):

- Incumbent upgrading; Community organizations should work with banks to secure loans for residential property upgrades.
- Create land trusts to secure affordable housing.
- Property resale reassessment

Summary of plans for housing and resident protection:

Governmental actors:	**Community organizations/UEP:**
• Encourage growth in varying densities. • Promote multi-family housing. • Build elderly housing.	• Limit condominium conversions. • Consider low-rise apartment buildings. • Make housing upgrades more affordable. • Fix property tax assessments.

In the early 1970s, the Metropolitan Area Planning Council (MAPC) and City of Somerville decided to create their own joint development plan with the MBTA for how the Red Line would impact Davis Square (City of Somerville 1982). One of the major groups outside of the government involved in the planning process was the Davis Square Task Force (DSTF) formed in 1977. DSTF was an alliance of the Ward 6 Civic Association, Davis Square Business Association, Somerville Chamber of Commerce, and area residents. They created their own plan for development. According to minutes of a June 28, 1979 meeting of the Ward 6 Civic Association, pressure had been applied on the city government to drop their joint development agreement. At this point, Somerville

OPCD provided planning expertise to DSTF in order to incorporate their plan into OPCD's. These were made into a series of working papers and distilled in order to create the Davis Square Action Plan 1982. After years of government and community plans, this can be seen as the point where their interests intersected.

1982: Davis Square Action Plan (City of Somerville 1982):

- City will encourage housing rehabilitation through State Housing Initiatives Program (SHIP).
- Encourage gradual reinvestment in area housing.
- Implement condominium conversion controls.
- Create elderly housing at Woodbridge Inn site.
- Property owners can develop their properties according to existing regulations and need special permission for any exceptions.
- Encourage landscaping to screen residential areas from commercial activity

Elsewhere in the report there are mentions of two sites that could be used for housing: a former school and the 16,000 square feet around a vent shaft. As of June 2010, the school contains 16 condominium units and the vent shaft is surrounded by a parking lot and has not been developed.

Conclusion

Historic events gave communities the power to have more of a say in projects that affect them. The Davis Square Action Plan makes some provisions for assisting residents in housing upgrades and slowing condominium conversions. However, residential development plans are mostly reactive and

limited aside from creating elderly housing. All the recommendations are geared towards preventing change in the character of the neighborhoods surrounding Davis Square. My review of historical materials related to Davis Square planning in anticipation of the Red Line did not reveal any evidence that gentrification was anticipated nor did it show evidence that decision makers wanted to take active measures to prevent displacement of families.

In the plans listed above, Somerville OPCD and UEP gave suggestions that more housing should be developed. This is not reflected in the final Davis Square Action Plan. While the 1982 plan worked alongside the Red Line station to make Davis Square a success, it failed in that one aspect.

CHAPTER 6: INTERVIEWS

I conducted interviews with practitioners who work with the Somerville community in the areas of affordable housing, equitable transportation, and city planning to learn whether and how displacement is being addressed in the anticipated Green Line extension. These individuals are familiar with the linkage between concepts of gentrification with the Green Line extension. These informants work within the non-profit Somerville Community Corporation (SCC), Somerville Transportation Equity Partnership (STEP), and in government in the Office of Strategic Planning and Community Development for the City of Somerville. SCC and STEP are part of the Community Corridor Planning (CCP) collaborative with other Somerville non-profits organizing around issues of the Green Line extension that affect the community. These interviewees were able to give insight into the concepts being discussed through their work in and for the community.

The Interviewees

Ellin Reisner is the president of the Somerville Transportation Equity Partnership (STEP). In 2012, Ms. Reisner won the distinction of being an "Unsung Heroine" by the Massachusetts Commission on the Status of Women (Guha 2012).

Brad Rawson is an Economic Development Planner for the Office of Strategic Planning and Community Development in the City of Somerville.

Mary Regan is a community organizer for the Somerville Community Corporation (SCC). She is a facilitator of SCC's Affordable Housing Action

Committee which engages with the community in trying to secure a vision for what development should look like around the Green Line extension in terms of affordable housing.

Defining Gentrification

I began with asking the informants what they considered the definition of gentrification. Ms. Regan defined it as the displacement of lower income populations by higher income populations with the possible effects of changing the ethnic, racial, and class diversity within a neighborhood. Ms. Reisner saw it in terms of an undervalued neighborhood becoming desirable with the result of pushing out poorer households through higher mortgages or rents. Mr. Rawson characterized it by the "in-migration of higher income households to a neighborhood" combined with the upgrading of its housing stock. Through his answer, displacement can be seen as a separate process.

Measuring gentrification and displacement

Through analysis of the literature regarding gentrification, a common theme is the difficulty measuring the phenomenon in a precise way. I wanted to know how these practitioners were able to detect the occurrence of gentrification. Ms. Regan acknowledges that a further degree of difficulty lays in the transient nature of the population of the Greater Boston area, in particular the student population. She sees the change in the number of cars in a neighborhood, the selling or renting price for housing, and school population as indicators. Ms. Reisner sees the change in the increased "flipping" of houses and the increase of young people. Mr. Rawson sees gentrification (as opposed to displacement) being

characterized by the change in median household income, number of new permits for residential improvements, number of registered vehicles as a proxy for income. Displacement is measured by the change in number of condominium conversions, sale of rental properties, landlord-tenant disputes being mediated by municipal or nonprofit agencies, and the withdrawal of students from public schools.

In the absence of census data being able to clearly state that one has moved from one neighborhood to another, these telltale signs indicate that the population has changed by moving from one set of characteristics to another. A common theme is the presence of individuals who can pay more for housing and housing improvements, the lack of children, and the increase in car ownership.

The vulnerability of Somerville neighborhoods to gentrification

Complicating efforts to create a consistent policy towards gentrification-related displacement, Ms. Regan and Ms. Reisner feel that there has been a mentality (more pronounced before the Red Line expansion) in Somerville to idealize suburban life. Ms. Regan feels that, as opposed to people desiring dense and more urban development, some people still want there to be lower-density development in an effort to come closer to the style of the suburbs. These forces are bolstered by Somerville's Board of Alderman who Ms. Regan characterizes as older and whiter (ostensibly older and whiter than the diverse neighborhoods she is looking to protect) who emphasize more parking for cars and less density in development.

Ms. Regan sees the eastern part of Somerville as containing more low-to-moderate income households, more families, more immigrants, and lower attainment of education, diversity of language and country of origin. The western part of Somerville, which contains Davis Square and its Red Line station is less vulnerable and has the inverse of those characteristics. There is an abundance of properties in the Inner Belt and Union Square areas in the eastern section along the Green Line extension that make them prime candidates for gentrification. In other areas, there is high homeownership and reasonable rents that are the result of long-time residency. Ms. Reisner sees affordable rental and property prices as the focus of price speculation. Mr. Rawson sees the same risk to areas where the property values are below Somerville's median values as well as "neighborhoods with high frequency of owner-occupied multifamily homes in which the primary householder is over 65 years in age". In these situations, the potential for change that comes with the Green Line causes Ms. Regan to consider these areas ripe for gentrification once the property owners decide to "cash out" and realize the appreciated value of their properties.

The Red Line: Attempts at Mitigating Displacement

It is difficult to find what actions were undertaken to mitigate displacement of communities around Davis Square when the Red Line expanded in the early 1980s. My interviewees were not aware of any notable anti-displacement efforts. Ms. Reisner notes when rent control ended in Somerville and in neighboring Cambridge after this expanded access to transit, housing costs in Cambridge were higher which made Somerville an ideal place to locate. She

notes that she lives near the Orange Line (Sullivan Station) from which gentrification has had little impact. This is consistent with an effect that I had discovered in my literature review as deriving from Sullivan station being a car-centered park-and-ride facility as opposed to a pedestrian-centered walk-and-ride station. The park-and-ride station is less desirable to live near than the walk-and-ride station, thus decreasing the demand for housing. She mentions that, with regard to the Green Line extension, "if you make it better, you'll push the people that live there out," noting that the alternative of denying the affected neighborhoods a service that is available throughout the greater Boston area is not a good option either. Mr. Rawson concurs with the idea that not much was done to mitigate gentrification, with the exception of the Somerville Housing Authority's senior housing built near Davis Square. As mentioned in the case study of Davis Square, this is the senior housing suggested in the Davis Square Action Plan.

Looking back one wonders, "what could have been done differently?" Ms. Reisner sees that more actively engaging the community would have been helpful. Basically, the steps that are being taken today by the City of Somerville and the SCC would have been helpful during the period of the Red Line extension. She also would have been opposed to building affordable housing in undesirable areas such as near highways. Looking at the housing developments listed on the Somerville Housing Authority website, I can see that a large number of units are located next to highways and are far from rail transit. Mr. Rawson feels that zoning and parking regulations should have been changed to allow for more dense

transit-oriented development in the square. Linkage fees and inclusionary zoning would have allowed Somerville to create more affordable housing.

Negative/Positive Effects of Gentrification on Davis Square

In the academic and political debates on gentrification, there are many perspectives to consider. I asked the informants what observable negative and positive effects have resulted from gentrification stemming from the Red Line extension into Davis Square. On the negative end of the spectrum, Ms. Regan saw the traditional apartment housing structure of the Boston area, the triple-decker, change in significance. She remembered that traditionally triple-deckers were multigenerational households, with three to five individuals on each floor. This has transitioned into an era in which many of the apartments have been converted into condominiums containing one to two people on each floor, with higher rates of car ownership by these households. Ms. Reisner was similarly concerned with the departure of families who were traditionally a part of the neighborhoods of Davis Square that left for more affordable areas.

From an economic development standpoint, Mr. Rawson notes that the Davis Square economy is focused around the entertainment and service industries. Mr. Rawson sees retail as having been pushed out of the area. A major factor in this push is the lack of new commercial development due to strict zoning regulations implemented in the wake of the Red Line expansion. What he notes is also reflected in the case study of Davis Square, which details a fear among residents that more development in Davis Square would negatively alter the quality of life in surrounding neighborhoods. What Mr. Rawson sees, while

acknowledging that this is a "simplification of complex neighborhood dynamics," is that the lack of businesses operating in the daytime creates a lack of the clientele to support "mom and pop" retailers.

There are also positive effects of the Red Line expansion into Davis Square noted by the respondents. Ms. Reisner feels that Davis Square has become an attractive place for people to congregate as an area of nightlife and culture. This is surprising for her and her peers, probably due to the perception of the neighborhood pre-Red Line. Mr. Rawson concurs with the positive reputation that Davis Square has attained being in sharp contrast to its image from the 1960s and 1970s where one would try to avoid the area. The physical improvements to the landscape are also a benefit as the streets, commercial properties, and housing stock have become "safer, more accessible and more attractive."

The Effect of More Housing

The interviews suggest that there is a need for more affordable housing. However, affordable housing is difficult to develop, though organizations like Somerville Community Corporation and the City of Somerville are trying to fix this. At the same time there is an outcry to keep traditional family housing from being converted into condominiums and thus less attractive to the lower-income families that used to live in the neighborhood. Mr. Rawson noted that the constraints on commercial development have squeezed out "mom and pop" retailers from Davis Square. I wondered similarly that if constraints on new residential development were removed, if developments like high rises would help to alleviate the demand on the traditional affordable family housing. Can

more housing, not necessarily affordable housing, alleviate the pressure on traditional housing in Somerville?

Ms. Reisner believes that expanded development would have created an "eyesore" that would create resentment. She also fears that it would have created the conditions in which smaller housing units would have been destroyed to create the bigger developments. In her opinion, the Red Line station in Davis Square is perfect because it was built within the scale of the surrounding area. She cites Properzi Manor in Somerville's Union Square as an example of an affordable housing development that is out of scale with the community because it is approximately ten stories tall in an area of two-story apartments (I would note that Properzi Manor is Massachusetts State Housing, administered by the Somerville Housing Authority). The ideal place where Ms. Reisner would prefer bigger development is in the Inner Belt and Brickbottom Districts of Somerville. This is a light industrial area between highways and rail lines in the eastern part of Somerville. Since the area is currently underutilized, she sees an opportunity to create commercial development there. This will create the ability to accrue more funds for affordable housing and help balance the taxes collected in Somerville away from its current dependence on residential taxes. She would prefer that the developments created be of mixed-use commercial and residential development.

Ms. Regan believes that the unfettered market will take care of the need for non-affordable housing. Mr. Rawson feels that demand is "probably strong enough to exhaust any new supply and still spill over into the older units." The

scale of high rises increasing the potential for the use of inclusionary zoning and linkage fees to provide the funding for affordable housing is the only real benefit.

The Red Line Effect in the Green Line Extension

The reason that groups like SCC and STEP are working to involve the community in the process of planning Green Line extension is due to memories or perceptions of the Red Line extension. It is a relatively recent phenomenon that occurred next to the affected communities. Will the Red Line effect be similar to the Green Line effect?

Ms. Reisner feels that the effect of the Green Line extension will be somewhat different. STEP is looking for Davis Square-type change to happen in the Inner Belt and Brickbottom Districts and some changes in Gilman Square due to their current state of being underutilized in terms of development. She sees Gilman Square as having already gone through a wave of condominium conversion due to preparation for the Green Line, but still needing observation to ensure that those remaining in affordable housing units are able to stay. In general, she thinks it is good that people are paying attention to the issue of displacement in these neighborhoods. Ms. Reisner also said a comprehensive planning process could address many of these issues and help focus the city on raising additional revenue. It is important, she adds, to remember that any plan needs to incorporate raising additional revenue as less money is being provided by the federal government. In the time since the interview, a comprehensive plan for Somerville has come into effect.

Mr. Rawson concurs with Ms. Reisner's sentiment that Inner Belt and Brickbottom Districts will see changes while adding Union Square to that list. They are already major business districts, they are close to Cambridge and Boston, and the amenities they already provide make them prime candidates for investment. Ms. Regan had concerns about the fabric of Union Square being disrupted because of the likelihood of immigrant-owned businesses, if they are not able to purchase their buildings, not being able to afford rising rents. As for the other planned stops west of these stations in Gilman Square, Lowell Street, Ball Square, and College Avenue/Tufts University, Mr. Rawson does not see the same pressures affecting them. He feels that they do not have ideal vehicular access, which adversely affects these areas' potential with regard to developers, speculators, and commercial tenants. With vehicle access an important factor in the calculations of these investors, Mr. Rawson feels that the western stations are not likely to feel "transformational land-use changes" in terms of becoming a higher-density mixed use destination like Davis Square.

Improved Transit in Somerville and Risk of Gentrification

In Somerville, is there a higher likelihood that improved transit affects housing prices than in other areas? Ms. Reisner is not sure that this applies to Somerville as a whole. She is located near the Sullivan Square station on the Orange Line. Sullivan Square station is a park-and-ride facility with large parking lots under an interstate highway and is not an attractive place to live near, nor is there good access to it. Ms. Regan feels that due to a global trend of populations moving to cities, there is a risk of gentrification in cities. Mr. Rawson sees the

universities and institutions of Somerville driving demand for housing that will remain steady.

Gentrification in Boston-Area Transit Planning

Is displacement caused by gentrification a factor in transit planning in the Boston metropolitan area? Should it be? Ms. Reisner ostensibly feels that gentrification needs to be a factor. A major inducement for the federal government providing funds to a transit extension project is the benefit to environmental justice communities. The MBTA is mainly looking at whether the extension will provide ridership. To this end she notes that 85% of Somerville will be within a half-mile of a rail transit station when the Green Line extension is finished. She characterizes the MBTA as envisioning local governments as responsible for overseeing impacts to housing. To this end, Ms. Reisner feels that the city of Somerville needs to help immigrant communities remain in the city and continue to run businesses.

Ms. Regan also feels that issues of displacement and gentrification need to be raised with transit projects, with the Green Line in particular. The promise of the Green Line has been "better public transportation, access to jobs, cleaner air, [and] healthier lifestyles" (Regan 2010). She feels that the low and moderate income populations of Somerville who have fought to bring the Green Line extension deserve to benefit from it. Ms. Regan and Ms. Reisner feel that it is important for the local community to work with the city and state in order to preserve their access to transit and affordable housing.

With regard to the question of whether gentrification has been a factor in planning, Mr. Rawson answered "yes and no". With the range of government agencies, non-profit organizations, and informed citizens groups, there is the ability to prepare for and plan around possible gentrification. Unfortunately, in terms of the regulatory framework in Somerville, implementation can be lacking. To this end, he adds, "planning happens but is not required." However, he feels that it needs to be a factor for two reasons, equity and efficiency. In terms of equity, when engaged with the public it has become clear that "people value diverse, dynamic communities which provide a range of housing options." In terms of efficiency, it is counterproductive to have a process in which transit extensions bring in higher-income households with higher rates of automobile ownership. The benefits of taxpayer investment in transit will be eroded in terms of ridership and the economic and environmental benefits that can be gained. Pucher and Renne (2003), studying travel survey data, saw a link between higher income and higher rates of car ownership as well as a link between car ownership and a sharp decrease in transit usage. Mr. Rawson feels that the automobile ownership-usage question must be planned for and mitigated.

CHAPTER 7: AFFORDABILITY EFFORTS IN SOMERVILLE

While attempting to divine what Somerville should do to avoid gentrification-aided displacement, it is important to understand what Somerville is currently doing. This involves looking at different aspects of keeping neighborhoods stable by maintaining affordable housing. Different strategies for ensuring housing affordability involve: building assets within a community, providing affordable housing for homeownership or rental, affordable housing retention, and other methods.

Mr. Rawson, as a planner for Somerville, is able to list a number of programs that the city offers to keep housing affordable. Among these are programs for lead abatement, housing rehabilitation, first-time homebuyer assistance, down payment and closing cost assistance, property tax exemptions for owner occupants, inclusionary zoning, commercial development linkage, the Affordable Housing Trust Fund, condominium permitting and application fees, foreclosure prevention, tenant-landlord dispute mediation, operating and development subsidies to community-based housing organizations, and the monitoring of expiring use (of federal subsidies to maintain affordable housing) properties with negotiations to preserve affordability. Many of these tools have been outlined into these subject areas by Levy, Comey and Padilla (2006b). I will use their structure in discussing mitigation policies focusing mainly on middle to late stages of gentrification while delving into the literature on individual methods to provide color.

Asset-building

Asset-building tools cater to the mindset that developing personal economic management skills and encouraging savings will provide residents with a stronger monetary base with which to deal with rising housing prices.

Ms. Regan mentioned a desire to provide job training and financial education programs. With regard to job training, there is the potential to rise from joblessness to work, or from low-income to higher income work. As Levy, Comey and Padilla (2006b) mention, there is more efficacy for this type of program during early stages of gentrification. It is a time-consuming process to develop skills that can change the income status of a household. Kennedy and Leonard (2001, 36) call efforts at harnessing economic growth into job opportunities "promising."

A type of financial education comes in the form of homeownership education counseling (HEC) programs. HEC programs help potential homeowners in underserved areas develop the knowledge base to save for homeownership and to maintain it (Levy, Comey, and Padilla 2006b). By definition, these programs are meant for those who have not saved their income to the extent required for buying a home. As an asset-building tool, it is not meant to create homeownership, but rather the opportunity to do so if it is possible. As far as efficacy the mortgage provider, Freddie Mac, (2000, quoted in Levy, Comey, and Padilla 2006b) cite a report from 2000 that showed that HEC participants are 13% less likely to become delinquent on their mortgages. HEC programs in classrooms had a slightly higher success rate than over the phone or

mail (Quercia and Spader 2008). Other research shows the effects of HEC and other financial education programs to be promising, but inconclusive (Collins and O'Rourke 2010). Accordingly, asset-building tools are deemed more helpful during the earlier stages of gentrification but will probably not help lower-income households in later stages when housing prices rise (Levy, Comey, and Padilla 2006b).

An asset-building tool aimed at the working poor, Individual Development Accounts, (IDAs) provide an opportunity for individuals to save money in special accounts from which funds are withdrawn and matched by a third party (Levy and Comey and Padilla 2006b). The sources for these matching funds can come from banks (in the process of fulfilling Community Benefit Agreements), non-profits, public agencies and individuals (Sherraden, et al. 2003). The money can be used to pay for down payments and other homeownership costs. Sherraden, et al. (2003) studied the effects of the first large administration of IDA's as a part of the American Dream Demonstration (ADD) of 1997. The purpose of the study was to determine whether increases in income led to an increase in savings. This was shown to not be the case. Those with lower incomes tended to save at a higher rate while saving the same amount as those with higher incomes. Getting qualified individuals to save is difficult as is providing adequate resources for the program (Levy and Comey and Padilla 2006b). The real effectiveness of IDAs seem to be the observed effect reported by Sherraden, et al (2003) in that the poorest tended to save more and were given financial counseling. These modest gains can only accomplish so much. The positive benefits of savings can help to

boost local economies once an individual's savings have matured but can do little in terms of rapidly rising real estate values that come with gentrification.

Affordable Housing Development

Inclusionary zoning is a way to leverage new for-profit development into units of affordable housing. In Somerville, the inclusionary zoning ordinance requires that any residential development consisting of at least eight units be required to make 12.5% of the units affordable. If that is not possible, there is an option to contribute a payment in-lieu of creating affordable housing units to the Somerville Affordable Housing Trust Fund. In-lieu fees can be a disincentive to creating affordable units unless the price is set close to the cost of building a unit (Mukhija et al. 2010). The effectiveness of inclusionary zoning ultimately lies with the strength of the local housing market (Levy and Comey and Padilla 2006b). It has been seen as a way to ensure affordable housing is produced rather than wait for the market to eventually produce it on its own (Newman and Wyly 2006). If there is enough desire for housing and the in-lieu payments are set high enough, then affordable housing will be produced.

An Affordable Housing Trust Fund can work in conjunction with inclusionary zoning, or any other type of fee transacted typically from real estate developments. It also works as a way to leverage an active housing market. This is its strength and its weakness as it will not accrue much funding if the housing market is weak (Levy and Comey and Padilla 2006b). Similar to inclusionary zoning, if there is enough market activity generating fees, there will be more possibilities for funding affordable housing.

Mr. Rawson would like to increase the ability of the inclusionary zoning ordinance to create more affordable housing by "targeted upzoning of commercial districts with higher inclusionary percentages." Upzoning would provide an opportunity to create dense, mixed-use residential and commercial development and increase the amount of units from which affordable units can be extracted. This is the type of development that Ms. Regan and Ms. Reisner also stated a preference for. Newman and Wyly (2006, 48) summarizes "upzoning enables landowners to capture windfall profits; the city should capture some of this back in the form of affordable housing units for the benefit of the entire city". While there were sensitivities shown by Ms. Reisner about development that is out of scale with the surrounding community, all the respondents were in favor of mixed-use development.

Upzoning would help provide additional units of affordable housing through inclusionary zoning. Ms. Regan stated that SCC would like to see increased commercial development in Somerville which would generate linkage fees that would be applied to the Somerville Affordable Housing Trust Fund. Since our original interview in 2011, I was informed by Mr. Rawson in 2013 that upzoning is currently planned for Broadway in eastern Somerville. This is a policy Mr. Rawson felt could have changed Davis Square's experience with the Red Line. With this type of policy, the interests of creating and retaining affordable housing as well as creating mixed-use development are served.

A common theme in the interviews was that Somerville faces a lack of funding to implement housing affordability-related policies. At the time of my

2011 interview with Mr. Rawson, he had expressed that funds awarded by the U.S. Department of Housing and Urban Development (HUD) Sustainable Communities Challenge Grant can be used to create a land bank for affordable housing. Since then, Somerville has won the grant for several efforts including creating a comprehensive plan. In November 2012, Somerville voters passed the Community Preservation Act (CPA), creating a new source of funding for affordable housing. CPA is a Massachusetts General Law that created a matching fund program allowing municipal governments, once the CPA has been approved by voters in the municipality, to create a property tax surcharge that will be matched to varying extent from the Massachusetts Community Preservation Trust Fund. This is with the understanding that the legal framework of the CPA requires the revenue created to be spent on affordable housing, open space, and historic preservation. According to Mr. Rawson, it passed with high margins and he was enthusiastic about its possibilities.

Affordable Housing Retention

Ms. Regan points to SCC's work with the City of Somerville to improve services to low income multi-unit homeowners including assistance with insulation, weatherizing, roof repair, lead paint removal, and other maintenance in exchange for commitments to affordable rent. According to Ms. Regan, the commitment to affordability received in return for these programs is three years, which SCC would like to see extended to twenty or thirty years.

Another important strategy for retaining affordable housing in Somerville is to ensure that dwellings that were made affordable through federal subsidies

remain affordable after the term of affordability expires. The federal government, through the U.S. Department of Housing and Urban Development (HUD) provided two types of subsidies, Section 236 and Project-based Section 8. These subsidies are for the owners of rental units to ensure affordable housing. Section 236 provided mortgages with low interest rates to multifamily rental unit owners with the promise that they will remain affordable for at least twenty years. Project-based Section 8 provides owners of rental housing a subsidy based on the difference between a set value of rent for the housing and 30% of tenants' income.

The problem for maintaining affordable housing is that with Section 236, after twenty years the property owner can convert their units to market-rate housing by prepaying their mortgage. Compounding the problem, as the program is no longer offered, there will not be any new supplies of Section 236 housing offered. Project-based Section 8 is based on the contract length, which can range from five to thirty years (Achtenberg 2006, 165). After the contract is over, the owner can then decide to renew their contract or convert the unit to market-rate pricing.

In order to preserve these affordable units, action can be taken by community organizations, tenants, and local governments to provide incentives for owners to keep their units affordable. Community organizations and tenants can organize campaigns to convince owners to renew their contracts (Levy, Comey and Padilla 2006b). SCC sees affordability as a moral and legal obligation due to a high amount of elderly renters who will otherwise be unable to pay higher market rates.

The U.S. Department of Housing and Urban Development (HUD) established a program called "Mark to Market" which allowed owners of units which were valued at above-market rates to restructure their debt in exchange for adjusting the set rent value to market rates and keeping affordability under contract for thirty years. HUD also allows Section 8 tenants "enhanced vouchers" to provide additional subsidy in case the owner decides to convert the unit to a market rate condominium (Levy, Comey and Padilla 2006b). Tenants in federally subsidized units also have a right of first refusal which can allow them to purchase their unit in such a case (Achtenburg 2006, 168). State and local governments can provide additional incentives for non-profit organizations to purchase these properties in exchange for renewing affordability (Achtenburg 2006, 168).

These are relatively new policies and their effectiveness is yet to be seen. The least complicated way to preserve affordability is through tenant and community organizing and non-profit purchase of the affordable units. These groups do not need to be convinced to maintain affordable housing.

Other Programs in Somerville Related to Affordable Housing

The interviewees mentioned the importance of reducing parking minimums for development. The more required parking spaces there are, the more it costs to develop a property (Shoup and Manville 2005). Lower parking minimums would allow denser development to proceed without having to create an excess amount of parking. This is particularly effective around transit stations as car ownership contributes to a large drop in transit use (Pucher and Renne

2003, 55). Somerville has parking minimums for non-residential development that take into account the presence of parking garages and transit stations by allowing a reduction in required spaces (Somerville Zoning Ordinance §9.6.3). The website for the Metropolitan Planning Organization has cited it for being an example of flexible parking requirements. In preparation for the Green Line, the City of Somerville outlined further reductions in parking minimums in its redevelopment zoning plan for Union Square. Since Union Square is one of the Green Line station areas that is particularly vulnerable to displacement pressures, the new parking minimums are designed to be beneficial by creating denser development more affordably and focusing more on using transit.

Areas for improvement and policies not being pursued

With regard to linkage fees, Ms. Regan points out that they are only paid for commercial development over 30,000 square feet, which she feels is too big and uncommon for Somerville. She feels that the type of commercial development should also reflect that of a vital neighborhood, consisting of mixed-use, residential and commercial development.

Another point of contention for Ms. Regan is Somerville's inclusionary zoning ordinance. It dictates that any new residential development of eight units or more must make 12.5% of the units affordable for low to moderate income households. However, in her experience, most new development tends to consist of single bed condominiums as opposed to family-sized housing. Ms. Regan advocates for affordable family-sized housing to be given priority in accordance to a comprehensive plan, which at the time of this interview Somerville had not

yet created. She offered three major areas to improve upon: safeguard affordable housing, create new affordable housing, and create job training and education programs for low income populations in order to help them build assets.

Ms. Reisner feels that there is nothing that can be done to prevent gentrification, only limit it. She supports SCC's work with Somerville in providing loans and grants toward weatherization and energy cost reduction. The only drawbacks she cites are the income requirements are so low that one cannot qualify if one is earning above the poverty line and public knowledge of the programs is limited. She believes this is because the funding is not high enough.

Ms. Reisner is also interested in the concept of the transit mortgage, a sort of location-efficient mortgage (LEM). LEMs factor in the savings of living in a dense, transit oriented area, as opposed to assuming the cost of an automobile-centered area, when calculating how much a borrower can afford when purchasing a house. There were fears that the effect of LEMs on low-income households would be similar to mortgages with low down-payments in terms of higher default rates (Blackman and Krupnick 2001). Fannie Mae sponsored an LEM program that was made available in 1999. The program itself ended in 2008 due to a lack of interest in the loans; only approximately three hundred loans were granted (Chatman Voorhoeve 2010). There is insufficient data to speak for the effectiveness of LEMs.

Ms. Reisner would like there to be more effort in encouraging current residents to stay in the city and not convert their properties into condominiums. Unfortunately, among the policy tools Mr. Rawson considers difficult to

implement are condominium conversion ordinances due to lack of legal authority. This is also the case for impact fees which could pay for preservation or development projects. Similarly, Ms. Reisner considers rent control as unfeasible due to massive political opposition since it was voted down in Massachusetts in 1995.

Mr. Rawson mentioned that a good deal of federal funding for programs that could reduce displacement has been cut. This lack of funding renders many policy tools such as increased Section 8 vouchers, federal subsidies for housing low-income households, useful but difficult to increase. Chapter 40R of the Massachusetts General Laws rewards cities monetarily for creating dense, mixed-use smart growth districts around transit stations. Mr. Rawson has stated that this was not pursued; one of the reasons is the state fund that provides the incentive has insufficient funding.

CHAPTER 8: CONCLUSION

Can a transit extension be too successful? The study of Somerville's Davis Square in the era leading up to the Red Line extension tells a story of a community that was not quite prepared for the improvement in economic fortunes and gentrification that would come with improved transit. Decisions were made to make the station in scale with the neighborhood while avoiding large parking lots to avoid blighting the community. However, insufficient provision was made for affordable housing. Instead, much of the discussion of the Red Line extension was centered on the perceived threat of large development in Davis Square. There were great concerns about the increased number of people who would walk in and around the neighborhood. It is difficult to say how many people were displaced from Somerville neighborhoods because of the lack of data showing where individuals are displaced from and where they go afterward. However, a great deal of anecdotal evidence from Somerville residents, and the action they have spurred on their behalf from community organizations and local government, show that displacement had an effect. Kahn's (2007) research showed that the number of single, college educated households benefited from the change. Davis Square has been a success, but not a success planned for everyone.

The interviewees knew that the actions and inactions surrounding the Red Line extension to Davis Square have effects that can be observed today. They provided me with a perspective taken from working with the community and for the community. They were aware of the concerns from the past in terms of

leaving people out of the conversation and are constantly involved in public meetings and community workshops. They work for organizations that utilize or want to utilize almost every gentrification mitigation policy I have researched. There are exceptions such as rent control, mentioned by Ms. Regan, which fell out of political favor from politicians and the residents who voted it down decades ago. They acknowledge a lack of federal funding for certain programs or the need to apply for a federal program. In the meantime they carry out various local policies and programs to promote affordability.

With the arrival of the Green Line extension, the interviewees point to Union Square and Brickbottom to be station areas that will most likely face changes. I have found these areas to have low median incomes, high proportion of residents who rent their housing, and high minority populations. Union Square was the prime area of concern for the interviewees. Mr. Rawson saw it as an area that can easily be invested in due to its proximity to Cambridge and Boston as well as being an established business district. Ms. Regan felt that the immigrant-owned businesses had an important role in keeping the area vital in place of boarded-up storefronts and should continue to be a presence. Brickbottom had the highest concentration of minority populations, lowest median household income, highest percentage of households with income less than $25,000, lowest rate of owner-occupied households, and second-highest percentage of renter-occupied households. It would seem most vulnerable, but Brickbottom has the highest amount of underutilized land of all the Green Line station areas (Reconnecting America 2008). The interviewees considered Brickbottom as an area where they

would like to see major development that will provide affordable housing opportunities. The Gilman Square area was seen to be less likely to be gentrified, but still a possibility. In the end, it would seem that Union Square station is the leading area of concern with respect to potential for displacement.

Redefining Success

The interviewees overlapped in three principles related to preserving affordability: creating and preserving affordable housing, creating mixed-use residential and commercial development, and reducing parking minimums for new development. To this end, the City of Somerville and Somerville Community Corporation utilize almost every policy tool a municipality can to increase the amount of affordable housing. New sources of funding from sources such as the federal HUD Sustainable Communities Challenge Grant and state Community Preservation Act will have to make up for a lack of more substantial funding from state and federal government. In spite of this, the use of so many policy tools highlights a marked change from the reaction to the Red Line extension into Davis Square.

Gentrification is a word that conjures many different ideas and emotions from various communities. For some researchers, economists, and planning practitioners it can represent a change of fortune for a neighborhood as it transitions from an underserved and blighted community to an economically vibrant one with the ability to use its increased revenue for improvement. Others see it as an attack on low-income communities. They disagree on the rate of displacement in contrast to non-gentrifying neighborhoods. Still, researchers on

both sides can agree that displacement can happen and that several academics and practitioners believe something should be done to prevent it.

The idea of a successful transit line is one where the ridership is high and thus effectively serves the area around it. In terms of equity, transit provides those of lower-incomes who do not own a car to be able to participate in the local economy or otherwise conduct their life unimpeded. Transit also provides economic, health, and environmental benefits. The lure of a neighborhood with a successfully integrated transit station can bring about gentrification. Since the new higher-income residents are linked to higher rates of car ownership and driving, it reduces the effectiveness of transit. If higher-income residents reduce the denseness of the community by occupying more units with fewer people, there are fewer potential transit passengers. The displacement of low-income households due to rising housing prices can further reduce ridership, as well as lead to negative impacts on their health. A transit extension can be too successful when it drives out the lower-income communities that depend on it most; in turn driving out the communities that transit needs in order to be effective.

Bibliography

Achtenberg, Emily Paradise. 2006. "Federally Assisted Housing in Conflict: Privatization Or Preservation?" Chap. 7, In *A Right to Housing: Foundation for a New Social Agenda*, edited by Rachel G. Bratt, Michael E. Stone and Chester Hartman, 163-170. Philadelphia: Temple University Press.

Alonso, William. 1964. *Location and Land use: Toward a General Theory of Land Rent*. Cambridge, MA: Harvard University Press.

Benjamin, John D. and G. Stacy Sirmans. 1996. "Mass Transportation, Apartment Rent and Property Values." *Journal of Real Estate Research* 12 (1): 1-8.

Besser, Lilah M. and Andrew L. Dannenberg. 2005. "Walking to Public Transit: Steps to Help Meet Physical Activity Recommendations." 29 (4): 273-280.

Blackman, Allen and Alan Krupnick. 2001. "Location-Efficient Mortgages: Is the Rationale Sound?" *Journal of Policy Analysis and Management* 20 (4): 633-649.

Centers for Disease Control and Prevention. "Health Effects of Gentrification.", last modified September 25, 2012, accessed January 14, 2013, http://www.cdc.gov/healthyplaces/healthtopics/gentrification.htm.

Chatman, Daniel and Niels Voorhoeve. 2010. "The Transportation-Credit Mortgage: A Post-Mortem." *Housing Policy Debate* 20 (3): 355-382.

City of Somerville. 1982. *Davis Square Action Plan*. Somerville, MA: Office of Planning and Community Development.

City of Somerville. 2008. *Five Year Consolidated Plan 2008-2013, Section One: Housing*. Somerville MA: Office of Strategic Planning and Community Development.

City of Somerville. 2004. *Somerville Community Development Plan: Development History & Historic Preservation Element*. Somerville MA: Office of Housing and Community Development.

City of Somerville. 2009. *Trends in Somerville: Transportation & Infrastructure Report*. Somerville MA: Office of Strategic Planning and Community Development.

Clarke, Bradley H. 2003. *Streetcar Lines of the Hub: The 1940s Heyday of Electric Transit in Boston*. Boston, MA: Boston Street Railway Association.

Collins, J. Michael and Collin M. O'Rourke. 2010. "Financial Education and Counseling - Still Holding Promise." *Journal of Consumer Affairs* 44 (3): 483-498.

Cravens, Marisa, Miriam Chion, Michael Reilly, Gillian Adams, Sailaja Kurella, Lauren Baranco, and Sarah Truehaft. 2009. *Development without Displacement: Development with Diversity*. Oakland, CA: Association of Bay Area Governments.

Curran, Winifred. 2004. "Gentrification and the Nature of Work: Exploring the Links in Williamsburg, Brooklyn." *Environment and Planning A* 36 (7): 1243-1258.

Debrezion, Ghebreegziabiher, Eric Pels, and Piet Rietveld. 2007. "The Impact of Railway Stations on Residential and Commercial Property Value: A Meta-Analysis." *Journal of Real Estate Finance and Economics* 35 (2): 161-180.

Florida, Richard. 2003. "Cities and the Creative Class." *City & Community* 2 (1): 3-19.

Freeman, Lance. 2009. "Neighbourhood Diversity, Metropolitan Segregation and Gentrification: What are the Links in the US?" *Urban Studies* 46 (10): 2079-2101.

Freeman, Lance and Frank Braconi. 2004. "Gentrification and Displacement: New York City in the 1990s." *Journal of the American Planning Association* 70 (1): 39-52.

Gakenheimer, Ralph A. 1976. *Transportation Planning as Response to Controversy : The Boston Case*. Cambridge, MA: MIT Press.

Geiser, Ken. 1978. *Davis Square : The Developmental Agenda*. Somerville then and Now. Massachusetts Foundation for Humanities and Public Policy.

Glass, Ruth L. 1964. *London : Aspects of Change*. London: Centre for Urban Studies and MacGibbon and Kee. Quoted in Neil Smith, "New Globalism, New Urbanism: Gentrification as Global Urban Strategy" (*Antipode* 34 (3): 427-450, 2002).

Guha, Auditi. "5 Questions with Somerville Unsung Hero Ellin Reisner." *Somerville Journal*, June 15, last modified July 11, 2012, accessed January 16, 2013, http://www.wickedlocal.com/somerville/news/x1660540851/5-questions-with-Somerville-Unsung-Hero-Ellin-Reisner.

Hamnett, Chris. 1991. "The Blind Men and the Elephant: The Explanation of Gentrification." *Transactions of the Institute of British Geographers* 16 (2): 173-189.

Hess, Daniel B. and Tangerine M. Almeida. 2007. "Impact of Proximity to Light Rail Rapid Transit on Station-Area Property Values in Buffalo, New York." *Urban Studies* 44 (5-6): 1041-1068.

Hess, Daniel B. and Peter A. Lombardi. 2004. "Policy Support for and Barriers to Transit-Oriented Development in the Inner City." *Transportation Research Record: Journal of the Transportation Research Board* (1887): 26-33.

Howley, Kathleen. 1999. "As Somerville Becomes Trendy, it also Becomes Pricey." *The Boston Globe*, March 13, 1999, E1. Lexis-Nexis.

Kahn, Matthew E. 2007. "Gentrification Trends in New Transit-Oriented Communities: Evidence from 14 Cities that Expanded and Built Rail Transit Systems." *Real Estate Economics* 35 (2): 155-182.

Lees, Loretta. 2008. "Gentrification and Social Mixing: Towards an Inclusive Urban Renaissance?" *Urban Studies* 45 (12): 2449-2470.

Lees, Loretta. 2000. "A Reappraisal of Gentrification: Towards a 'Geography of Gentrification'." *Progress in Human Geography* 24 (3): 389-408.

Lees, Loretta and David Ley. 2008. "Introduction to Special Issue on Gentrification and Public Policy." *Urban Studies* 45 (12): 2379-2384.

Levy, Diane K., Jennifer Comey, and Sandra Padilla. 2006a. *In the Face of Gentrification: Case Studies of Local Efforts to Mitigate Displacement*: Urban Institute.

Levy, Diane K., Jennifer Comey, and Sandra Padilla. 2006b. *Keeping the Neighborhood Affordable: A Handbook of Housing Strategies for Gentrifying Areas*: Urban Institute.

Ley, David and Cory Dobson. 2008. "Are there Limits to Gentrification? the Contexts of Impeded Gentrification in Vancouver." *Urban Studies* 45 (12): 2471-2498.

Lupo, Alan, Frank Colcord, and Edmund P. Fowler. 1971. *Rites of Way: The Politics of Transportation in Boston and the U.S. City*. Boston, MA: Little, Brown and Company.

Manville, Michael and Daniel Shoup. 2005. "Parking, People, and Cities." *Journal of Urban Planning and Development* 131 (4): 233-245.

McKinnish, Terra, Randall Walsh, and T. Kirk White. 2010. "Who Gentrifies Low-Income Neighborhoods?" *Journal of Urban Economics* 67 (2): 180-193.

McKinnon, Anne L. 1988. "Perspectives on a Transportation Planning Problem : Case Study, the Washington Street Corridor." M.A. thesis, Tufts University.

Mukhija, Vinit, Lara Regus, Sara Slovin, and Ashok Das. 2010. "Can Inclusionary Zoning be an Effective and Efficient Housing Policy? Evidence from Los Angeles and Orange Counties." *Journal of Urban Affairs* 32 (2): 229-252.

Newman, Kathe and Elvin K. Wyly. 2006. "The Right to Stay Put, Revisited: Gentrification and Resistance to Displacement in New York City." *Urban Studies* 43 (1): 23-57.

Pollack, Stephanie, Barry Bluestone, and Chase Billingham. 2010. *Maintaining Diversity in America's Transit-Rich Neighborhoods:Tools for Equitable Neighborhood Change*: Dukakis Center Publications.

Pucher, John and John L. Renne. 2003. "Socioeconomics of Urban Travel: Evidence from the 2001 NHTS." *Transportation Quarterly* 57 (3): 49-77.

Quercia, Roberto and Jonathan Spader. 2008. "Does Homeownership Counseling Affect the Prepayment and Default Behavior of Affordable Mortgage Borrowers?" *Journal of Policy Analysis and Management* 27 (2): 304-325.

Ralph, S. Lester. 1973. "Position of Mayor Ralph." *Somerville Journal*, April 5.

Rawson, Bradley. 2011. Personal communication. February 8.

Rawson, Bradley. 2013. Personal communication. January 15.

Reconnecting America. 2008. *Somerville Equitable Transit-Oriented Development Strategy*.

Redfern, P. A. 2003. "What Makes Gentrification 'Gentrification'?" *Urban Studies* 40 (12): 2351-2366.

Regan, Mary. 2010. Interview by author. Somerville, MA. November 12.

Reisner, Ellin. 2010. Interview by author. Somerville, MA. December 16.

Salvucci, Frederick P. ND. "Some Observations on the Recent 25-Year History of the Metropolitan Boston Transportation System, the Legacy of the 1970 Boston Transportation Planning Review: What we should Expect from

ISTEA, and some New Directions which may Prove Interesting. Paper Prepared for the Boston Conference on Shaping the Accessible Region."

Sherraden, Michael, Mark Schreiner, and Sondra Beverly. 2003. "Income, Institutions, and Saving Performance in Individual Development Accounts." *Economic Development Quarterly* 17 (1): 95-112.

Slater, Tom. 2006. "The Eviction of Critical Perspectives from Gentrification Research." *International Journal of Urban and Regional Research* 30 (4): 737-757.

Smith, Darren. 2008. "The Politics of Studentification and `(Un)Balanced' Urban Populations: Lessons for Gentrification and Sustainable Communities?" *Urban Studies* 45 (12): 2541-2564.

Smith, Neil. 1987. "Gentrification and the Rent Gap." *Annals of the Association of American Geographers* 77 (3): 462-465.

Smith, Neil. 2002. "New Globalism, New Urbanism: Gentrification as Global Urban Strategy." *Antipode* 34 (3): 427-450.

Smith, Neil. 1996. *The New Urban Frontier: Gentrification and the Revanchist City*. New York: Routledge.

Transportation Cooperative Research Program. 1998. *Transit-Friendly Streets: Design and Traffic Management Strategies to Support Livable Communities / Project for Public Spaces, Inc.* Washington, DC: Transportation Research Board, National Research Council ; National Academy Press. http://onlinepubs.trb.org/onlinepubs/tcrp/tcrp_rpt_33.pdf.

Tulloss, Janice K. 1995. "Citizen Participation in Boston's Development Policy: The Political Economy of Participation." *Urban Affairs Review* 30 (4): 514-537.

van Weesep, Jan. 1994. "Gentrification as a Research Frontier." *Progress in Human Geography* 18 (1): 74-83.

Vanasse Hangen Brustlin, Inc. 2005. Beyond Lechmere Northwest Corridor Study: Chapter 3 - Existing Conditions. Boston, MA. http://www.eot.state.ma.us/downloads/planning/MIS8-05-Chapter3.pdf

Vigdor, Jacob L. 2002. "Does Gentrification Harm the Poor?" *Brookings-Wharton Papers on Urban Affairs* 2002 (1): 133-182.

Wacquant, Loïc. 2008. "Relocating Gentrification: The Working Class, Science and the State in Recent Urban Research." *International Journal of Urban and Regional Research* 32 (1): 198-205.

Walljasper, Jay and Daniel Kraker. 1997. "Hip Hot Spots: The 15 Hippest Places to Live." *The Utne Reader*, November 1997, 56-59.

Wyly, Elvin K. and Daniel J. Hammel. 1998. "Modeling the Context and Contingency of Gentrification." *Journal of Urban Affairs* 20 (3): 303-326.

Yin, Robert K. 2003. *Case Study Research: Design and Methods*. 3rd ed. Thousand Oaks, Ca: Sage Publications, Incorporated.