An Assessment of the Neighborhood Retail Environment in Union Square, Somerville

A thesis submitted by

Maria F. Martinez

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Advisor: Dr. Weiping Wu

Reader: Professor Peg Barringer

i. Abstract

Once the centers for social interactions and economic activity, commercial corridors suffer economic hardship precipitated by retail competition, high vacancy rates, and a poor mix of retail tenants. These commercial areas define the neighborhood's character and have the potential to enhance its overall attractiveness, to revitalize them help to serve resident needs and strength the economy. Therefore, the purpose of this thesis is to assess the conditions of the commercial district in Somerville's Union Square, and provide useful information to create a well-balanced profile of retail and service that ensures future's prosperity. Union Square will be revitalized by a large and long-term civic, residential, and commercial development project, partly motivated by the increase of light rail service. This study analyzes historic business inventories, physical conditions, business district's composition, and the social context in the Square including the residents' perspective on the commercial area. Among the key findings are that professional services and food related establishments are still predominant in the Square. Even thought residents recognize that several types of businesses are missing to generate pedestrian traffic and drop-in customers, they are concerned that future development plans considerable change the community assets that they already have.

ii. Acknowledgements

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I would like to thank to my mom, my dad, and my brother for encouraging me to achieve my dreams; but I would especially like to thank my husband Memo, who had unconditional support, patience, and love this whole time.

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Lastly, I thank the Union Square community including residents, business owners, community organizers, and city officials, who took the time to share with me their perspectives and aspirations for the future of their neighborhood.

iii. Dedication

To, and in loving memory of my grandfather Maximo, who taught me that to achieve worthy goals is never easy but not impossible.

iv. Table of Contents

v. List of Tables

vi. List of Figures

Chapter 1 - Introduction

1.1 Union Square Background

Union Square, Somerville's larger commercial district grew in importance in the1800's, when it became a commercial gateway for delivering goods to Boston. The Square became a hub of activity serviced by electric streetcars and trolleys; this was in part a result of increased development. Driven by the construction of the Fitchburg railroad at the end of the 19th century, the neighborhood gained the status as a vibrant commercial area (City of Somerville, 2003). The commerce at that time included establishments of brickyards, slaughterhouses, the Union Glass Company, and other industries such as woodworking shops, ice businesses, and carriage factories.

The middle of the 20th century brought with it changes in transportation patterns. As automobile use became widespread, streetcar lines were replaced with highways, and many of the industries that made Union Square thrive suddenly left. When the businesses decamped, property values declined and residents moved elsewhere. During the 1980's Union Square struggled to compete with similar neighborhood commercial centers such as Porter Square and Davis Square, which enjoyed consistent pedestrian traffic, rapid transit service connectivity, and viable retail and service mix.

Throughout the 20th century Union Square has served multiple roles, not only as an employment center for blue-collar manufacturing businesses, but also as an entry portal to successive waves of international immigrants from Europe, Asia, Latin America and the Caribbean, where the languages spoken include English, Portuguese, Haitian-Creole, Spanish, Hindi, Chinese, and Korean among others. Similar to the rest of Somerville, Union Square distinguishes itself from other commercial areas within the

Boston region by the diversity of ethnic groups and the rich history they have produced. At present, it is considered a lively and diverse community of immigrant families, long-term residents, students, artists, young professionals and retirees, and several unique small local businesses (Centers Square, 2010; Sacchi et.al. 2014).

In recent years, a renewed interest in urbanism has sparked excitement about the inner city development based upon smart-growth and new urbanism design principles (Poloyzoides, 2011). Transit oriented development (TOD) has been especially applauded as a correction to previous decades' misguided obeisance to the automobile. In Union Square, the planned arrival of the long anticipated extended light rail service (Green Line Extension) inspired the city government to develop an urban renewal plan. The Union Square Revitalization's Plan (2012) intends to bring the Square into the 21st century as a vibrant downtown area. However, visions of revitalization and renewal obscure negative consequences faced by Union Square's current residents and businesses, such as displacement (Sacchi et.al. 2014).

The redevelopment of Union Square could threaten small businesses through the larger process of gentrification, which is defined as an influx of capital and resultant displacement, and the unwanted transformation of social character, culture, amenities, and physical infrastructure (Japonica, 2005). While most investigations of gentrification focus on the housing market, businesses are similarly subjected to displacement pressures. Without effective intervention, these pressures could force many of the existing businesses out of Union Square, fundamentally altering its diverse and multicultural character (Sacchi et.al. 2014).

Constant monitoring and evaluation of the complete neighborhood context is necessary to ensure that the targeted area is healthy, strong, and sustainable (Kay, 2010). If neighborhood retail development is a sort of living entity that will grow and change with time (Urban Collaborators, 2006), and the access to basic goods and services within urban neighborhoods remains an important equity issue and a catalyst for strong communities (Kay, 2010), this seems to be an appropriate moment to assess businesses in Union Square, and how they impact residents' social experiences. Therefore, this project explores the retail environment that includes the physical conditions of the commercial district, the business type, and the shopper perspective about characteristics and recent changes in commercial uses.

1.2 Research Purpose

This research aims to provide community stakeholders, local government agencies, and economic development organizations a framework for understanding, assessing, and supporting the retail environment in Union Square's commercial district. The main goal is to offer useful information for future policy design and planning strategies related to local retail.

1.3 Research Questions

A. What are the fundamentals for neighborhood retail?

- **a.** Why has retail in the inner city declined and what is the importance of neighborhood retail?
- **b.** What are the most common challenges and opportunities for these kinds of commercial areas?
- **c.** What mix of businesses optimally serves neighborhood residents?

B. What are the conditions in Union Square?

- **a.** What are the neighborhood characteristics?
- **b.** What are the attributes in the commercial district?
- **c.** What is the business mix and how it has changed?

C. How could the conditions of Union Square Commercial District's improve?

- **a.** What business mix would best serve the surrounding neighborhood?
- **b.** What steps need to be taken to improve the neighborhood retail and services?

1.4 Thesis Outline

The methods used in this research are detailed in the next section. Chapter 2 provides a literature review about neighborhood retail, followed by Chapter 3 with the description of Union Square neighborhood characteristics. Chapter 4 describes the current conditions of the commercial district, the differences between Union Square and a typical neighborhood center, and the residents' perspective regarding the commercial area. Finally, Chapter 5 includes key findings of the research, recommendations and conclusions to support future policy and planning strategies to improve the neighborhood retail and services mix. The research limitations are also included in this final section.

1.5 Methodology

A) The assessment of Union Square was done based on the several available toolkits to evaluate and create economically vibrant commercial districts such as, Downtown and Business Districts Market Analysis (University of Wisconsin), and Commercial Revitalization Planning Guide (LISC, Center of Commercial Revitalization). Table 1.1 describes the framework used to guide this research.

Table 1.1 Union Square's assessment

Neighborhood characteristics	Description
Location	Boundaries of the target area (the commercial district itself), and trade area (immediate surroundings).
Age	Estimated decade of original development.
Physical Condition	Information about physical condition of buildings and storefronts.
Demographics	Demographic and economic information from local customers.
Transit Accessibility	Main roads, bus lines and sub way station through the corridor.
Housing and Lifestyle	Data to provide further detail of demographic characteristics.
Anchor Institutions	Number of amenities and anchor institutions that may represent drivers of increased retail activity
Land Use	Physical size of the trade area and zoning
Plans or Interventions	Public investments that have been made in the corridor or city plans for the future.

Commercial district characteristics	Description
Type	Based on trade area from which the corridor draws customers, and store mix.
Competition	Other competing neighborhood centers
Retail and Services Businesses Mix	Refers to overall quantity of establishments in the Commercial District
Vacancy Rate	Percentage of all commercial spaces within a corridor that are not occupied
Change in Store Mix	Store mix change within the corridor
Perception	Evaluation of physical condition, retail mix and safety from the residents' perspective.

Source: Downtown and Business Districts Market Analysis (University of Wisconsin), and Commercial Revitalization Planning Guide (LISC, Center of Commercial Revitalization).

B) Secondary data collected from Esri demographics, city official documents, and academic reports were used to identify Union Square characteristics. In addition, the research drew information from local press and websites to fully understand the social context and the city's vision and plans for the future of Union Square.

C) To analyze past and present trends in the number and mix of businesses supported within Union Square, the business inventories from following documents were used: a) Union Square Central Business District. Buschur, Brad University of Massachusetts, Amherst, August 2005, b) Union Square Creative Uses Report, City of Somerville Office of Strategic Planning and Community Development, October 2008, c) Commercial Gentrification in Union Square, Somerville. UEP Field Project, Tufts University, May 2014. In addition, field observation allowed further definition of the number and type of businesses that have changed recently (Appendix A).

Area of Study

The area of study to analyze the business mix in Union Square was the former Commercial Business District (CBD), which is the center of the Square. This is the same area used by the past business inventories mentioned in section 1.5.C. As the Figure 1.1 shows, the CBD runs along Somerville Avenue and Washington Street between Prospect Street and Webster Avenue. Because of the 2009 Re-zoning, currently the CBD is considered as the Union Square Commercial Corridor District (CCD) and includes a broader area.

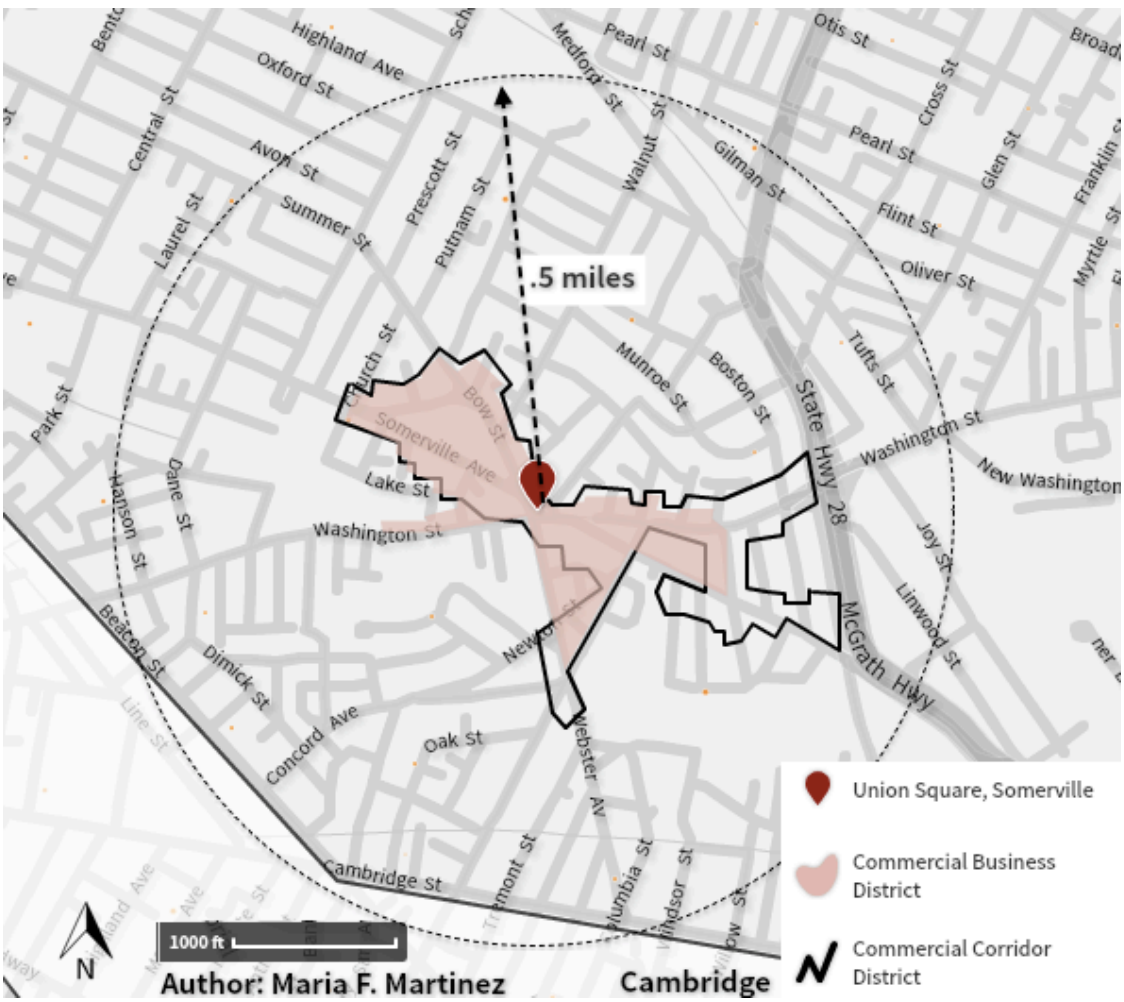
Demographics

The commercial core of Union Square is bounded by dense residential neighborhoods, which provides a nearby customer base within walking distance for convenient shopping.

For the purpose of this research the boundaries of the Union Square customer market are:

- The immediate area of the CBD as well as parts of the surrounding neighborhood, which are determined according to a ¼ mile radius from the center of the Square at the intersection of Somerville Avenue and Washington Street.
- The primary market area that includes a ½ mile radius from the center of the square (Figure 1.1).

Figure 1.1 Area of study, former Union Square's CBD



Source: Union Square Central Business District, August 2005. Union Square Revitalization Plan, 2012.

D) Finally, interviews with residents were done to gain an understanding of many aspects of the neighborhood that cannot be understood from demographics and other publicly available data alone, e.g. timing, frequency and location regarding their shopping habits. The interviews revealed attitudes toward Union Square's commercial district, and how those attitudes affect shopping decisions. It also invited consumers to share their perspectives regarding the current and future economic health of the Square. Neighborhood retail is designed to support pedestrian activity within a radius no longer than 0.5 miles (Urban Collaborators, 2006). Therefore, the study includes a representative sample of Union Square residents, reflecting the diversity of the neighborhood, such as gender, age, education, profession, economic status and nationality (Appendix C). The sampling technique was snowball sampling, a small pool of initial informants to nominate through their social networks to find other participants who met the eligibility criteria and could potentially contribute to the research.

Chapter 2 - Literature Review: Neighborhood Retail Fundamentals

This chapter draws on existing literature on neighborhood retail theory and is organized into five sections. First, the historical context of how inner-city commercial areas decline is provided. The second section covers the definition, characteristics and the importance of neighborhood-serving retail, as well as the major challenges, opportunities, and obstacles that still affect these commercial areas. In the third section some strategies regarding commercial development are reviewed in the context of commercial revitalization. The fourth section describes what should be an adequate neighborhood retail mix. In the final section, key characteristics and factors associated with successful neighborhood retail are outlined.

2.1 Inner-city Commercial Area Decline

Commercial corridors in cities across America have experienced declines identical to the downturn of Union Square (Turner, 2004; CURA, 2012). Downtowns and neighborhood retail centers traditionally served the commercial needs of theirs residents, workers, and visitors, providing a broad range of day-to-day goods and services. Established before the proliferation of automobiles, these commercial areas allowed residents to walk or take a short drive to acquire most of their desired goods. This pattern was challenged and disturbed post-1945 mainly by rapid suburbanization, the prominence of the automobile, and the disappearance of streetcars (Gibbs 2002; Morgan, 2010; Jacobus and Chapple 2009).

From the 1950's to the 1990's, ring roads and bypass highways were built through American cities and towns. Because bypass roads often reduce the traffic on main streets, commerce declined with devastating impacts on retailers, which have always depended on the exposure of passing traffic for their livelihood. In many cases, this major shift in transportation systems explains why between 1954 and 1977 the total retail market share in American city centers dropped by 77 percent (Gibbs, 2002). In addition, concentration of commercial activity in the hands of corporations such as new automobile-oriented shopping centers and big-box retailing along bypass roads exerted additional competitive pressure on traditional commercial corridors and small business owners (Fogeslon, 2001; City of Philadelphia, 2009; Poloyzoides, 2011).

The massive decentralization and decline of neighborhood retail activity coincided with dramatic shifts in residential housing patterns. Many middle income minorities and white families of all income levels moved out of urban neighborhoods, leaving behind increasingly concentrated poverty (Seidmad 2002; Jacobus and Chapple 2009). Though some traditional commercial corridors were able to remain viable assets for their neighborhoods, many went through long periods of distress and decline and still face challenges in improving their commercial vibrancy.

Recent economics and demographics have shifted in favor of smaller, more walkable, and more sustainable retail locations in historic downtowns and inner-city neighborhoods (Gibbs, 2012; Downtown Denver, 2011). Over the last two decades many cities have experienced a dramatic upward swing in demand for housing in downtowns and other core areas where people can live close to jobs, shopping and entertainment centers (Sonoran Institute, 2014). Reports from the National Association of Realtors (NAR) in 2011 and 2013 show that when making housing decisions, Americans are placing a higher value on walkability, neighborhood character, shorter commuting times, and less on home and lot size. With the influx of reinvestment in urban housing markets also came a resurgence of neighborhood retail and services.

While the 1990's saw the return of some more affluent residents to inner city neighborhoods, commercial corridors have been slower to bounce back; and though commercial revitalization emerged as an important component of community and economic development in the 1980's and 1990's the deterioration of retail activity persisted (Seidman 2002; Jacobus and Chapple 2010). Commercial corridors still face numerous challenges including residents' concerns about safety, complex neighborhoods politics, and ethnic conflict and mistrust. In addition, the difficulty of access capital has diminished their economic importance, thus jeopardizing their existence.

Local governments and community-based organizations are implementing a wide variety of programs that seek to reverse this decline. Commercial corridors have been targeted for interventions ranging from façade improvements and tree plantings, to tax credits and business development technical assistance. However, no single approach has been articulated with other mechanisms that contribute to revitalization, and neither has been supplemented with a more strategic and systemic understanding of neighborhood retail. Because each commercial district is unique and faces specific problems and challenges, it is not possibly to improve them with a single approach. Commercial revitalization strategies have to build around the need for flexible, on-the ground responses to the specific issues facing each neighborhood (Jacobus and Hickey 2007; City of Philadelphia, 2009; Morgan, 2010).

2.2 Neighborhood Retail and Characteristics

"*Commercial corridor*", "*inner city center*" or "*market centers*" are just a few synonyms for neighborhood retail, but they all suggest the same thing: a concentration of businesses in a centrally located portion of a city, which serve a common trade area and surround or lie along streets (Urban Collaborators, 2006; City of Philadelphia, 2009).

Neighborhood business districts were often built on primary transportation corridors, and often had streetcar lines that connected them back to the city center. They were generally located within a 10 to 15 minute walk from their residential market area and were centered on satisfying the day-to-day convenience shopping needs and services of a neighborhood. Typically, they have buildings that are one to three stories in height though they may extend higher with small-footprint storefronts for retail and service businesses. The buildings and associated storefronts are usually on the right-of-way at the sidewalk, and offer a contiguous pedestrian shopping experience including a grocery or variety store anchor along with several small stores. The upper stories are either small commercial offices or residential space (Morgan, 2010).

Parking is primarily on the street, at the back of the buildings or occasionally on the sides of the buildings. As older neighborhoods, they often have a rich narrative history that adds to their identity. Many of these neighborhoods have experienced periods of *white flight* to the outer suburbs, have high levels of poverty, and have a multiplicity of ethnic residents. Currently, they are common entry points for the more recent wave of immigrants (Ibid).

The Importance of Neighborhood Retail

The significance of neighborhood retail may not be immediately evident. Neighborhood retail does not provide significant resources impacting state or regional economy, and they are considered to provide services and amenities to adjacent populations with limited impact on the city. Some scholars argue that commercial corridors are typically not regionally significant employment centers or even primary distribution sites of consumer goods (Seidman, 2002; Howsley, 2013). However, others contend that a healthy neighborhood economy benefits residents and helps connect them to regional economic opportunities. Thriving stores and local businesses usually define the character of neighborhoods and are identified as positive attributes of successful urban areas. (Urban Institute, 2001; Koebel, 2014).

Commercial corridors are the public face and the front door of the neighborhood, with an image often woven into the identity of the residents (Jacobus and Chapple, 2010; Morgan, 2010). If the commercial area is run down and has several vacancies it sends a negative signal about the quality of the whole neighborhood, deters additional investment, and can have an impact on the physical and economic health of residents who must travel longer distances to shop and leave the confines of their neighborhood (Zielenbach 2000; Klinenberg 2002). In contrast, if the commercial area is improving, it enhances the overall attractiveness of its surrounding neighborhoods, and people are likely to see this as a strong sign that the whole neighborhood is improving too.

In addition, although individual household incomes may be lower in inner cities, the density of demand, due to the high population density, creates enormous retail purchasing power. Many communities, investors, and businesses are rediscovering this potential and putting plans in motion to tap this resource as part of an overall economic development strategy and to create a more healthy community (Urban Collaborators, 2006). These commercial areas are key considerations of employers, real estate developers, and other businesses when determining whether to invest. In some cases the reputation and image of the neighborhood reaches far beyond its borders and takes on regional or even national prominence (Morgan, 2010).

Besides the reasons mentioned above, neighborhood retail is important because it improves residents' quality of life. As social centers for communities, commercial corridor districts offer the context for important networking, and help to provide not only social cohesion but also a sense of place and community. In addition, access to goods and services offer health benefits through increased levels of walking (Key, 2010). Carley et al. (2001 in Key, 2010) state that residents of all ages and abilities often experience local retail as "the physical and social heart of their neighborhood", and point out the special value of local walkable retail for elders, children, and low-income residents without access to cars.

Neighborhood Retail Challenges and Opportunities

Neighborhood retail faces various challenges in improving their condition. Retail and the shopping center sector are the riskiest of all principal real estate sectors, among which are residential, office, and industrial uses (Gibbs, 2007; Morgan 2011). Success rates in a business vary greatly depending on a multiplicity of factors, many of which are out of the control of the individual businessperson and are driven by market dynamics that are not altogether predicable, such as a lagging economy, new competition, and crime.

In addition, consumer spending and behavior are influenced by numerous emotional and economic variables, resulting in drastic ebbs and flows of consumption. There are many reasons why individuals can postpone, avoid or suspend visits to stores and shopping centers. Therefore shopping behavior can vary widely from individual to individual and moment to moment (Gibbs, 2012; Howsley's, 2013).

The decaying physical conditions and the complicated process to acquire vacant land for new commercial developments is an obstacle to improve neighborhood commerce. In inner-city neighborhoods existing buildings may be too small for many business uses and often are not structurally equipped for contemporary uses. Public infrastructure also may be poorly maintained, especially if property owners and local governments are fiscally strapped (Porter, 1994; Gibbs, 2012b; Seidman, 2002).

Besides the lack of good physical conditions, a poor customer and investor perception of neighborhoods is a significant obstacle to new commercial activity. There is a persistent belief that limited markets and high crime exist in the inner city. This often-false perception prevents businesses from recognizing and acting upon the market and business opportunities that do exist (Porter, 1994; Seidman, 2002; Quakenbush, 2003).

Another obstacle is the difficulty in coordinating the actions of property owners, businesses, local government, and other professionals involved in the improvement process. Inner city locations may have higher costs and more heavily regulated business environments than suburban locations. The difficulty is contrasted with the management of shopping malls, where common ownership and lease provisions ensure common store hours, a well-maintained environment, and collective contribution to fund advertising, events, and promotions (Ibid).

The limited mix of businesses in inner-city districts impairs their ability to draw a substantial local customer base. Without strong anchors, destination retailers, or an agglomeration of businesses, districts do not generate sufficient traffic to bring in new and stronger merchants that are needed to attract more customers and regenerate economic vitality. Finally, limited personal assets and barriers to accessing capital among small and minority entrepreneurs impede the success of firms in inner-city business districts (Gibbs, 2012b; Seidman, 2002).

Improving commercial corridors is an integral first step towards citywide community health (City of Philadelphia, 2009). Despite the long-standing obstacles, urban neighborhoods have assets and positive trends to rebirth. Michael Porter has applied the lens of competitive advantages to inner cities and emphasized the importance of crafting development strategies and fostering private businesses that build on these advantages (Porter 1995, 1997). The four key competitive advantages present in inner cities identified by Porter are: a) *strategic location* close to the city center, key transportation infrastructure, and entertainment and tourist centers; b) *local market demand* reflected in high density that compensates for lower incomes, and specialized urban ethnic market niches; c) *integration with regional clusters,* which creates an opportunity for inner-city businesses to provide goods and services for these engines of regional economic growth; d) *human resources* that include a supply of moderate-wage hard-working and dedicated employees and an entrepreneurial spirit in inner-city communities.

In addition, the huge buying power of American's inner cities makes them true emerging markets, and untapped opportunities exist there (Quakenbush, 2003). Several studies have documented the large inner-city market and found it underserved. A study for the U.S. Department of Housing and Urban Development identified 48 inner cities where local purchasing power exceeded retail sales by several hundred million dollars. With higher population density in the urban areas, the income and retail demand per square mile were found to be greater for inner-city neighborhoods than in other areas.

Urban neighborhoods also have concentrated market segments: Black, Hispanic, and youth markets, as well as ethnic markets supported by concentrations of immigrant populations (Seidman 2002, Quakenbush, 2003).

2.3 Neighborhood Retail Development

In response to the declining fortunes of many local retail districts, a rich body of literature specializes in strategies for revitalizing severely troubled commercial centers. The strategies and tactics are often broad-based and wide-range in scope. Much of the literature on those strategies has been framed within one policy debate regarding the merits of people –based versus place-based approaches. The first approach considers that improving inner-city residents' well being is a prerequisite to successful community revitalization and is the ultimate policy goal. Followers of the place-based approach consider improving the physical infrastructure of the neighborhood without necessarily addressing the community social needs. Several researchers have showed the pitfalls of following one approach or the other and advocate strategies that take into account both people and place. Commercial district revitalization strategies implicitly accept the place-based approach, but can also contribute to improving residents' opportunities (Seidman, 2002). For the purpose of this research only the strategies related to neighborhood retail development are described including business development and attraction, commercial real estate development, and district management strategies.

Business Development and Attraction

Because commercial corridor districts often are dominated by small independent businesses, many neighborhood economic development efforts focus on supporting the start-up and growth of small locally owned businesses or bringing in firms as relocation or expansion. By increasing their capacity, small business development can strengthen commercial districts by reducing the failure and turnover of businesses, attracting a larger and more stable customer base, and hiring inner-city residents (Seidman, 2002; Turner, 2004; Jackson and Hickey, 2007).

Many early community development corporations (CDC's) focused on business development, and there is a recent trend toward creation of neighborhood-based business development networks among other nonprofit organizations. Community development is oriented toward empowerment (Ferguson and Dickens 1999) and could be a natural companion for entrepreneurial-style business development. While commercial development has not been the primary focus of CDC's (Vidal, 1992) there is enough attention paid to commercial property and business start-up to warrant consideration by policy makers for its inclusion in redevelopment strategies.

Commercial Real Estate Development

Downtown commercial development has been a major local revitalization strategy in many cities. Retail development, especially large-scale projects, engenders vigorous popular, political, and scholarly debate about the appropriate retail mix and location of establishments, but claim net benefits for localities to preserve the neighborhood character and social relationships (Sutton 2010). These efforts include physical development such as housing, retail, office, tourism and entertainment development. Through either catalytic or incremental projects, the purpose is to contribute with the reposition of urban business districts, and to compete with the suburbs as both shopping and employment centers (Seidman 2002; Jackson and Hickey 2007, Morgan 2010).

Neighborhood commercial development, with a different character and a far smaller scale than downtown development projects, has been a major focus of these efforts through both rehabilitation of existing buildings and new construction. These strategies are driven by two key issues regarding character: one concerns redevelopment versus building reuse, and the other is whether to focus on attracting national chain stores versus supporting local independent businesses. The two issues are interrelated because national retailers often require new development to support their large formats, and inner-city building stock typically is very deteriorated to be reused. Therefore, building sites must be reconfigured to attract retailers (Seidman 2002; Jackson and Hickey 2007, Morgan 2010).

Many underserved city centers refuse to allow leading national retailers or discount department stores to open new units within their corridor districts. As a result, large populations of urban residents are denied basic shopping necessities and choices. In some cases if municipal governments prevent "undesirable" retail stores from opening downtown, the retail consumer-based market will eventually prevail, and these same stores will open just across the city lines in another community (Gibbs, 2012b).

Supermarkets and chain stores can anchor a district, but the literature suggests that strategies must also address how to fit locally owned businesses into the mix. Difficulties inherent to urban neighborhood commercial development include lack of commitment on the part of local institutions, the complexity of site assembly and financing for larger projects. While some authors suggest that the presence of national chain stores and big-box retailers threaten neighborhood identity (Lloyd, 2002), others point out that both public and private large-scale anchors brought considerable pedestrian and vehicular traffic downtown. They supplemented each other's functions and indirectly supported smaller independent retailers (Gibbs, 2012).

Public and private anchors continue to be as essential to competitive urban shopping districts as they are to suburban shopping centers. According to research in Philadelphia done by the City in 2002, big boxes or chain stores primarily influence the number of shopping trips to a corridor, but do not have a significant relationship with retail sales. In addition, the research did not find evidence that big box stores have been harmful to corridors in the period covered by the study.

District Management Strategies

The Main Street program is the most widely used approach to business district management; however, it is not comprehensive within the community development context because it does not address many of the social, housing, and employment issues facing low-income communities (Seidman, 2002). Developed by the National Trust for Historic Preservation and based on work in towns and small cities, the model proposes four key points: 1) *organization,* establishes consensus and cooperation by building partnerships among various stakeholders in the commercial district; 2) *design* that means improving the physical environment, including creating a safe and inviting environment for shoppers, workers, and visitors; 3) *promotion,* which emphasizes the creation of a positive image that will rekindle community pride and improve consumer and investor confidence in the commercial district, and 4) *economic restructuring*, which is considered as the most difficult activity to implement, it strengths the community's existing economic assets, diversifies the economic base by retaining and expanding successful business to provide a balanced commercial mix, sharpening the competitiveness skills of business owners, and attracting new businesses.

2.4 Local Retail Profile / Retail Mix

Generally, shoppers are attracted to commercial centers due, in part, to the business mix. Shoppers are more strongly drawn to an area that has both a pleasant atmosphere and the specific goods in which they have an interest. Therefore, one measure of the attractiveness of a particular commercial center is to examine the range of goods that are available in the area. This is known as the "retail mix" or business mix (City of Somerville, 2002).

Similarly, a *local retail profile* describes the mix of goods and services offered in a shopping area at a given point in time. Over time, businesses close or change hands, new enterprises set up shops, and sites are redeveloped. However, the mix of goods and services available within a shopping area reflects a legacy of social, economic and built capital. Therefore, a well –balanced profile of critical services today bodes health and welfare for the future of the shopping area and the surrounding neighborhood (Urban Collaborators, 2006; Kay, 2010).

Typology and Retail Concepts

In economic development and commercial real estate literature, neighborhood retail area is denominated also as a local or neighborhood center. *Local centers* provide convenience goods and services required by nearby residents on a day-to-day basis. Over 75 percent of a local center's floor area is devoted to the sale of convenience goods and services, and the remainder to shopping goods (City of Somerville, 2002; Kay, 2010). Similarly, *neighborhood center,* which is a classification established by the Urban Land Institute (ULI), is anchored usually with a supermarket; it offers a full depth of goods and services geared to the daily needs of its surrounding neighborhood (Gibbs, 2012).

The ULI categories include neighborhood, community, regional, and super regional commercial centers. The gross leasable area, population radius, and typical anchors within the commercial centers are factors that define them. Generally, they are referred as “shopping centers”, which are a group of retail and other commercial establishments that are planned, developed, owned and managed as a single property, typically with on-site parking provided. Given that a proper classification for commercial corridor districts is not available, this thesis uses the ULI shopping center classification as a benchmark to determine the type of commercial center that best fits Union Square. As Table 2.1 shows, other studies have also used the ULI classification for this purpose (City of Somerville 2012).

Table 2.1 Types of commercial centers

Type of commercial center	Gross leasable area (Sq. Feet)	Population	Radius (Miles)	Typical anchors
Neighborhood	30,000 - 100,000	2,500 - 40,000	1.5	Grocery Store
Community	100,000 - 300,000	40,000 - 50,000	3-4	Junior Department Store, Discount Store
Regional	300,000 - 900,000	150,000 +	8	Several Department Stores

Source: City of Somerville (2002) Neighborhood Revitalization Strategy Area Plan of Union Square.

It is important to distinguish between the general types of retail functions: a) *convenience goods* are those consumers’ goods, which the customer purchases frequently, immediately, and with the minimum of effort. This includes perishables and other daily needs such as foods, drug and sundries, laundry and dry cleaning, barbering and shoe repairing (Gibbs 2012; Howsley's, 2013); b) *shopping goods* are those consumers' goods, which the customer in the process of selection and purchase characteristically compares on such bases as suitability, quality, price and style. Furniture and electronics are some examples (Kay, 2010).

Kay's research (2010) contributes with the concept of *local retail profile completeness,* which describes a mix of shops and services that optimally serves the population residing within walking distance. Retail mix is difficult to quantify objectively, in the sense that what constitutes a "good" mix is a bit subjective, but it generally has to do with creating synergies between proximate stores (City of Philadelphia, 2009). Some researchers have suggested specific kinds of businesses that are often found in well-functioning local retail centers; foremost among these businesses is a grocery store, the hardware store and restaurants (University of Illinois, 1980; Walljasper, 2007; Urban Collaborators, 2006).

Three such lists are compiled in Table 2.2, as well as the list of a typical neighborhood retail center in the United States established by ULI, the latter cited in the Neighborhood Revitalization Strategy Area Plan of Union Square done by the City of Somerville in 2002. The comparison among the business types in each list shows a significant agreement regarding what categories of retail are typical of locally oriented neighborhood retail spanning nearly thirty years. The grocery store, the hardware store, and food and beverage services are mentioned in all lists. The bakery and the food and beverage services categories are in three of the lists. The automobile, bank, barber or beauty salon, clothing or accessories, and specialty food categories are in two lists. However, the daily needs of the residents in a neighborhood are, to some degree, contextually dependent on needs and desires that evolve over time and vary with the demographics of local residents (Kay, 2010).

Table 2.2. Common retail categories characteristic of local centers

	University of Illinois (1980)	Urban Land Institute (2002)	Urban Collaborators (2006)	Walljasper (2007)
Automobile-related		❖	❖	
Bakery	❖	❖		❖
Bank		❖	❖	
Barber/ Beautification	❖	❖		
Bookstore				❖
Cards/ Gifts/ Novelty		❖		
Child-care Center				❖
Clothing / Accessories		❖		❖
Specialty Food	❖			❖
Discount Department			❖	
Dry Cleaner/ Laundromat	❖	❖	❖	
Furniture		❖	❖	
Grocery/ Supermarket	❖	❖	❖	❖
Hardware Store	❖	❖	❖	❖
Hobby/ Special Interest		❖		
Jewelry		❖		
Liquor Store	❖			
Personal Services		❖		
Pharmacy/Drug Store		❖	❖	
Food & Beverage Service	❖	❖	❖	❖
Shoes, Repair/Taylor	❖	❖		
Video Rental			❖	❖

2.5 Successful Neighborhood Retail Characteristics

Neighborhood retail should provide goods and services tailored to the specific needs of each neighborhood in an environment that is convenient, service-oriented, and connected to the urban lifestyles of the neighborhood residents' capital. Among the specific preconditions for successful retailing are walkability and easy accessibility, high visibility, a sense of personal security, a clean and friendly environment, and convenient parking. Those successful characteristics regarding retailers are to hold evening hours, to target product selections toward a diverse customer base, to hire from the community, and to engage with the community (Urban Collaborators 2006; ULI, 2003).

Among the strategies that contribute to successful neighborhood retail are the following. a) Utilize public and private partnerships to achieve long-term success. The balance of the government's regulatory power together with the investment potential of the private sector can make the most of retail development efforts. b) Establish a multi stakeholder visioning process. Reaching a shared vision requires facing the tough questions upfront, making sure everyone understands the realities of the situation, and setting short, medium and long range goals that are realistically attainable. c) Establish the right blend of retailers is critical to the health, welfare, and sustainability of a neighborhood retail area. Achieving an ideal tenant mix and quality will give the street its unique character, as well as the diversity of product offerings it needs to compete successfully with more established retail destinations. d) Use regulatory and financial tools to attract investment, and to develop a strong relationship with local financial institutions and nonprofit organizations. e) Plan for the long term, but manage for constant change. Constant monitoring and reevaluation is necessary to ensure that the target area is healthy, strong, and sustainable (Ibid).

2.6 Conclusions

After decades of decline, cities are rebounding and the revitalization of commercial districts is crucial to bringing urban areas back to life. Though commercial revitalization emerged as an important component of community and economic development, this literature review suggests that the deterioration of retail activity persists, and a single approach has not yet been articulated to understand and contribute to neighborhood retail revitalization. Commercial revitalization requires integration with other strategies to overcome the long-standing socioeconomic forces that lead to inner-city disinvestment. Issues to target include housing improvement, improved health, education, family support services, and workforce development programs as part of a comprehensive effort to create neighborhood-wide revitalization that substantially benefits existing low- and moderate- income residents (Seidman ,2002).

Retail and shopping centers could benefit from inner city competitive advantages such as strategic location, local market demand and purchasing power, integration with regional cluster, and the moderate-wage workforce. However, unless the obstacles are addressed directly, the inner city competitive advantages will continue to erode. A consensus was found among the obstacles of commercial development: the decaying physical conditions of commercial districts, expensive building costs and barriers to accessing capital. Among the most mentioned disadvantages to locating businesses in inner cities are the complicated processes of acquiring vacant land. In addition, the difficulty of coordinating the actions of property owners, businesses, local government, and the limited mix of business inner-city districts harms the ability to draw a substantial customer base. A well-balanced profile of critical services in a commercial district bodes health and welfare for the future of the shopping area and the surrounding neighborhood. However, an agreement was not reached regarding the appropriate retail mix and location of establishments. Commercial revitalization strategies have to build around the need for flexible, on-the ground responses to the specific issues facing each neighborhood.

Chapter 3 – A Snapshot of the Union Square Neighborhood

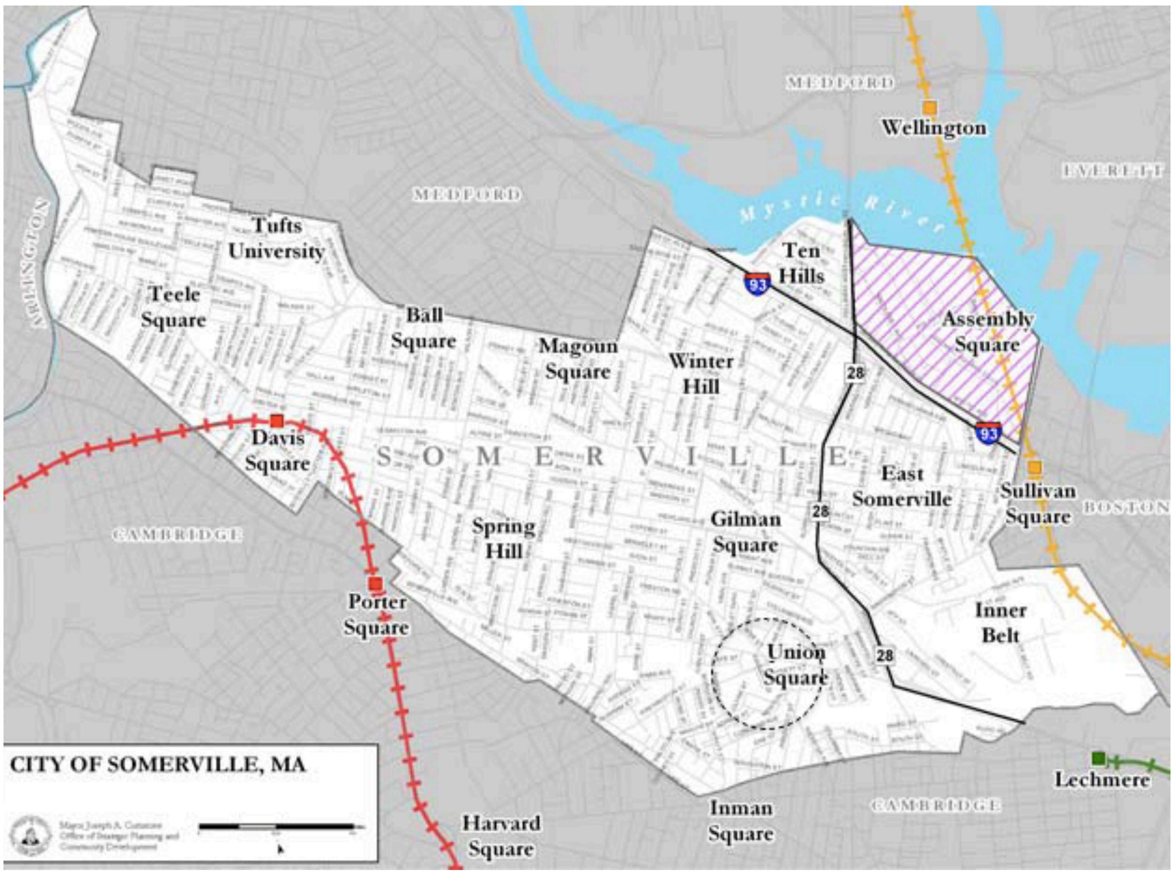
Union Square is in Somerville, a city where a myriad of immigrants from all over the world make it the most densely populated community in New England and one of the most ethnically diverse cities in the nation. It hasn't developed at the same rate as nearby Squares presumably because it is not next to the rapid transit T line. That will change eventually after the construction of the Green Line Extension (GLX), which will connect Somerville, Boston and Cambridge. The first part of this chapter provides a background of Union Square and a glimpse of current plans and polices implemented in the area. Then neighborhood characteristics will be described including: physical conditions, land uses, anchor institutions in the area, demographics, and transit accessibility and existing transportation. The chapter concludes with some of the challenges and opportunities that the Square currently faces.

3.1 Location

Union Square is located at the southeastern part of Somerville, Massachusetts. It is just two miles from downtown Boston at the intersection of two 17th-century highways, Washington Street and Somerville Avenue. Currently, it is at the center of a void in the MBTA's light rail network, but the Massachusetts Executive Office of Transportation is under a federal order to extend the Green Line Trolley system through Somerville by the end of 2016 and beginning of 2017 (City of Somerville, 2012).

Union Square is within walking distance of Somerville's City Hall, and it is surrounded by many lively neighborhoods, such as Davis Square, Inman Square in Cambridge, and East Somerville in Somerville; and Porter, Kendall, and Harvard Square in Cambridge. The boundaries of the immediate area of Union Square include the commercial district as well as parts of the surrounding neighborhood within a walking distance, which are determined according to a ¼ mile radius from the center of the square, which is roughly around the Vietnam Memorial at the intersection of Somerville Avenue and Washington Street (Figure 3.1).

Figure 3.1 City of Somerville



Source: City of Somerville, Office of Strategic Planning and Community Development

3.2 Background

As an infamous home to organized crime in the 1960's and 1970's, Somerville has obtained a new identity with civic and cultural vitality. With a population of more than 77,000 Somerville is today an eclectic mix of blue-collar families, young professionals, college students and recent immigrants from countries as varied as El Salvador, Haiti and

Brazil. It is more demographically diverse than Boston, Cambridge and Quincy and more than 52 languages are spoken in Somerville schools.

Somerville has become a city of young people, with an entrepreneurial character[1] and a tradition of public participation in public affairs (City of Somerville, 2012b). According to the 2010 Census it has the second highest proportion of residents between the ages of 25 and 34 in the United States, behind Hoboken, but ahead of Cambridge. Factors of contemporary revitalization in Somerville include the red line northwest extension reaching Davis Square in 1984, and the accompanying redevelopment of the Square. In addition, the telecommunication and biotechnology booms of the mid-to-late 1990's, and the end of rent control in Cambridge significantly increased demand for Somerville's affordable housing options for students and the creative class (Simon, 2014).

Somerville is known for its large number of squares, which help mark neighborhood boundaries while also featuring bustling businesses and entertainment centers. Each square offers a mix of ethnic restaurants, bars and shops, and small businesses to fit every taste and occasion. In addition, Somerville is Arts Central: only New York has a higher ratio of artists per capita; the local artists make Somerville one of the most vibrant and exciting arts centers in the country.

Union Square has long held a fundamental place in Somerville's cultural and commercial life. It used to serve as the primary commercial center of the City and it sits at the foot of the hill where the first American flag was raised. While this period is

[1] Currently both "entrepreneurial and creative" words are part of the description of Somerville's professional world, where creative professionals build their own business, such as artist, designers, and restaurateurs. Incubator spaces for small businesses in Union Square that are part of the creative

retained in some of the square's taller historic buildings, today Union Square is considered an artistic and multicultural neighborhood.

Union Square has been the subject of decades of plans and studies, including two earlier Urban Renewal Plans, one for the heart of Union Square and a second for Boynton Yards. However, without investments in rapid transit service intended to bring it into Somerville since more than 50 years, the goals of these plans to develop the Square were futile (City of Somerville, 2012).

The origins of the current GLX project date back to 1990, when Massachusetts agreed to extend the Green Line into Somerville to offset increased pollution resulting from the Big Dig. Although technically a state controlled project, city leaders have worked to ensure its progress. In 2005, repeated delays prompted the City of Somerville and the Conservation Law Foundation to file suit against the state, resulting in substantial state investment. Since then the project has taken shape, and the proposed route includes a "mainline" branch of five stops and a branch line terminating in Union Square (Sacchi et.al, 2014).

Union Square station possesses particular significance among the neighborhoods that the GLX will reach due to the city has made it the cornerstone of the Union Square Revitalization Plan adopted by the City in 2012. The realization of the 21st century vision of Union Square presented in the plan requires not partial improvement but a large-scale reinvention of the area. The authorizing statute for the Revitalization Plan is Massachusetts General Laws Chapter 121B, which empowers the Somerville Redevelopment Authority to characterize the Revitalization Area as a "Decadent Area" and prepare an "Urban Renewal Plan" for its rehabilitation.

A revitalization plan under Chapter 121B provides certain benefits to local communities, including the ability to acquire and dispose of designated property. In June 2014, city officials selected a Chicago venture firm called Union Square Station Associates (US2), a partnership between Magellan Development and Mesirow Financial, to be the “Master Developer” of the area. They will carry out the redevelopment of seven disposition blocks owned by the city, with an estimated value of $26 million, transforming them into a mix of offices, shops, homes and opens spaces. Available information indicates there are around 400 businesses in the revitalization area, 23 of them within the disposition blocks where the city is authorized to acquire the parcels by eminent domain (Sacchi et.al. 2014). Figure 3.2 shows the area of the Union Square Revitalization Project, as well as the location of two light-rail transit stations that are part of the GLX.

The “Union Square Revitalization Plan” will guide the development of the area for the next twenty years. It not only outlines key actions to bring Union Square into the 21st century as a vibrant downtown area supporting commercial, residential, and civic goals through improvements to transit, infrastructure, and public realm, but also points out that the new TOD[2] will create jobs and stimulate a larger commercial base. The development of both new transit and TOD will provide economic benefits to the residents of Somerville and provide new commercial growth opportunities that will benefit the Commonwealth (City of Somerville, 2012).

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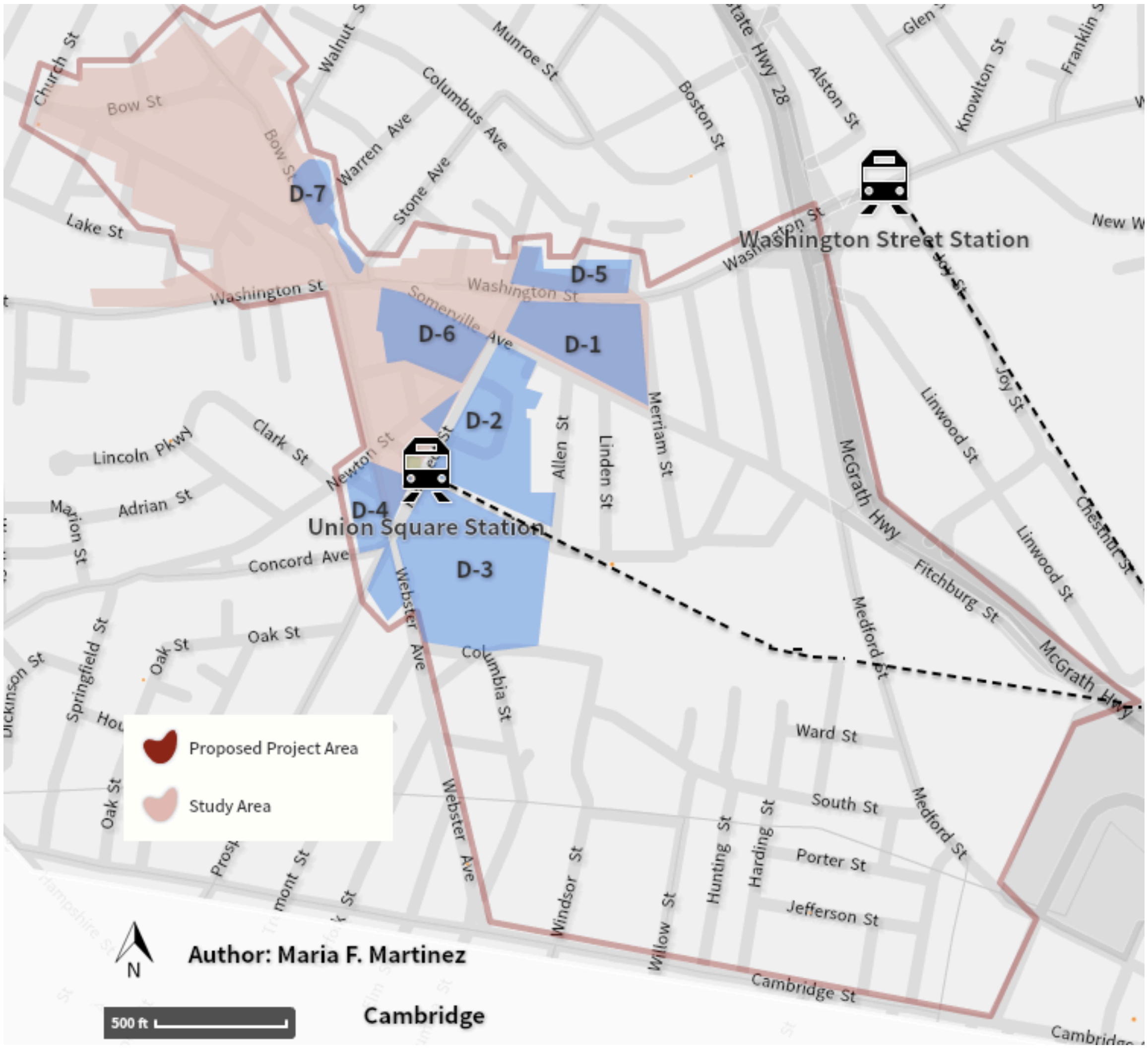
[2] The purpose of a Transit Oriented District (TOD) is to encourage mixed-use transit oriented development with well-designed pedestrian access near transit connections and commercial squares. TOD’s major objectives are to increase street-level activity and real estate investment in order to strength the local tax base through intensive commercial development in the higher density TOD districts.

Figure 3.2 Union Square revitalization area



Source: City of Somerville (2012) Union Square Revitalization Plan

After the approval of the new zoning in 2009 in anticipation of the coming MBTA station, the Somerville Board of Aldermen endorsed the City's first comprehensive plan in 2012 known as SomerVision. Stakeholders of the plan include residents, academics, businesses, local nonprofits and planners; its aim is to develop a vision as well as goals and actions for Somerville's economic sustainability. It is focused on creating transit-oriented neighborhoods with 10.5 million square feet of new development and 30,000 new jobs for local residents. Like the Revitalization Plan, SomerVision is a 20-year plan and the two are intended to run simultaneously.

Among the objectives of SomerVision, the following are related to Union Square's improvement: to make Somerville a regional employment center with a mix of diverse and high-quality jobs; to transform key opportunity areas into dynamic, mixed-use and TOD's; and to invest in the talents, skills and education of people to support growth and provide opportunities to residents of all social and economic levels.

In addition to the existing plans, there is strong community participation in the Square trying to influence the future of their neighborhood. Community groups include an independent neighborhood association called Union Square Neighbors, and Union United, a coalition launched in May of 2014, both aim to actively participate in the development plans.

On the one hand, Union Square Neighbors have emphasized that public and civic spaces are an essential component of a strong neighborhood and commercial center. With millions of square feet of development being planned – two or three times more than what exists in all of Union Square today – this is an opportunity to address existing needs while identifying the neighborhoods aspirations for the future. Therefore, they have requested that the City's plans for major public and civic buildings be clarified, and the Plan addresses not only future city-owned civic buildings, but the potential for publically accessible spaces in private developments as well (Talun, 2015). On the other hand, Union United works to ensure that equity is the foundation of neighborhood revitalization. The coalition's goal is to sign a community benefit agreement with the master developer (CBA). A CBA is a legally enforceable contract between developers and community coalition that address a broad range of community needs while ensuring that local stakeholders can influence in the development process. Among Union United priorities are affordable housing, local jobs, workers' rights, open spaces, and small local businesses (Union United, 2015).

3.3 Age and Physical Condition

Union Square is the oldest and most historic Square in Somerville. It is also where leftover industrial pockets and car workshops are scattered in the midst of residential and retail districts. The Square has an unclear image, and it needs branding (ULI, 2006). No significant private investment has occurred in most of the properties for over fifty years, and many of the commercial lots are situated on parcels of land averaging 3,000 square feet, considered too small for most commercial uses. A majority (85%) of the structures in Union Square were built prior to 1940, and there has been little development during the last 30 years.

The average renovation year for properties is 1977, and only ten new structures have been built since 1981, meaning that most of the buildings would not be compliant with today's building codes (City of Somerville, 2012). Several of the businesses and land use types existing in Union Square today are a legacy of the industrial uses abutting the Fitchburg Rail Line, and automobile- related uses that developed following the closing of the Ford Assembly plant. These parcels contain many one-story industrial buildings, warehouses and surface parking areas, which are a disincentive for private investment and redevelopment in the area.

3.4 Transit Accessibility and Existing Transport Services

Union Square is directly accessible from State Route 28 and it is heavily oriented toward automobile use. Currently MBTA buses are the only form of public transportation, and it is within half of a mile of stops on the following bus routes: 69, 80, 85, 86, 87, 88, 90, 91, and CT2. The road network includes high traffic volume arterial roads and secondary streets. The intersections of the arterial roads are highly trafficked, creating high-density junctions, and limiting pedestrian connectivity. Such streets include Somerville Avenue, Washington Street, Prospect Street, Medford Street, and McGrath Highway. The secondary streets have limited external connectivity and often non-traditional grid layout that results in low traffic volume (Chan G. et al., 2013).

Existing obsolete street patterns need reconfiguration and upgrading to allow for better vehicular traffic flow and interface with pedestrian, bus, and bicycle modes. Infrastructure for bicyclists is limited, and the lack of lane markings and the presence of high volumes of vehicular traffic limits their use. Pedestrian connectivity is constrained, and there are long crosswalk distances, poor crosswalk markings, and small medians and pedestrian islands, which limit accessibility (City of Somerville, 2012; Chan G. et al., 2013). Several planned transportation interventions will have significant impact, such as the GLX, that will connect Union Square to Lechmere Station and downtown Boston. Phase 1 has already started and includes reconstruction of the Medford Street Bridge, and Phase 2, with an estimated completion date of 2017, includes the creation of Union Square and Washington Street T-Stations.

3.5 Demographics[3]

Union Square's immediate area, ¼ mile radius from the center of the Square, has a population of 3,379 residents, which represents varied ethnic and racial backgrounds.

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[3] Due to the purpose of this research, the demographics here included pertain to a smaller area compared to the full revitalization area.

Table 3.1 shows that 12 percent of the residents identify themselves as a Hispanic, 7 percent as African American, 10 percent as Asian, and 68 percent as White (City of Somerville, 2009).

Table 3.1 Racial and Latino composition of Union Sq. and primary market area

	Union Sq. Immediate Area* (¼ mile)	**Union Sq. Primary Market Area* (½ mile)**	**Somerville****
Population %	3,379	15,537	75,754
White	68%	64%	73%
African American	7%	8%	7%
Asian	10%	10%	9%
Hispanic	12%	13%	11%
Median Age	37	36	31
Households	1,442	6,558	31,524
Family Households	46%	47%	44%
Median Household Income	$49,227	$49,632	$67,118
Owner Occupied	27%	27%	34%
Median Home Value	$393,038	$394,010	$437,200
Education			
Bachelor's Degree or higher	19%	20%	53%

Source: *City of Somerville Office of Strategic Planning and Community Development (2009) *Union Sq. Profile* **United States Census 2010 and Social Explorer

The Union Square immediate area's data mirrors the values from the Union Square Primary Market area and Somerville as a whole. The median household income estimated in both Union Square areas is higher than $49,000 and notably lower than Somerville

($64,603) and Massachusetts ($66,658) averages. 19 percent of the population have a bachelor's degree or higher. The age distribution indicates that 25 – 34 year olds is the largest age group; representing 24 percent of the total population, and 37 is the median age.

3.6 Housing and Lifestyle

Somerville's rate of homeownership is considerably lower than other U.S. communities (City of Somerville, 2008), as fully two-thirds (67%) of households are renters, and nearly half of whom (44%) experience housing cost-burden, meaning that they pay more than 30 percent of their gross household income on housing expenses. Housing cost burden is particularly troubling for lower-income households, which have less flexibility in their budgets to cover other basic needs and absorb life's contingencies. Forty percent of Union Square households are defined as a lower income or cost burdened (MAPC, 2014[4]).

According to demographic analysis of ESRI's Tapestry Segmentation (2014)[5], which provides a detailed description of socioeconomic and demographic composition of Americans' neighborhoods, the 02143 zip code that includes Union Square has 16,419 people per square mile and a median age of 31.3. The Median Household income is $64,000, considerably higher than the median household incomes in the six Census Blocks intersecting Union Square. The 02143 zip code has 95 percent of residents in

[4] Renters housing cost burden by household income by ½ mile MBTA Walkshed,

[5] ESRI Tapestry Segmentation is a market segmentation system designed to identify consumer markets in the United State. It contains 14 LifeMode groups that represent markets that share a common experience, e.g. born in the same generation or immigration from another country, or a significant demographic trait, like affluence. http://downloads.esri.com/esri_content_doc/dbl/us/J9941Tapestry%20Segmentation%20Methodology.pdf

Uptown Individuals LifeMode[6] category (trendsetters and metro renters) and 3 percent of residents in the Senior Style category (security set), as shown in Table 3.2.

Table 3.2. Tapestry segmentation by 02143 zip code

Life Mode	Segments	%
Uptown Individuals	Trendsetters	64%
	Metro Renters	31%
Senior Style	Social Security Set	3%

Source: Esri Demographics, 2014

On the one hand, "uptown individuals" are defined as a young, mobile, and single. They usually live in rented apartments or condos in the center of the city, and most of their income goes for rent. Other characteristics include, best-educated market and highest rate of labor force participation, averse to traditional commitments of marriage and home ownership, generous to environmental, cultural and political organizations, and adventurous and open to new experiences and places.

On the other hand, senior lifestyles reveal the effects of saving for retirement. "Senior styles" are defined as households who are commonly married, empty nesters or singles living alone; homes are single-family, retirement communities, or high-rise apartments. More affluent seniors travel and relocate to warmer climates while less affluent, settled seniors are still working towards retirement (Esri Demographics, 2014).

3.7 Anchor Institutions and Employment

Any use that generates a high number of visits to an area is considered to be an anchor. Anchor institutions that may represent drivers of foot traffic and therefore retail activity

[6] The full description of each LifeMode is available in http://doc.arcgis.com/en/esri-demographics/data/tapestry-segmentation.htm

are moderate in size in Union Square. There are several civic and public service agencies in the Square that are potential generators of pedestrian traffic and sales. Most of the operations are modest in size and are not large-scale employers. The major employment centers are: the Public Safety Building (136 jobs approx. in Police Department), the United State Post Office (120 jobs), School Department Administrative Office, Argenziano Elementary School (70 jobs), and the Walnut Street Center (100 jobs approximately) (City of Somerville, 2008).

Some of the non-profit agencies include: Community Action Agency of Somerville (CAAS); Cambridge and Somerville Program for Alcoholism and Drug Abuse Rehabilitation (CASPAR); RESPOND, a domestic violence agency; Massachusetts Alliance for Portuguese Speakers (MAPS); and Somerville Community Corporation (SCC). Catholic Charities, Union Square Main Streets, and Somerville Community Access Television (SCAT) are also located in the Square.

Churches, banks, schools, hospitals, tourist attractions, and arts organizations serve as amenities that may represent drivers of foot traffic and therefore retail activity. Union Square has several churches and two banks in the core area. The hospital nearest to the study area is Union Square Health Center, but Cambridge centers are also nearby and include the East Cambridge Health Center and Cambridge Pediatrics.

3.8 Land Use and Zoning

Land use analysis in the Union Square Neighborhood Revitalization Area Plan (2002), reflects a mix of commercial, industrial and vacant pockets with an outer ring of dense single and multi-family residences (Table 3.3). The usage distribution differs from the rest of Somerville in nearly all categories, (open spaces, industrial, residential and roadways). Open space and residential use percentages are smaller than the city as a whole, and industrial and roadways uses are higher. The concentration of commercial uses reflects the dominance of Target and Twin City Mall, similarly to Somerville, which despite being recognized for its urban squares, has the largest concentration of commercial land being in the form of traditional ‘big box’ shopping centers and malls (City of Somerville, 2011).

The 2009 Re- zoning of Union Square clearly indicates the city’s intention for the neighborhood to be remade as a thriving urban core (Sacchi et.al. 2014). Although the outcome of the public rezoning process resulted in retaining the standard residential zoning for the neighborhood areas, two new types of mixed-use districts were introduced: the CCD along the heart of Union Square, and the TOD near the light rail station (Figure 3.3).

Table 3.3 Land use type and occupancy share of Union Square compared to Somerville at large

	Union Square*		**Somerville****	
Categories	**Land Area (sf.)**	**% of Total**	**Land Area (sf.)**	**% of Total**
Civic & Institutional	641,081	8.9%	7,927,920	7%
Open Space/Vacant	223,185	3.1%	6,751,800	6%
Commercial	771,898	10.7%	11,586,960	10%
Industrial	691,937	9.6%	4,486,680	4%
Residential		38.7%	52,664,040	46%
Mix Use	N.A.		2,570,040	2%
Subtotal	5115770	71%	85,987,440	75%
Roadways/ Railways	2,092,054	29%	28,314,000	25%
Total	**7,207,824**	**100%**	**114,301,440**	**100%**

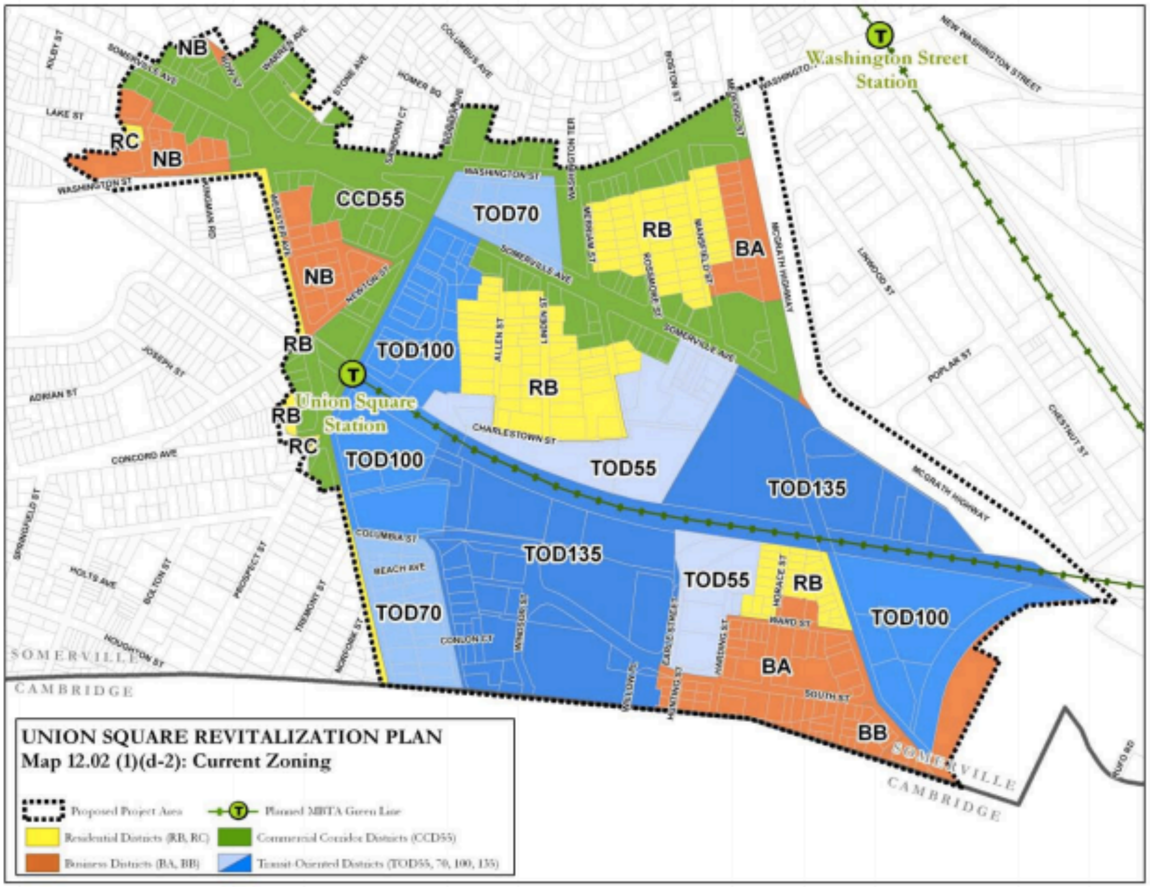
Source: *City of Somerville Office of Housing and Community Development (2002) *Union Square Revitalization Study* NRSA April 2002
**City of Somerville Office of Strategic Planning and Community Development (2011) Trends in Somerville: *Land Use Technical Report May 2011*

The CCD will encourage infill development and mid-rise, mixed–use or commercial development in the main streets, and increase high profile commercial investment. The TOD will encourage pedestrian-friendly streets, sidewalks, transit access, and mixed-use development, especially on vacant or underutilized land. It could increase the supply of affordable housing, and a dynamic business environment with jobs for a variety of skill and income levels (City of Somerville, 2012).

With these newly applied districts, property owners and developers have access to "Use Clusters", a regulatory mechanism that provides a greater level of categorical flexibility between uses that have similar impacts (Table 3.4). Provided they are under the square footage limit that would require a Special Permit for approval, individual uses categorized within the same cluster can come and go by right, while uses not expressly authorized in the clusters are prohibited. Although the City is currently undertaking an extensive rewrite of the Somerville Zoning Ordinance, the CCD and TOD districts within the Revitalization Area are anticipated to remain essentially the same as they are in the current version of the Zoning Ordinance (Ibid).

The 2009 Re-Zoning includes an Arts Overlay District to promote arts-related uses in Union Square, and encourage the continued development of the area as a working arts district (Figure 3.4). Beyond clarifying use definitions and incentivizing the conversion of underutilized lots and spaces for arts-related uses, the zoning requires that most developments in areas zoned as TODs include arts-related spaces totaling at least 5% of the gross floor area. New creative business have made a significant impact in Union Square by shifting 12,000 square feet of commercial space from industrial use or vacant to a creative use (City of Somerville, 2008).

Figure 3.3 Union Square zoning



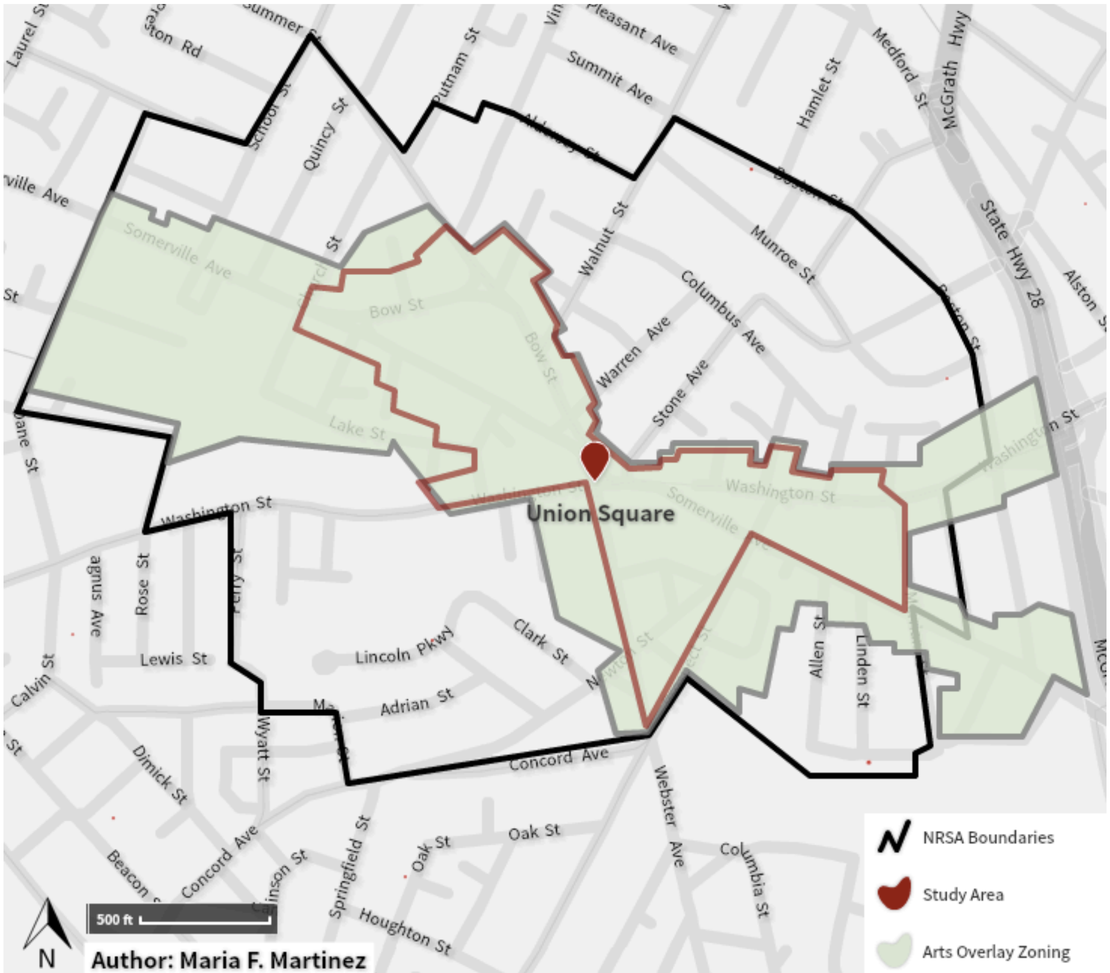
Source: City of Somerville (2012) Union Square Revitalization Plan

Table 3.4 Use clusters in the CCD District

A. Office/R&D/Institutional Uses	F. Other Accommodations
B. Small Retail and Service (Less than 1,500 net square feet)	G. Educational/Recreational Services
C. Medium Retail and Service (1,500 to 10,000 net square feet)	H. Other Uses
D. Eating and Drinking	I. Protected Uses
E. Residential (except on first floors facing corridor streets unless it already exists)	J. Large Retail and Service (more than 10,000 net square feet)

Source: City of Somerville (2012) Union Square Revitalization Plan

Figure 3.4 Union Square NRSA boundaries and arts overlay zoning district



Source: City of Somerville (2002) Neighborhood Revitalization Strategy Area Plan of Union Square.

3.9 Conclusions

Union Square is a desirable mixed use and cultural destination with access to transit, and diverse goods and services. It has become well known for eclectic activities, nurtured by community groups. Similarly to Somerville, which became more diverse from 2000 to 2010 (MAPC, 2014), the multi-ethnic character of Union Square has been accentuated in recent years. Although the Square faces considerable issues and a lack of visual identity, it has a rich history and the potential to become once again a thriving commercial district.

The participatory community is an asset in the neighborhood where there are not only several non-profit organizations but also grassroots associations dedicated to supporting and shaping the future of Union Square.

The planned development in the Square is a priority to the City administration, which aims to accomplish physical improvements and to link Somerville's corridors in order to support future development and economic activity. With strategic development of underutilized property, Union Square can regain its status as a vital urban crossroad that is pleasant to be in, to travel to, and easy to pass through (ULI, 2006). Besides the new development, the pace of change will accelerate due to the GLX, which will most likely stimulate economic growth and enliven the Square. Furthermore, these changes will make the Square more attractive as a business location, and will dramatically improve transit mobility for both residents and businesses (MAPC, 2014).

The city expects positive effects due to the TOD, such as new mix-use neighborhoods with the density to meet the city's growing needs and to maximize the area's potential as a center for commercial research, retail, residential and recreational uses. However, new challenges are also expected; for instance, how to keep Somerville affordable enough for the people who currently live there. There is a concern that some residents might be pushed out of the neighborhood due to the climbing cost of housing. According to MAPC's "The Dimensions of Displacement report" (Ibid), as the new stations along the GLX will be built, the apartments around these stations might see the average rent climb more than 25 percent and as much as 70 percent. Washington Street, Ball Square and Union Square might see the biggest increases. That is confirmed by the Esri's lifestyle database, as Somerville in general has gradually become a go-to nesting ground for a certain variety of professionals in the upper-middle class, who have a renewed interest in urban living and walkable, artistic neighborhoods.

Chapter 4 – Snapshot of Union Square's Commercial District

This chapter aims to offer a picture of what is taking place in the Union Square commercial district. The first part explains the background and the city's perspective on the business mix in the area. Then, the current district's characteristics including type, size, competing neighborhood centers, and anchors within the commercial district are provided. The third section analyzes the current business mix in the area of study and how it has changed during the last ten years. The last section includes the perspective of some residents about the business mix in Union Square.

4.1 Commercial District Characteristics

Type, Size and Anchors

The commercial district is at the heart of the Union Square and bounded by dense residential areas along Somerville Avenue and Washington Street between Prospect Street and Webster Avenue. According to the Urban Land Institute criteria for commercial centers or shopping centers, Union Square is classified as a neighborhood center (City of Somerville, 2002) with a population of about 15,537, a radius of about ½ mile, and the Market Basket grocery store serving as an anchor.

The commercial district has over 400,000 square feet of office and commercial space, and the majority of the commercial buildings are one to two stories. The Union Square non-residential uses are predominantly in this area, which has a total gross area of 842,033 square feet including commercial and office uses.

Historically, commercial center anchors tended to be retail uses, particularly department stores, but traditional commercial center uses have changed and anchors now take different forms (City of Somerville 2008, Five years). Besides the civic organizations serving as anchor institutions mentioned in section 3.7, there are other anchors such as a food specialty establishment, popular restaurants, a grocery store or social service agencies. The Market Basket grocery store located on the outer edge of the commercial district is perhaps the largest anchor store in Union Square.

Art and cultural events benefit the perception of the square and also attract visitors, who subsequently provide additional economic benefits to local business establishments. Union Square Main Streets in collaboration with Somerville Arts Council (both created in 2005) have drawn positive public attention to the area in recent years. They have provided cultural economic development for local businesses, residents, and artists. The seasonal Farmers Market and Crafts Fair, and multiple annual events such as the "Fluff Festival" celebrated in September, have attracted thousands of visitors to the area. Along with the Brick Bottom District the Square has a concentration of artists and arts-related businesses. In the past few years, incubator spaces for small businesses engaged in the creative economy have opened, including Greentown Labs, Fringe Union, Form Labs, the Grommet and the nearby Artisan's Asylum (City of Somerville, 2003).

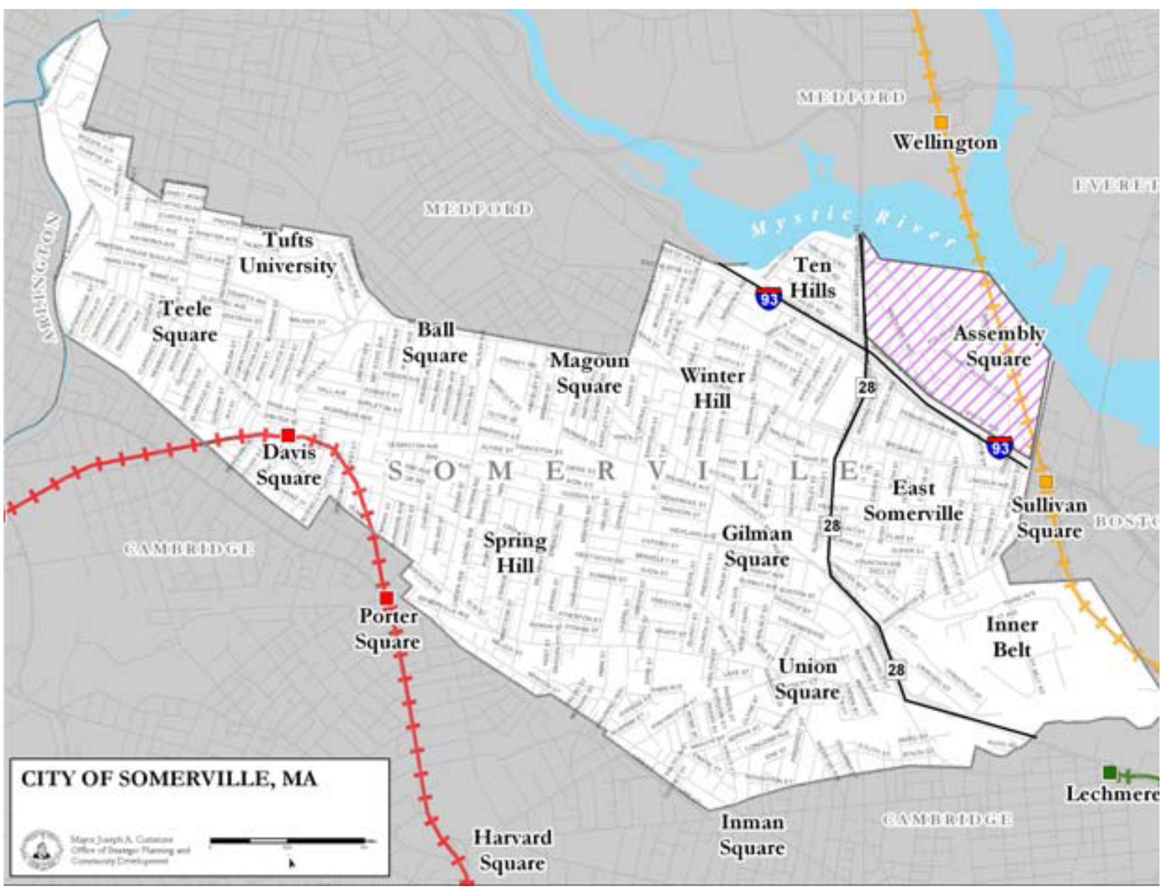
Competing Neighborhood Centers

Some of the commercial districts in the surrounding areas include traditional commercial centers, such as Inman Square, Central Square, Davis Square, Porter Square, and Harvard Square (Figure 4.1). Their better image and streetscape patterns, as well as the mix of restaurants and retail stores, and the office spaces of these commercial centers compete with those of Union Square. The easily accessible MBTA Red Line in Central Square, Davis Square, Porter Square and Harvard Square, represent a competitive advantage too. While some of them are neighborhood oriented commercial districts, others such as

Harvard Square and Central Square have become a regional destination, oriented to high-end retail, restaurants and offices uses.

As figure 4.1 shows, there are also other neighborhood commercial centers in Somerville such as Teele Square, Magoun Square, Ball Square, East Somerville, and Winter Hill which are small, locally serving sources of convenience goods to residential neighborhoods in Somerville. However, it does not appear that these squares are directly competing with Union Square for retail and restaurants establishment (City of Somerville, 2002).

Figure 4.1 Neighborhood commercial centers in Somerville



Source: City of Somerville

Within a 1.5 miles radius, Union Square is surrounded by major regional and community shopping centers. These lager scale retail centers offer a broad range of general merchandise and specialty goods, such as Cambridge Side Galleria, which has traditional apparel and a large food court; Twin Cities Plaza, which has a Star Market and other national chains and convenience stores; and Assembly Square, which was transformed from the site of an industrial Ford Motor assembly plant to the site of a billion dollar development lined with national shopping brands and restaurant options, and it has a rapid transit station on the MTBA's Orange line since September 2014.

4.2 Retail and Service Mix

I prepared an inventory of businesses in Union Square during March 2015 through a combination of business lists and field observation. The inventory is provided in the Appendix, and includes the name, the address, and type of each of the 136 businesses in the study area. As shown in Table 4.1, the business mix in the core of Union Square is heavily weighted toward professional services, which are both high in terms of number of establishments (31.6%) and square footage (23.8%). There are three predominant types: design and artist (6.6%), social services providers (5.1%), and health related services (5.2%); the latter category includes medical and dental, and alternative healthcare services such as acupuncture. Social service providers and health care services have more than 40 percent of the office space in the category of professional services; therefore many of the service related uses are not taxpayers that could make contributions to the non-residential tax base of the city of Somerville (City of Somerville, 2002).

The second largest category is food service (19.1%), and the restaurants are the predominant industry representing over 60 percent of the total of business type of this category. Combined with the food and beverage category, both food-related categories represent 29.4 percent of the total establishments and 27.5 percent of the total square footage. However, the Market Basket alone occupies more than 50 percent of the square footage. Personal services represent 16.2 percent of the total of businesses, yet only 8.6 percent of the total square footage. Similarly, automobile related services represent 8.1 percent of the total of square footage, and it only represents 5.9 percent of the total of business type. The instruction business type that includes yoga, karate, dance and languages lessons, represents the highest percentage of personal services (7.4%) followed by hair and nail salons (5.1%), which is one of the most commonly found personal services in a neighborhood.

Table 4.1 Summary of Union Square business, March 2015

Type of Business	No.	%Total	Sq. Feet	% Total
Food and Beverages	**14**	**10.3**	**70,956**	**17.3%**
Convenience Store	5	3.7	5,816	8.2%
Specialty/Wholesale/Bakery	7	5.1	14,810	20.9%
Supermarket	1	0.7	46,278	65.2%
Liquor Store	1	0.7	4,052	5.7%
Food Services	**26**	**19.1**	**41,996**	**10.2%**
Restaurant	17	12.5	25,644	59.5%
Pizza/Fast food	4	2.9	6,380	14.9%
Bar, Lounge	3	2.2	5,172	12.1%
Cafe Shop	2	1.5	4,800	13.6%
Other Retail	**10**	**7.4**	**17,243**	**4.2%**
Apparel	2	1.5	1,900	11.0%
Book, Music, Videos	3	2.2	4,104	23.8%
Flowers/Plants Stores	1	0.7	8,200	47.6%
Jewelry	2	1.5	1,802	10.5%

Other	2	1.5	1,237	7.2%
Personal Services	**22**	**16.2**	**35,325**	**8.6%**
Hair/Nail Salons	7	5.1	6,884	19.5%
Cleaners/Laundry	2	1.5	2,240	6.3%
Travel Agent	1	0.7	946	2.7%
Tailor/Shoe Repair	1	0.7	600	1.7%
Instruction	10	7.4	22,955	65.0%
Printing / Publishing	1	0.7	1,700	4.8%
Financial Services	**10**	**7.4**	**15,439**	**3.8%**
Bank	3	2.2	7,570	46.1%
Insurance	2	1.5	2,164	19.2%
Wire, Transfer, Lottery	5	3.7	5,705	34.7%
Professional Services	**43**	**31.6**	**97,633**	**23.8%**
Medical / Dental	5	3.7	27,449	28.4%
Accounting / Legal	4	2.9	8,067	8.3%
Design/ Artist	9	6.6	21,004	21.7%
Social Services Provider	7	5.1	10,424	10.8%
Alternative Healthcare	2	1.5	2,765	3.6%
Other Professional Services	16	11.8	27,924	27.2%
Car Related	**8**	**5.9**	**33,273**	**8.1%**
Vehicle Sales	1	0.7	3,203	9.6%
Gas, Monitor Oil	1	0.7	2,288	6.9%
Vehicle Maintenance	6	4.4	27,782	83.5%
Public Administration	**3**	**2.2**	**79,534**	**19.4%**
Vacancy	**11**		**18,739**	**4.6%**
Total	**147**	**100.0**	**410,138**	**100.0%**

Source: Field research

There is no prevalent business type in other retail category, representing 7.4 percent of the total of establishments and only 4.2 percent of the total square footage. Similarly, financial services establishments represent 7.4 percent and only around 4 percent of the total square footage. Finally, the public administration buildings, including the Post Office and the Police Station, occupy over 70,000 square feet, around 20 percent of the total area although they only represent 2.2 percent of the total businesses space accounted for.

Ethnic Businesses, Vacancies and New Businesses.

The qualitative analysis of business mix in Union Square shows the existing diversity. Food-related services are good examples of the eclectic mix of longtime and new businesses in the area, which serve and attract a diversity of residents and visitors in the neighborhood. The mixed used square features many ethnic restaurants and traditional American cuisine such as Peruvian, Mexican, Korean, Indian, and Brazilian. Restaurant kitchens include also gourmet options like drinks and food from Germany and Central Europe, which are reflected in a high variance in their menu prices. In addition, there is a diversity of choices in food markets including Italian, Japanese and Korean, Portuguese, Indian and Latin American.

To our knowledge there is no registry of the ethnic businesses in Union Square. In 2012, a Tufts academic research work found that 70 out of 108 Union Square's businesses might be considered non-ethnic (although a few may cater to ethnic groups) and 54 may be considered ethnic (Wai, 2012). Currently, 33 of the 54 still remain open in the same location (Appendix B). Table 4.2 shows the name and origin of the seven businesses that have been in the neighborhood since the 1980's. According to this research, the oldest businesses still in operation today are ethnic. There are new businesses that sit side-by-side to ethnic markets but attract a much different clientele such as coffee shops and high-end restaurants. These businesses strike a stark contrast to immigrant owned multi-purpose stores that offer products from home countries and signs in several languages advertise remittance services.

Through all these years, some of these business owners have seen how Union Square, and Somerville in general, has changed and now is a place with younger people, "hipster" establishments, expensive rents, and luxury apartments (Teitell, 2013). Other academic research from Tufts about the Brazilian entrepreneurship, found that some business owners in Union Square have seen general improvements but also witnessed the deteriorating traffic conditions, lack of parking and inconveniences caused by construction in some main streets. At the same time, they have also been active community members by demanding improved trash collection services from the City of Somerville (Christiansen, 2010).

Table 4.2 Oldest Businesses in Union Square

Name and Origin	Year	Type
Reliable Market - Japanese	1982	Korean and Japanese Grocery
Neighborhood Restaurant and Bakery - Portugal	1983	Restaurant, Portuguese American Cuisine
Capone Foods - Argentina	1985	Specialty Food
Ricky's Flowers - USA	1989	Garden Supply
Indian Palace	1989	Indian Restaurant
La International Food-Guatemala	1989	Latin American Groceries

Source: Somerville Arts Council, Nibble Project and field research

As of March 2015, eleven out of 147 retail spaces in the study area are visibly vacant (Figure 4.2). Table 4.3 shows the name of the new businesses in Union Square since last summer (2014). In less than one year, eight businesses have closed, and eight have opened. The new businesses include a gourmet donuts on Bow Street, which used to have a smaller location in the square and now occupies the place where there was once a convince store; a restaurant which replaced another restaurant in the Union Square Plaza; an ice cream store which replaced a food market, and an apparel store in Union Square Street in the upper floor; a bicycle shop on Somerville Avenue; two stores related with art and the creative industry, on Somerville Avenue and Union Square street respectively; and a project management service place making.

Figure 4.2 Vacancies in the area of study, March 2015

Source: Field research

Based on the review of the past Union Square businesses inventories (2004, 2005, 2008, 2014), year 2015 has a slightly higher number of vacancies than others. While several factors influence a business closure, it is know that the past years brought unpredictable shifts in the property's land value and tax burdens influencing the survival of several businesses.

Table 4.3 Turnover in Union Square from summer 2014 to spring 2015

Closed recently			**New businesses**	
Name and years in the Sq.		**Type**	**Name**	**Type**
Elegant Furniture *	20	Other Retail	Vacant	
Kerr Party *	10	Other Retail	Somervelo	Bicycle repair
Kerr Sport*	-	Other Retail	Somervelo	Bicycle repair
Living Well *	2	Other Retail	Vacant	
Lovely Spot *	2	Convenience	Union Sq. Donuts	Food Service
Riverside Kawasaki*	30	Motorcycle	Vacant	
Sherman Cafe	10	Food Service	Vacant	
Sherman Market	-	Food	Gracie's Ice Cream	Food Service
The Precinct	6	Food Service	Brass Union*	Food Service
Vacant			BeadKreative	Retail, Art related
Vacant			Loyal Supply	Retail, Art related
			Kawaii Me	Apparel
			Relish Management	Service (Project management for place making)

Source: Field research

The FY14 Chief Assessor's Classification Hearing Report indicates that commercial rents in Union Square have risen sharply over the past decade. From 2005 to 2012 the average per square foot cost for commercial and industrial properties rose almost 47 percent. From Fiscal Year 2012 to Fiscal Year 2013, the average value for commercial and industrial parcels in the Union Square Revitalization area essentially remained stagnant. However, in FY14, during the first assessment period following state approval of the Union Square Revitalization Plan, the assessed value for the same parcels increased more than 20 percent. Assuming that rental rates are affected by property value and property tax, the Revitalization Plan and GLX are reasons why the rents in Union Square will reach unprecedented levels. Inflated property values translate into outsized property tax increases, which can devastate existing small businesses. Although long term, fixed rate leases protect some businesses from unreasonable rent increases, almost all commercial leases include a clause passing the burden for paying property taxes onto the tenant (Sacchi et.al. 2014).

To understand how these trends affected business owners, I collected the following anecdotal information from business owners in the Square. The owner of Elegant Furniture closed his store last fall after his rent increased 80 percent. Capone Foods is charging more for its food products to cover soaring local tax bills. Riverside Motorsports left the Square after 35 years and moved out of town right after being notified of a rent increase. Sherman Café closed after almost 10 years, arguing that in recent years Union Square's face has change and it had been difficult paying bills (Boston Globe, December 2014). What businesses eventually move into Union Square remains an open question.

4.3 Missing Business Types

Union Square's commercial district is surrounded by several businesses, and it is close to Target and Ride Aid, which are considered to be outside of the study area. Besides the Market Basket, the Square lacks other strong anchors. According to a typical commercial mix in downtowns (Bill, et al 2010) Union Square is lacking home appliance and other electronics stores as well as used merchandise stores. Other categories that do not exist in the area are family wear, clothing and accessories, home furnishing, hardware, and a drugstore; these types of businesses are considered part of a typical U.S. neighborhood district (City of Somerville, 2002). The lack of apparel and general merchandise or retail stores is a disadvantage to competing with neighborhood commercial districts. Even thought Union Square is not a shopping center, the ULI classification is used in several official documents. For instance, according to Union Square Revitalization Study (2002) the typical gross leasable area (GLA) in commercial mixes for neighborhood and community centers differs compared to the commercial mix for Union Square, Table 4.4.

Table 4.4 Comparison to the typical commercial center

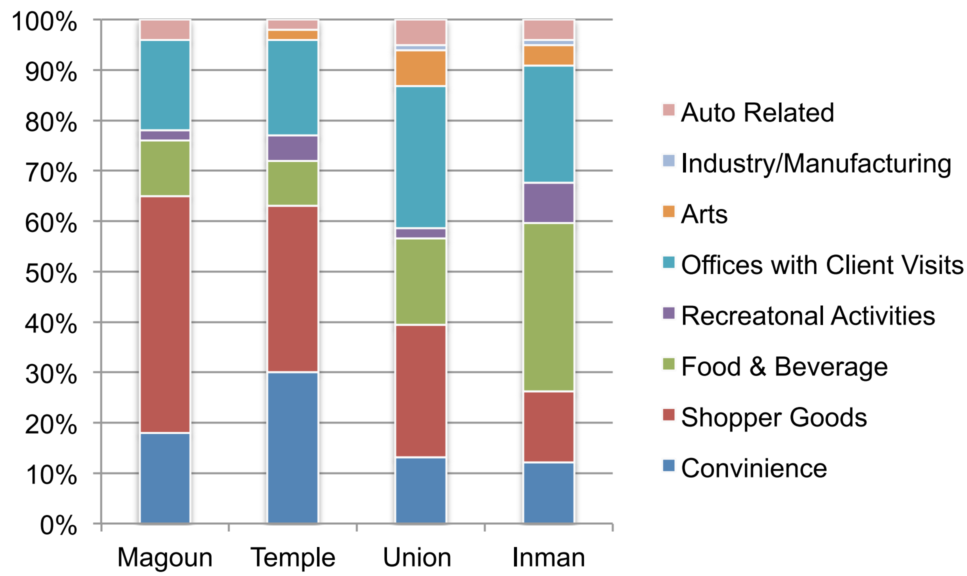
Type	**Typical GLA Neighborhood Center**	**Union Sq. GLA Commercial District**
Convenience Goods	50%	27%
Shopper Goods	30%	4%
Personal Services	5-7%	16%
Professional Services	7-9%	27%
Vacant	2%	5%
Other		20%
Total	100%	100%

Source: Union Sq. Revitalization Study Neighborhood Revitalization Plan Strategy Area Plan, April 2002 and field research

Union Square commercial district has substantially fewer convenience (27%) and shopper goods (4%) compared to what is typical for a commercial center. Convenience goods such as grocery or pharmacies are often visited by people on their way to or from work, and are not destinations in their own right. However, sit-down food and beverage establishments encourage visitors and residents to spend more time experiencing the squares. Businesses that offer shopper goods, which are higher end products occasionally bought by consumers that usually compare for quality, cost, and feature, could be "destination businesses". This category tends to be desirable because of its ability to create pedestrian traffic that will support other area businesses. Uses that typically have a less prominent role in a commercial center are dominant in Union Square, such as the professional services, which occupied 27 percent of the total square footage in the commercial area. These businesses that serve clients, such as health or architecture offices draw both employees and clients; however, in Union Square they are not considered primary employer centers. Twenty percent of the commercial district gross leasable area belongs to public administration buildings like the Police Station and the Post Office.

In order to compare the business mix between Union Square and other commercial centers nearby, the number of different business types is considered. Figure 4.3 shows how Magoun and Temple Square have a larger percentage of shopper and convenience good businesses, similar to a typical GLA Neighborhood Center. It's important to mention that Magoun and Temple Square have only over 40 businesses each, and no Square besides Union Square has a large amount of redevelopment projects. In comparison to Inman Square, which has 91 businesses, Union Square has a slightly higher proportion of shopper goods and offices with client visits. In contrast, Inman Square has a higher proportion of sit down food and beverage and recreational facilities appealing to local area residents and visitors and encouraging them to spend more time and money locally. Both Inman and Union have a strong presence of art workshops and activities (Ayyash, D. et. al., 2012).

Figure 4.3 Commercial uses by percent business mix in 2012.

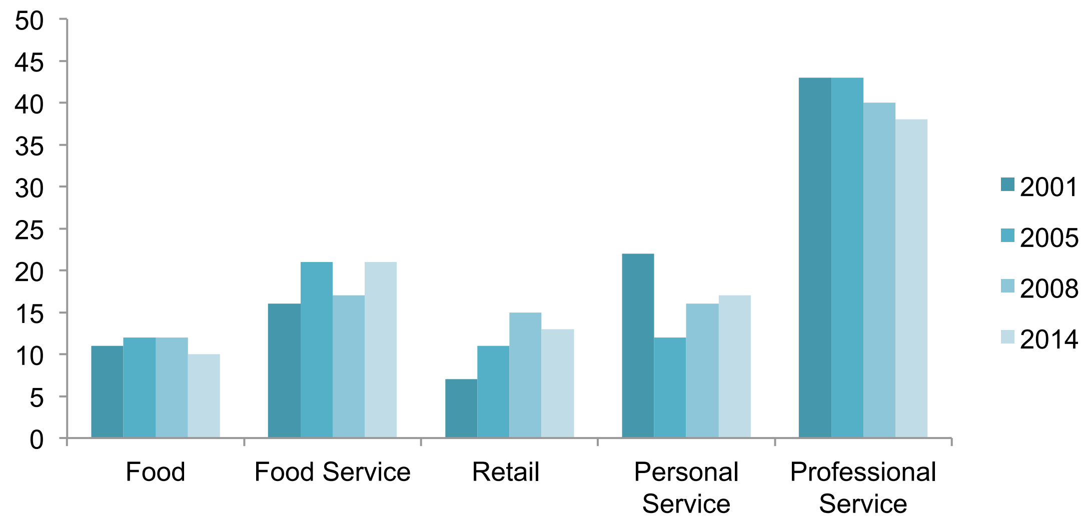


Source: Winter and Magoun Square community plan, 2012.

4.4 Business Mix Over Time

Since 2002, Union Square has been described as a business area focused on food based services (City of Somerville, 2002, De la Torre, 2005; Chan G. et al., 2013). Besides these characteristics, the Union Square Revitalization Study (2002) mentioned that the total gross leasable areas for automobile uses, industry office and construction or contractor service uses have substantially greater percentages than are typical for neighborhood centers. This is explained because the boundaries of this study include a broader area than the area of this research and also includes parts of the surrounding neighborhood (7.2 million square feet). Figure 4.4 shows the comparison of the number of business types in Union Square based on four Union Square business inventories for 2001, 2005, 2008 and 2014. It illustrates the higher number of professional services existing in the area since 2001, a smaller number of food (convenience store, specialty, wholesale bakery and supermarket) and food services (restaurants), and the lack of retail.

Figure 4.4 Percentage of business mix over the time in Union Square

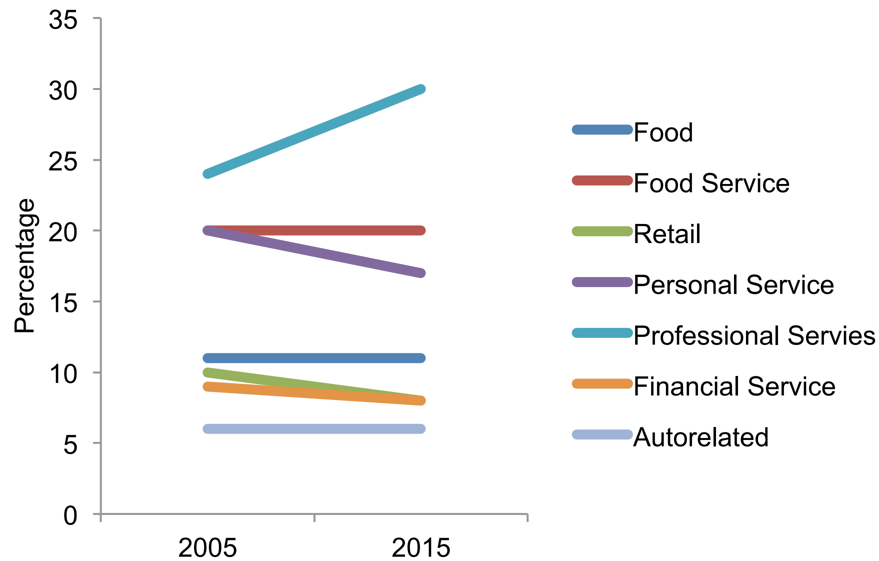


Source: Business Inventories from 2001, 2005, 2008, 2014 and field observation[7]

Figure 4.5 shows how the business mix has slightly changed since 2005 to 2015. The number of professional services has increased by around 5 percent. Contrarily, the number of personal services has decreased less than 5 percent as well as the financial services and retail. Although both figures, 4.4 and 4.5, show very limited change over the time, according to the historical data of businesses, from 2005 to 2008 there were 35 turnovers, and from 2008 to 2014 there were 27. As it was mentioned before, the last year from 2014 to 2015, there were eight. Therefore, 70 businesses that existed in 2004 closed before March 2015, and at least 68 businesses have been in Union Square around ten years or more (Table 4.5).

[7] Business inventories were consulted from Union Square Revitalization Study, a NRPS Area Plan 2002; Union Square Central Business District, a Building Survey, 2005; Union Square Creative Uses Report, 2008; and Commercial Gentrification in Union Square, 2014.

Figure 4.5 Business mix composition by type from 2005-2015 in Union Square



Source: Business Inventories from 2005, 2008, 2014 and field observation

Table 4.5 Businesses that have been in Union Sq. more than 10 years.

Type	No.	%
Food and Beverage	**9**	**13.2**
Convenience Store	4	
Specialty/Wholesale/Bakery	4	
Liquor Store	1	
Food Service	**15**	**22.1**
Restaurant	9	
Pizza/Fast food	4	
Bar, Lounge	2	
Other Retail	**3**	**4.4**
Book, Music, Videos	1	
Flowers/Plants Stores	1	
Jewelry	1	
Personal Services	**7**	**10.3**

Hair/Nail Salons	2	
Travel Agent	1	
Tailor/Shoe Repair	1	
Instruction	3	
Financial Services	**7**	**10.3**
Banks	2	
Insurance	2	
Wire, Transfer, Lottery	3	
Professional Services	**19**	**27.9**
Medical / Dental	4	
Accounting and legal	3	
Design/ Artist	3	
Social Services Provider	3	
Other Professional Services	4	
Car Related	**8**	**11.8**
Gas, Monitor Oil	1	
Vehicle Maintenance	7	
Total	**68**	**100**

Source: Business Inventories from 2005, 2008, 2014, and field observation

4.5 Residents' Perspectives

In order to know more about Union Square residents' shopping habits and their perspective of the business mix in the Square, seven interviews were conducted and sixteen surveys were collected. The study subjects were contacted purposefully from community groups, but mostly from community meetings where they were invited either to participate in an interview in person or in a survey sent via email. The small sample size limits the results' utility when applying rigorous quantitative data analysis. However, it offers a valuable snapshot of residents' perception of the commercial district's characteristics.

Participants' General Characteristics

In total, thirteen women and ten men with diverse professions participated including four students, four people who work in architecture or the real estate field, three academics, three social workers, one retired, two business owners, and six subjects with other professions. Five participants work in Union Square, fifteen rent their house, and sixteen identified themselves as a white. Almost all of them walk or use a bicycle in the Square, and the majority showed interest in helping to improve the area by attending community meetings or working on projects related to commercial revitalization.

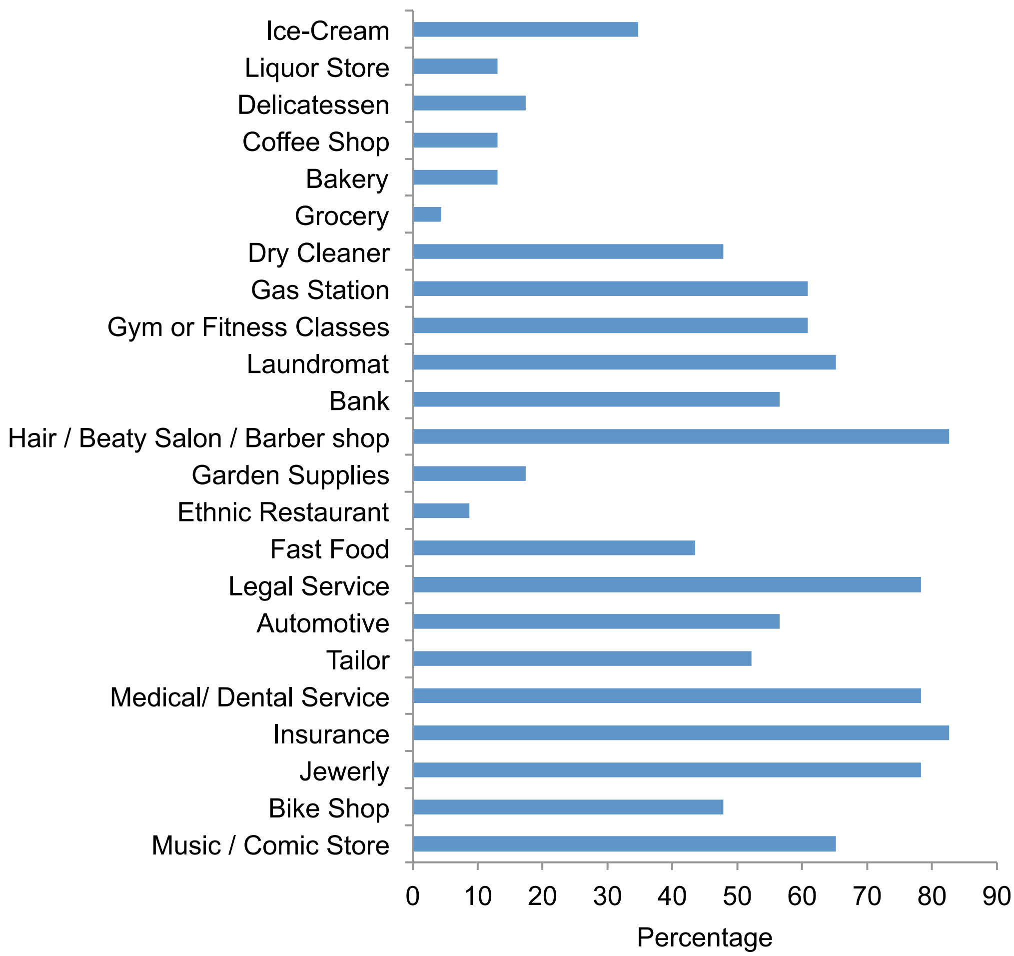
Shopping Habits

Almost 90 percent of the participants identified themselves as a "frequent shopper" in Union Square, and 56 percent of them have not set times to shop but usually they do it on weekends, and evening is the more convenient time for them. Eighty-three percent shop for their groceries at Market Basket, and almost all of them shop in the farmer's market when it is open. Fifty percent buy in local groceries such as Reliable Market, Capone Foods, La International, Pao de Acuar, and Well Foods, which are ethnic markets. Sixty five percent also shop for their groceries outside of Union Square; Whole Foods and Trader Joes were the stores more mentioned.

> *I usually do my groceries in Market Basket. However I complement my shopping in other stores like Indian groceries, or Reliable Market in Union Square because I like fresh food and vegetables. If I am visiting other neighborhood I go to Whole Foods. I have tried to buy in other ethnic market in the Square but I had not found anything that I need.* (Interview with a professional)

Fifty percent of respondents declared that when they buy groceries they also visit other stores in the neighborhood. Figure 4.6 shows many types of business that respondents have never visited. In general, they are professional or personal services (e.g., beauty salon, insurance, legal assistance, and medical or dental service).

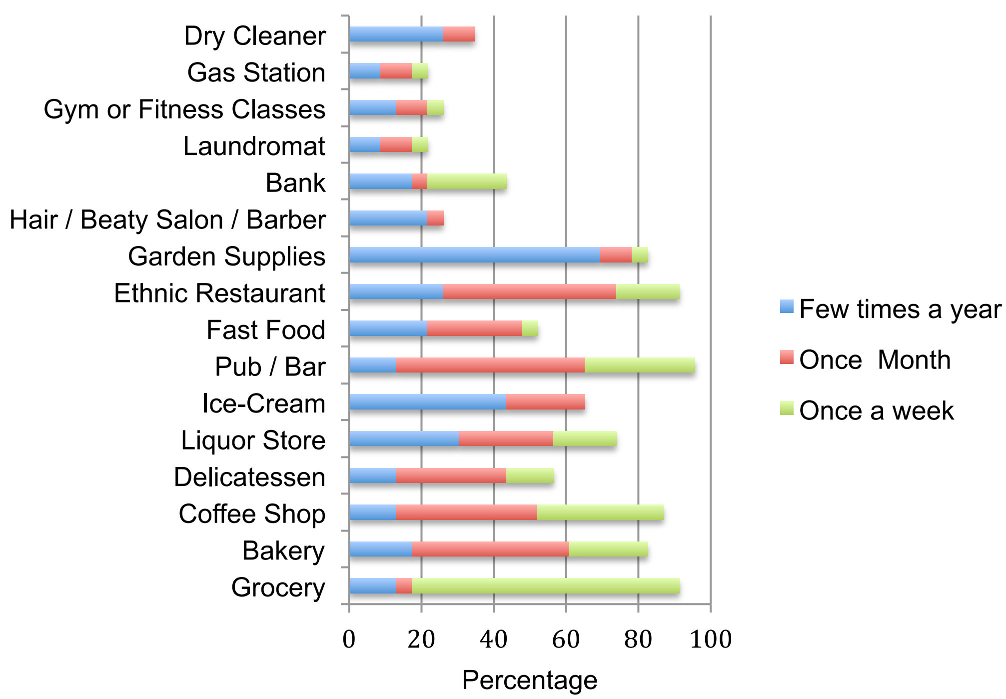
Figure 4.6 Businesses that respondents have never visited



On the one hand, a few recognized that they have never been in a coffee shop, delicatessen, bakery or liquor store in Union Square (13%); and a couple said that they have never gone to ethnic restaurants in Union Square. On the other hand, around 35 percent remarked that they frequent such types of businesses at least once a month.

Figure 4.7 shows the frequency that participants patronized some stores. Business types that they visit more frequently, at least once a week, are groceries (74%), coffee shops (35%), pub and bars (30%), bakery and banks (22%), and liquor stores (17%). Businesses they visit once a month are bars (52%), ethnic restaurants (48%) and the bakery (43%), which are the three business types with the largest percentage in that Figure 4.10. Finally, the business that more participants visit "a few times a year" is the garden supply (70%).

Figure 4.7 Shopping frequency in Union Square Businesses



The amount of money that respondents spend in the commercial district per week varies. Thirty five percent of them spend less than $25. Around 44 percent spend between $26 and $99, and 13 percent spend more than $100. Over 22 percent have a budget of less than $15 per person to have dinner out in a restaurant in Union Square and around 65 percent have more than $15. They tend to spend more money on weekends.

Food Services

A couple of participants expressed that they prefer to eat at home, and they almost never patronize food services businesses in Union Square. One reason behind this choice was that they couldn't afford to go to restaurants often, which was also a predominant opinion about some dining options; the other one was that there is a lack of healthy options. Nearly all of the participants believe that Union Square offers a "fantastic" and diverse array of dining options, and the ethnic and affordable restaurants are unique in the Square. Another predominant opinion was that some dinning options are not affordable for them.

> *Newer looking American pub restaurants are great but too pricey. In general, there are some excellent restaurants in Union Square, however, not all of them have the same quality. There are some where the food doesn't have good presentation and the places are not in the best conditions.* (Interview with a business owner)

Advantages and Disadvantages

Almost all agreed that Union Square has a convenient location and walking distance; it is a safe place that supports local businesses and it offers friendly services. In addition, some of them said the linguistic and ethnic diversity that exists in the community is a great asset. Half of the respondents indicated that in Union Square there is less traffic and crowds than in other areas, and it has a selection of goods and services with fair prices.

> *I like the mix of business services as well as its unique road network that provides central gathering place and view of much of the commercial area*. (Interview with a student)

However, for the other half, Union Square has not enough parking, traffic is an issue, and it is "somewhat expensive". Disadvantages they mentioned most often were the limited hours and the lack of maintenance to the infrastructure, shown in some deteriorated facades or uninviting public spaces.

> *You can get a lot done in one small area! Grocery shopping, ethnic foods and baked goods, bike repair, tailoring. I also like the feeling I get from supporting locally owned business in my area; I'd like them to stay so I try to vote with my wallet!* (Interview with a student)
>
> *I choose Union Square to buy a house and live because it is a relaxed and walkable place. I like its class diversity*. (Interview with a professional)

Other Squares, Goods and Services That are Missing

Even though respondents mentioned some features that they like from other Squares, many of them argued that they are not quite sure if these assets would be appropriate for Union Square, the majority doesn't want Union Square to become like any other commercial area.

> *I would prefer that Union be a little more under the radar. I don't want traffic to get out of control or to lose the neighborhood that I enjoyed*. (Interview with a professional)

Among other Squares that participants particularly like are Davis Square in first place, then Porter, Inman, Harvard, Central Squares and Jamaica Plain. They remarked that these places seem to have a good location too, they are easier to walk, and have roads that are easier for visitors to traffic. Mainly some of them have more activities and business diversity, such as gift shops, hardware stores, drug stores, bookstores, and a greater variety of restaurants.

According to the respondents, if Union Square would have some of these business types, which seem quite expensive for some participants, the diversity should remain in the area. In addition, they mentioned that Union Square has regularly occurring events, but they should increase the open and green space in order to make it more inviting like other Squares.

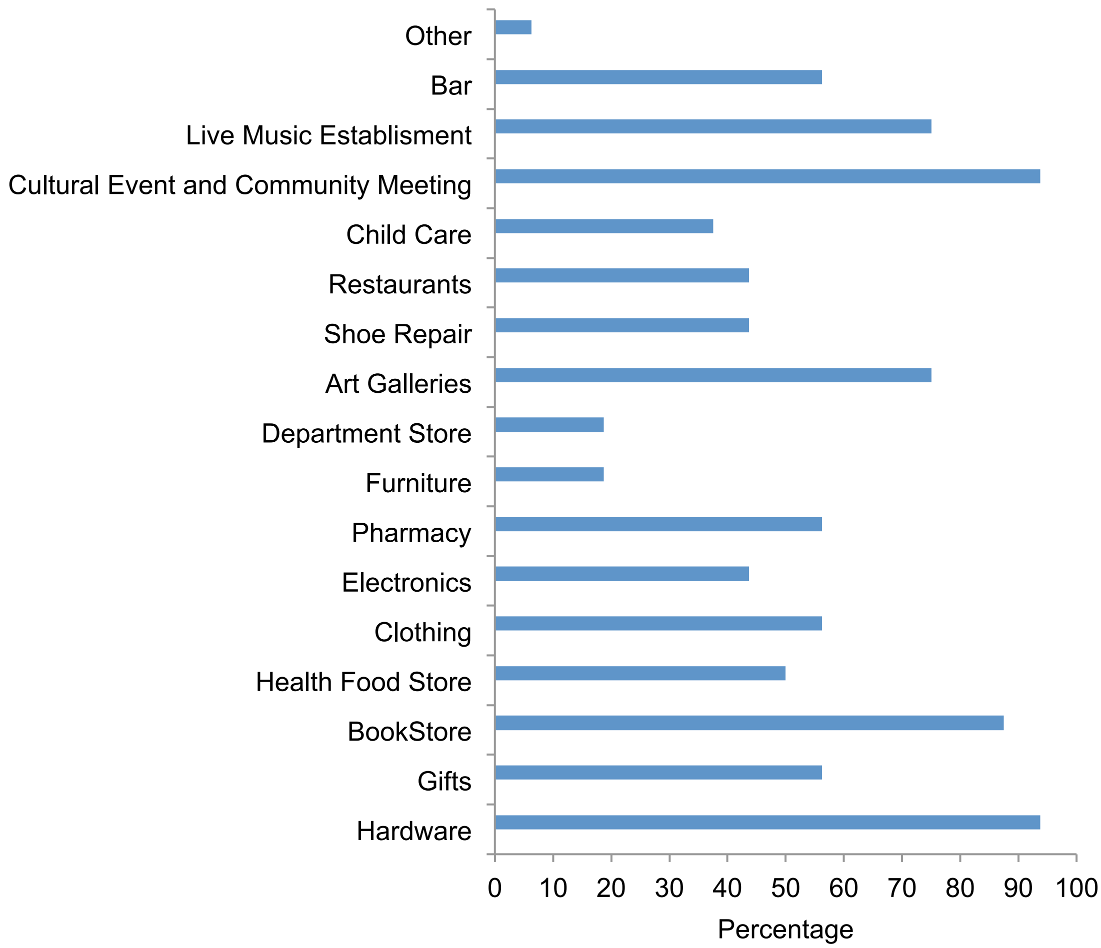
> *In other squares are nice varieties of restaurants - often bands playing outside when the weather is nice, and there are other activities, and also a big open public space to walk and sit.* (Interview with a student)

Others said that Union Square is a "blank slate" and it lacks daytime population on weekdays to support much beyond restaurants and bars. The general opinion about what is missing was "many types of businesses and more activities", but participants seem to be not quite sure how the soul of the neighborhood would change if those assets were added.

While few participants expressed that Union Square has everything that they need, Figure 4.8 shows the types of business that the study participants believe are missing. Bars, live music establishments, art gallery, pharmacy, clothing and gifts were mentioned by more than 50% of the respondents, and a hardware store, a bookstore and a cultural event or a community meeting place were the businesses voted with more than

80 percent. Other kinds of businesses that they mentioned were a sport bar and a used merchandise store.

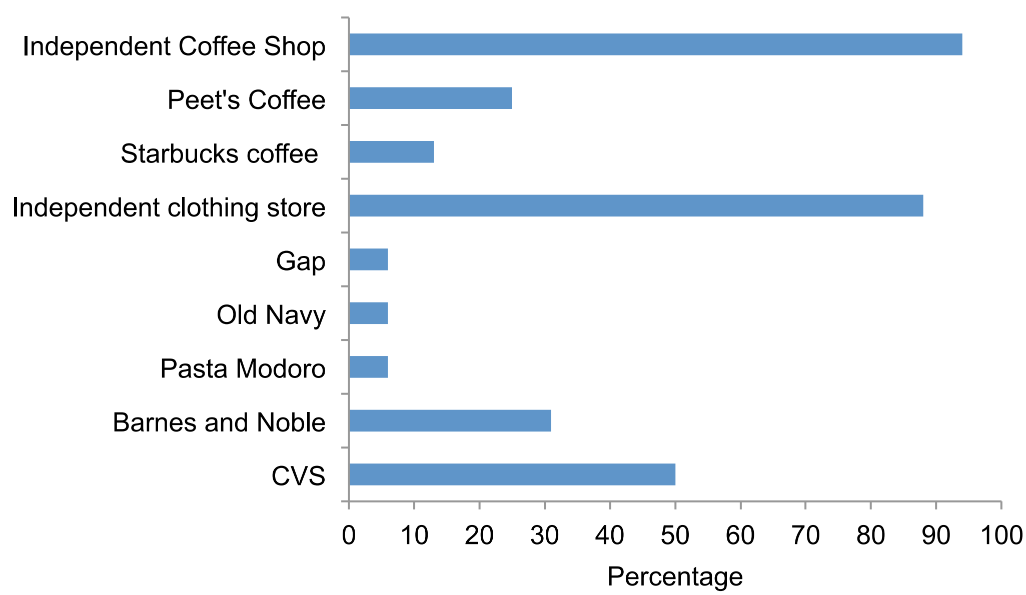
Figure 4.8 Type of business that are missing in Union Square



Many of the missing items above can be found in other Squares near the area. Other places where respondents shop are Cambridge Site Galleria Mall, Target, Twin City Plaza, or even Amazon. They were also questioned if they would shop in chains or independent stores if they were in Union Square, 50 percent would shop in a CVS and 31 percent in a Barnes and Noble, and more than 80 percent would shop in an independent clothing store or in an independent coffee shop (Figure 4.9). However, when they were questioned about what specific stores they would not like to see in Union Square, the majority said large chain stores such as Walt Mart, Gap, Old Navy, Peet's, Starbucks, or any fast food were not desirable. Some of them expressed that even though they would generally like to avoid formula retail, it's unavoidable for drug stores and to some extent hardware stores.

> *I would not like to see chain stores in Union Square. I rather would like to have small businesses involved and engage in some way in the community.* (Interview with a professional)
>
> *I don't think this is the place for Gap or Old Navy…Those establishments just don't fit with the aesthetic, goals or needs of existing Union Square businesses and residents.* (Interview with a student)

Figure 4.9 Store where participant would shop if they were in Union Square



In order to understand better what kind of businesses are missing in Union Square, there must be an assessment of current economic circumstances. This information would help to obtain consumer expenditure and business profile data for specific geographic areas. The above findings showed in Table 4.6 somehow agree with the opportunity gap existing in the Square according to the Union Square Brochure (City of Somerville, 2009).

Table 4.6 Consumer expenditure (Demand) 0.25 mile radius

Radius	**Consumer Expenditure (Demand) 0.25 Mile**	**Retail Sales (Supply) 0.25 Mile**	**Opportunity Gap (Surplus) 0.25 Mile**
Electronics & Appliances	$2,597,042	$2,074,951	$522,091
Clothing & Accessories	$3,664,763	$5,115,431	*-$1,450,668*
Pharmacies & Personal Care	$5,590,797	7,246,709	*-$1,655,912*
Restaurants & Bars	$6,571,004	$7,973,471	*-$1,402,467*
Groceries & Other Food	$7,731,689	$22,338,976	*-$14,607,287*

Source: *City of Somerville Office of Strategic Planning and Community Development (2009) *Union Sq. Profile*

Changes in the Square

Among respondents, 86 percent are concerned that new stores could displace businesses that have been in Union Square for several years. The other 4 percent believe that it is part of the redevelopment of the area. Even though they would like to have independent stores, they argued there always would be turnover.

In general the changes that participants would like to see in Union Square are related with four issues: small business, streets and open spaces, housing, and traffic. They would like more support for local and independent business like grants for façade renewal, lighting improvements and opportunities for residents who want to start an enterprise, more stores and empty stores occupied; a safer pedestrian crossing for major streets; more usable and walkable open spaces, and places where people could spend an afternoon. Less traffic and more available parking together with mixed income housing and an increase in partially subsidized housing were also included in their wish list.

> *I don't want to be like other neighborhood. People and new businesses are welcome, but I don't want to lose the community that we already have*. (Interview with a social worker)

4.6 Previous Studies

In 2007, Union Square Main Street (USMS) did a survey that gathered information about shopping habits in Union Square. Out of 270 participants, 157 (63.7%) reported living in the zip code that encloses Union Square. More than half of the participants (59.2%) mentioned USA as their country of origin, 20 percent (52) Brazil, and the rest responded "other country". The largest group of respondents was between 25 to 34 years old (32.4%), followed by the group of 35 to 44 years old (28%), and 45 to 54 years old (18.2%); participants' genders were evenly split. Answers about the household income from all sources in the year prior to the survey showed a balanced group of respondents in terms of economic status. Each of the nine broad categories registered approximately 10 percent of the answers; categories in the range from $9,999 to $100,000 and higher were divided in $10,000 increments. The $60,000 to $74,999 category received the smaller percentage (8.4%) and the $100,000 over, the highest (14.8%). Despite the limited sample size, these results may reflect the actual diversity of Union Square residents.

Multiple similarities were found between the USMS survey results and the findings presented in section 4.5 about Union Square's retail scene from a resident's perspective. The majority of the survey respondents (approx. 50%) said that they walk to get to Union Square almost every day, shopping was their primary reason to visit the area, and the evenings on weekdays and mornings and weekend days are the most convenient times to visit the Square. Twenty six percent of the respondents said that they had spent \$10 – \$19 the day they answered the survey, around 30 percent said less than \$10, and the rest spent more than \$ 20. The variety and the quality of products and services, the merchants' friendliness, and the general safety were all rated as "good" by more than half of the respondents. The physical appearance and the access to parking were considered as "fair". Residents reported the following business types as being deficient in meeting their needs: book stores, clothing and shoe stores, office supply stores, hardware stores, pharmacies, and entertainment.

Previous Plans and the Vision for Union Square

More than ten years ago, the Union Square Transportation Plan (2002) stated that retail, offices, and services in Union Square had historically met the needs of the local residential community. This document described neighborhood landmarks still in existence including the post office, the public safety building, a flower market, and a range of ethnic and neighborhood-based restaurants, elementary schools, and banks. The Plan also pointed out that the Square has an established reputation in the metropolitan Boston area for its diverse, affordable, and ethnically varied restaurants and markets.

A deeper analysis from other Union Square city plans, including the Master Plan (2003), the Five Years Consolidate Plan (2008) and the recent Revitalization Plan (2012), state that Union Square has an edgy and interesting retail presence, but recognize a failure to fully meet the shopping needs of the surrounding neighborhoods. They also mention that there is a lack of some essential retail and service establishments to create linkages among businesses and promote pedestrian activity. These reports state that there are no cultural and entertainment uses such as a theater or galleries and few retail stores are open in the evening hours. The result is the need for a revitalization strategy designed to strengthen Union Square's character and sense of place while building an economic base, but none of the documents addresses what types of retail tenants are desired, and how to target them.

These official documents state that the Square and surrounding areas are missing job opportunities and a larger commercial base that could be developed with new transit. Additionally, these reports recognize the need for stronger daytime activity, a stronger street presence, and new investment to improve physical appeal and enhance infrastructure. Despite its unique character and diversity, Union Square has failed to attract the level of private investment expected by city leaders. The existing activity nodes, including offices and businesses do not generate the desired pedestrian traffic within the area, which is an indicator of a thriving and vibrant community. The single greatest catalyst to large-scale development in Union Square will be the implementation of the long-awaited GLX and the redevelopment of the disposition blocks.

In 2009, the city of Somerville and several community partners launched a grassroots planning process, known as the Community Corridor Planning project, to engage local residents in the land use planning of the Green Line Corridor. The Corridor Core Principles, developed by participating community members, indicate a widely shared desire to "keep and add" locally owned, culturally diverse businesses. SomerVision, the city's Comprehensive Plan developed through a parallel community engagement process, similarly proposes to "protect and promote a diverse and interesting mix of small-scale businesses" in Somerville's squares and neighborhoods.

4.7 Conclusions

The current business mix in Union Square is best known for its many diverse food services and markets. The majority of businesses located within the central corridor district include small retail and service-oriented trades, the latter representing a higher percentage of the total number of businesses in comparison to other similar commercial centers. The CCD has many vacancies and because of the pending redevelopment of the area there is uncertainty about how the business mix is going to change. Revitalization strategies along Union Square are not a new concept, and previous plans have determined that there are numerous retail categories that are absent in the Square. This agrees with some of the residents' perceptions. However, because each community's market opportunities are unique, it is essential to take into account the realities and necessities of the local market to determine the appropriate business mix.

Chapter 5 – Conclusions

The first section of this chapter summarizes the key findings of this research, offering a clear snapshot of business mix in Union Square since 2005, and the residents' perspectives regarding the businesses in the area. Recommendations are presented to help inform the development of planning programs and policies that support a well-functioning commercial district in the Square. This section includes short-term recommendations, as well as medium and long-term actions to support the general commercial development in the Square and in the commercial areas that will be built in the future. The last section of the chapter contains the final conclusions and lists some research limitations.

5.1 Key Findings

A. Professional services and food related establishments are still predominant, the latter of which are a mirror of the Square's diversity.

The data analysis indicates that overall since 2005, the business mix in the commercial district has not changed, and it is still heavily weighted towards professional services. The data also shows that the prevalence of some business types has slightly declined (i.e. general retail, apparel, and personal services). The second largest category is food related establishments, which includes food and beverage stores and food services. It is a strong factor in explaining why Union Square is considered as an eclectic neighborhood, not only because there are many types of food from several places in the world, but also because the business mix includes longtime and new businesses. The oldest restaurant in the Square has been there more than 33 years (Neighborhood Restaurant Bakery), and there are a couple of restaurants that will open soon, (Juliet and Tuki Shabu Sushi). In addition, menu prices are highly diverse too. There are restaurants that offer dinners for less than $12.00, but there are other high-end restaurants where the menu price ranges from $60.00 -90.00.

Union Square has a long tradition of gastronomic and cultural diversity. Food related establishments are the most resilient business category in the Square. There are some businesses that have been in the Square for 20 or 30 years. At least half of the 137 businesses that currently exist have been there more than ten years, 31 of them are considered ethnic enterprises. Food related establishments make up 35 percent of the total of 68 businesses that have been in the Square at least ten years.

B. Union Square's diverse, affordable, and ethnically varied urban fabric could change.

Actually, it is already changing so fast. Some businesses that opened and grew in the Square have closed or moved out recently for different reasons. The incrementally increasing property values and the associated escalation in rent and commercial taxes have contributed to business turnover. Only in the last year, seven businesses closed (five of them ethnic), there are eight new ones, and many others have announced that they will start operations soon. Over 70 businesses have been in the Square more than 10 years, and it is not known if they will be able to adapt to that changes. For instance, Ricky's Flowers Market, a garden supply business that has been in the Square more than 30 years is located in one of the disposition blocks, along with 22 more businesses, so they have an uncertain future.

C. **Several types of businesses are missing including entertainment and office categories that generate pedestrian traffic and drop-in customers, and an appropriate retail and service mix has not been well defined.**

Some respondents noted the lack of some business types that could benefit the area. Books, clothing and shoes, office supplies, hardware, and a pharmacy were mentioned as the most desired businesses. Retail stores that open in the evening hours and places for entertainment and community meetings were sought after as well. But this is not something new, several city plans have already indicated that this represents an economic opportunity to make Union Square a more vibrant center.

However, an appropriate retail and service mix has not been well defined. For example, it is not known if businesses that already are in the Square should have a priority to get the new built spaces, or if formula businesses could bring benefits for the neighborhood rather than threaten its identity. The zoning will determine uses and sizes for new construction, but some of the properties in the commercial district are single-story retail buildings. Therefore, there is not a clear vision for its future or a plan to support them and achieve SomerVision's goals, which include the preservation of existing small-scale businesses to support a business-friendly environment, and to enable the attraction of new ones.

D. **Residents' shopping habits are diverse, but their perspective about their future's neighborhood is quite similar: they want improvements and welcome new people and new businesses, but they don't want to lose the community that they already have.**

There are very successful businesses in Union Square such as coffee shops or bakeries where 30% of the participants shop at least once in a month. However, other participants mentioned that they have never been there. Ethnic restaurants are another example, which some residents patronize quite often while others prefer other kind of food. The majority of participants believe that independent stores would best fit in the Square rather than box stores of big companies. In general the changes that they would like to see are in support of local and independent business. They would like to see grants for façade renewal, lighting improvements and opportunities for residents who want to start an enterprise. They would also like to see fewer vacant spaces, less traffic, safer pedestrian crossing for major streets, and more usable and walkable open spaces. Finally, but not less important, they would like to see more mixed income housing. Even though respondents mentioned some features that they like from other Squares, many of them stated that they are not quite sure if these assets would be appropriate for Union Square. The majority don't want USQ to become like any other commercial area, and they are concerned about the displacement of businesses that were born, grew and are part of their community.

5.2 Short Term Recommendations

The recommendations of this research came from a main idea: the organizations in charge of commercial development, the master developer, and the decision makers in Union Square should take in to account the diversity that already exists. As the Union Square Revitalization Plan states, the planning around the Square's future should focus on providing Union Square with a better image and design, attracting more businesses to generate job opportunities and creating an active daytime population. It is equally important to celebrate the Square's diversity, foster the unique character of the community, and support local businesses (SomerVision's goals, 2012).

To achieve the ambitious goal printed in SomerVision, the city needs to create an economic development strategy that achieves a balance between small, culturally diverse businesses and the larger establishments attracted by the redevelopment process. A Small Business Plan could shape how to best serve small businesses over the next 3-5 years. By using data collection methods, the plan could assess needs and develop a set of key actions to support business to mitigate the impact of the changes in the Square due to redevelopment. The brief recommendations below are short-term actions focused on strengthening the things that already make Union Square an attractive community:

A. Support vulnerable, (but viable) existing businesses to conduct a market analysis that documents their intrinsic value to the community to use to attract new clients as the neighborhood changes, while still serving "old guard" of remaining loyal customers. Providing trainings, one-on-one assistance, and facilitating these businesses' connections to City resources will enhance their performance too.

B. Provide tenant assistance to business owners who don't have a commercial lease or to those who want to improve it or negotiate the terms of rent amount, rent increase, length of the lease, among others.

C. Engage landlords to support their tenants without compromising their profits. The assistance provided to property owners, who currently select tenants based on the ability to pay the rent rather than on what is right for the market, could improve their real estate and business-investment performance.

D. Organize activities to promote and support local businesses. A partnership among stakeholders such as government, property owners, local businesses, community, financial institutions, non-profit organizations, and neighborhood organizations is essential to achieve revitalization and preserve the character of the Square.

E. Craft each retail street individually because a single vision will probably not fit all the desires and priorities of the community. Make sure that everyone understands the Union Square context to set short, medium, and long-range goals that are realistically attainable.

It is not known which is the perfect business mix in Union Square. But according to the residents' perspective, who want to keep the character and the community that they already have, a balance of current and new retail and services would bode well for the health and welfare for the Square's future. To find the way to redevelop the Square without damaging its identity is not an easy task; however, if significant efforts from all the stakeholders converge to work cooperatively based on a shared vision and goals, local businesses will have a voice when needed and more opportunities to stay in their neighborhood. The City of Somerville through the Economic Development Office and Union Square Main Streets could look at the following examples to create a partnership with key City agencies, local organizations, and community leaders to expand its work to support local business owners in their efforts to keep and grow their businesses:

- Ten Boston CDCs cooperate through the Community Business Network (CBN) to provide outreach, one-on-one technical assistance services, training, and assistance in securing loans to neighborhood businesses. The CBN helped entrepreneurs start their business; generated sales, productivity, or job growth in more than half of the existing businesses served; and led to the creation of jobs, largely for minorities and neighborhood residents (Seidman, 2002)

- The City of Boston is currently undertaking its first ever Small Business Plan to support immigrant entrepreneurs in the heart of Boston’s main streets, which will shape how to best serve Boston's entrepreneurs and small businesses in the short term. Boston’s Main Streets organizations are a key partner to the City of Boston as they offer these businesses assistance and training to facilitate them connections to City resources (Cowan, B. 2015).
- The network of Business Outreach Centers (BOCs), formed among different community organizations in eight low-income neighborhoods in New York, operates as brokers, connecting local businesses to a diverse range of professional, technical assistance, and financial services. (Seidman, 2002)
- Several Boston Main Street programs work with CDCs that provide business technical assistance to local firms. Main Street staff conducts outreach and provides introductions and referrals to CDC staff. In Pittsburgh, the South Side Local Development Corporation organized business assistance teams with both government and private-sector members to offer quarterly workshops, provide information on key business issues, review business plans, and help firms access the Pittsburgh Urban Redevelopment Authority’s revolving loan fund (Ibid).

5.3 Medium and Long Term Recommendations

In the medium, and long term, the strategies to support the commercial development in Union Square could be divided into two sections. The first one would focus on actions that can be applied in the general commercial area, and the second one would include strategies addressing new commercial spaces built by the master developer in the disposition blocs.

Broad Strategies

A. The Square must actively expand its share of consumer income in the markets it already serves while pursing the potential market of people who visit the Square but spend little money. Although neighborhood residential development provides a boost for retailing, it does not provide the only source of demand. Other market conditions surrounding Union Square Neighborhood are work force, commuter, regional, and cultural destination markets.

B. The commercial district will evolve over time, and the quality and amount of the residential development will also dictate what types of retail space that tenants will be interested in leasing. If new stores open, it is important that they conform to the urban character of the community.

C. The rebuilding of the commercial district should be incremental, so as to successfully implement steps along the way. In addition, constant monitoring and reevaluation is necessary to ensure that the target area is healthy, strong, and sustainable.

Strategies to Build Commercial Spaces

A. Coordinate management and recruit tenants in the new commercial spaces not only based on bringing more people in the Square and increasing foot traffic, but also on the current residents" and consumer needs (ULI, 2003).

B. It isn't necessary to attract national retailers to be a success, but the value of anchors on the street should not be underestimated. Chain stores can anchor a district that help the smaller, independent tenants succeed by drawing customers to the area. The literature suggests that strategies must also address how to fit locally owned businesses into the mix (Lloyd, 2002; Seidman, 2002).

C. Facilitate the relocation of displaced local businesses located in disposition blocs to other commercial spaces built in the area, and to mitigate the impact of substantial rent increases on existing businesses when buildings are constructed with below market rents for a specific period of time (below market rents are rents that is offered at a price below the going market rate in the area) (Prado, A, 2015).

The case of Shaw Main Streets in Washington, D.C. could be used to illustrate some of these strategies to reduce the adverse impact of revitalization on an economically vulnerable population in urban environments poised for transition. In a large mixed-use project where a hair salon was located, part of the proposed development was to be built on land owned by the District of Columbia, a provision for the inclusion of below market rate retail space for neighborhood businesses was included in the deal awarding the developer the rights to the property. With legal and technical assistance, the hair salon's owner was able to return once the project was completed. The developer agreed to provide financial assistance for the business owner to temporarily relocate her business to a space nearby during construction. They also provided tenant improvement credit that assisted with the cost of building out her space in the new development. Other resources for the business owner erea small business capital improvement grant from the District of Columbia, providing an additional $85,000 for her build-out costs, and a $5,000 marketing grant from Shaw Main Streets to help leverage the city funding. In addition, she received below market rate rent for the first five years of her new lease for the salon.

The salon now offers many services for the expanded customer base that have resulted from new offices and new residences in the neighborhood where the business owner has lived and worked all her 59 years. Her business were also featured in a citywide transit advertising campaign highlighting Shaw businesses (Ibid)

5.4 Conclusion and Limitations

A retail policy is an opportunity to set strategies to preserve the identity of the Square, but also to support local business owners, residents, and workers who are part of Union Square community and have contributed to make a great neighborhood. Just like a diversity of businesses helps create a more vibrant business district, economic, ethnic, and cultural diversity are important assets that help to create a healthy and vibrant community. If Union Square is envisioned as the new downtown Somerville, it will be the public face of the city and its image should be woven into the identity of its residents.

The GLX in the Square should be opened in 2017, but the revitalization plan in the area is a long-term project. Therefore, a well–balanced profile of retail and services today ensures health and welfare for the future of the shopping area, which has defined the character of the neighborhood and has the potential to enhance its overall attractiveness. The redevelopment planning process is still evolving, so whether or not a comprehensive retail policy is developed in the area, some of the incremental actions mentioned before could be considered to support neighborhood retail and could contribute to the repositioning of the commercial district. It is important to recognize that the image of Union Square will reach far beyond Somerville's borders; it will achieve regional prominence and be part of a regional economy. Therefore, the Square should not be treated as an island and an overall strategy will be required not only to provide needed services but also to attract more businesses and create more jobs.

Limitations

The data and methods used in this research have limitations, including: a) imperfect reliability of past business inventories, b) a lack of complex information about businesses' size, performance, and cost of goods and services, c) a limited survey sample size, d) and incomplete information about broader market segments, other stakeholders' perspectives and customer base data such as a purchasing power. However, this information and analysis should help local business, entrepreneurs, and developers to understand the social context and the changing market place in Union Square.

Bibliography

Anderson, A. (2012) "On the Right Track: A Framework for Evaluating Commercial Corridor Revitalization in New Orleans" University of New Orleans Theses and Dissertations. Paper 1581.

Ayyash, D. et. al. (2012) Winter Hill and Magoun Square Community Plan Final Report prepared for the City of Somerville's Office of Strategic Planning and Community Development. Department of Urban Studies and Planning School of Architecture and Planning Massachusetts Institute of Technology Cambridge, MA

Bright, E. (2000). Reviving America's Forgotten Neighborhoods: An investigation of inner city revitalization efforts. New York: Routledge.

Buschur, Brad (2005) Union Square Central Business District. Building Survey. University of Massachusetts, Amherst. Accessed February 15 from https://unionsquaremain.org/wp-content/uploads/2011/03/Arts-Space-report1.pdf

Center And Squares (2010) Union Square Somerville Accessed April 28, 2015 from http://centersandsquares.com/union-square-somerville/

Center of Urban and Regional (CURA) (2012) *Understanding Strategies and Tactics in Commercial Corridor Revitalization*. University of Minnesota accessed January 18, 2014 from http://selbyavenueactioncoalition.onefireplace.org/Resources/Documents/Understanding%20Strategies%20and%20Tactics%20in%20Commercial%20Corridor%20Revitalization.pdf

Chan G. et al. (2013) A vision and plan for the Union Square Gateway. Prepared for the City of Somerville. Department of Urban Studies and Planning School of Architecture and Planning Massachusetts Institute of Technology Cambridge, MA

Christiansen, K. (2010) Brazilian entrepreneurship in Somerville, MA *Urban Borderlands Oral History Project* in conjunction with the Somerville Community Corporation Community Corridor project. Tufts University

City of Somerville (2014) FY14 Chief Assessor's Classification Hearing Report

City of Somerville, (2003) Request for Qualifications for selection of a Master Developer Partner for Certain Union Square Disposition Parcels accessed November 10, 2014 from http://www.somervillema.gov/sites/default/files/Union%20Square%20-%20Request%20for%20Qualifications%20for%20Master%20Developer.pdf

City of Somerville Office of Strategic Planning and Community Development (2012) *Union Square Revitalization Plan* accessed November 10, 2014 from http://www.somervillema.gov/departments/ospcd/economic-development/union-square-revitalization-plan

City of Somerville Office of Strategic Planning and Community Development (2011) Trends in Somerville: *Land Use Technical Report May 2011* accessed February 14 from http://www.somervillema.gov/sites/default/files/LandUseTrendsReportFinalMay2011.pdf

City of Somerville Office of Strategic Planning and Community Development (2009) *Union Square Profile* accessed February 10, 2015 from http://www.somervillema.gov/departments/ospcd/squares-and-neighborhoods/union-square

City of Somerville Office of Strategic Plan and Community Development (2008a) *Union Square NRSA Five Year Consolidated Plan*, *February 2008* accessed November 10, 2014 from http://www.somervillema.gov/sites/default/files/documents/I%20USQ%20NRSA%20FINAL.pdf

City of Somerville Office of Strategic Planning and Community Development & Somerville Arts Council (2008b) *Union Square Creative Uses Report* accessed November 10, 2014 from http://www.somervilleartscouncil.org/sacfiles/Union%20Square%20Creative%20Uses%20Report%20final.pdf

City of Somerville Office of Housing and Community Development (2002) *Union Square Revitalization Study Neighborhood Revitalization Plan Strategy Area Plan*, April 2002 accessed February 2 from http://www.somervillema.gov/sites/default/files/documents/union%20sq.%20NRSA%20plan.pdf

City of Somerville Office of Housing and Community Development (2002) *Union Square Revitalization Study* Neighborhood Revitalization Plan Strategy Area Plan, April 2002 accessed February 2 from http://www.somervillema.gov/sites/default/files/documents/union%20sq.%20NRSA%20plan.pdf

City of Somerville Office of Housing and Community Development (2002) *Union Square Transportation Plan*, September 2002

Cowan, B. (July 16, 2015) Supporting Immigrant Entrepreneurs in the heart of Boston's Main Streets. *National Main Street Center*. Accesed July 10, 2015 from http://www.preservationnation.org/main-street/main-street-news/story-of-the-week/2015/supporting-immigrant.html#.Va_0RGRViko

Downtown Denver Partnership (2011) Downtown Denver: A Magnet for the Future Workforce Accessed February 22, 2015 from http://www.bizjournals.com/denver/pdf/DDPMagnetReport021512.pdf

Downtown Market Analysis (n.d.) Accessed April 28, 2015, from http://fyi.uwex.edu/downtown-market-analysis/

Duany, A., Plater-Zyberk, E. and Speck, J. (2000) *Suburban Nation: The Rise of Sprawl and the Decline of the American Dream*. New York: North Point Press.

Eaman J.B., Higginbottom H., and Sack S., (1998) *A Capital Plan: Government Inertia and Urban Revitalization on U Street*, Policy Perspectives: 56

Esri Demographics (2014) *Tapestry Segmentation* accessed February 2 from http://doc.arcgis.com/en/esri-demographics/data/tapestry-segmentation.htm

Ferguson, Ronald and William Dickens (eds.). 1999. Urban Problems and Community Development. Washington, D.C.: Brookings Institution Press

Fogelson, Robert M. (2001), *Downtown: Its Rise and Fall, 1880-1950* New Haven, CT: Yale University Press.

Gibbs, Robert J (2012). *Principles of Urban Retail Planning and Development,* Wiley Dollar & Center of Shopping Centers/ the SCORE

Gibbs, Robert J (2012b) Building a Better Foundation for Urban Retail's Future *Retail Property Insights*. Vol. 19, No.3

Howsley K. A (2013) "Neighborhood Commercial Corridor Change: Portland Oregon 1990-2010" Dissertations and Thesis. Paper 1409.

Jacobus R. and Chapple K. (2010). *What difference can a few stores make? Retail and neighborhood revitalization* The Center of Community Innovation

Jacobus R. and Hickey M. (2007) *Commercial Revitalization Planning Guide: A Toolkit for Community Based Organizations*. Produced by Local Initiatives Support Corporation 2007

Janponica ,B. S. (2005), "*What is Gentrification?"* The Gentrification Debates ed. Japonica Brown-Saracino. New York: Routledge, 13.

Kay V. (2010) Neighborhood Retail Change The Evolution of Local Shopping Areas in Vancouver, BC. Dissertations and Thesis, University of British Columbia, Canada

Klinenberg, E. (2002). Heat Wave: A social autopsy of disaster in Chicago. Chicago:University of Chicago Press.

Koebel, T. (1999) *Analyzing neighborhood retail and service change in six cities* Center for Housing Research. Virginia Polytechnic Institute and State University, accessed February 18 from http://www.vchr.vt.edu/pdfreports/retail-uno-final.pdf

Kooker, N. (2014, December 9) Green Line plan brings economic tension to Union Square in Somerville. *The Boston Globe* Accessed from http://www.bostonglobe.com/business/2014/12/09/green-line-extension-plan-brings-economic-tension-somerville-union-square/aataVlAvWcjqcWxmPRzk2J/story.html#

Lloyd, R. (2002). Neo-Bohemia: Art and Neighborhood Redevelopment in Chicago. *Journal of Urban Affairs,* 24(5), pp. 517-532.

Loukaitou-Sideris, A. (2000). Revisiting Inner-City Strips: A framework for community and economic development. Economic Development Quarterly 14 (2): 165-181.

Metropolitan Area Planning Council (2004) *The Dimensions of Displacement. Baseline Data for Managing Neighborhood Changein Somerville's Green Line Corridor,* February 2014 accessed February 2 from http://www.somervillema.gov/sites/default/files/Dimensions_of_Displacement_Final_2_11_14.pdf

Mier, R., Robert G. and Moe K,(1993). Social Justice and Local Development Policy. Thousand Oaks, CA: Sage.

Morgan J. (2011*) (Re)vitalizing Inner-City Neighborhood Business Districts An Assessment and Strategy Framework for Integrated Microbusiness and Real Estate Development by Nonprofits*. Harvard Joint Center for Housing Studies.

Philips R. et. al. (2013). *Sustainable Communities*. Earthscan Tools from Community Planning

Porter M. (1995) The competitive advantage of inner-city *Harvard Business Review* accessed March 20, 2015 from https://hbr.org/1995/05/the-competitive-advantage-of-the-inner-city

Prado, A. (July 10, 2015) Minimizing the effects of Gentrification: Part II. Nationa main Street Center, Accessed July 10, 2015 from http://www.preservationnation.org/main-street/main-street-news/story-of-the-week/2015/minimizing-the-effects-of-1.html#.VbD17mRViko

Quackenbush, A. (2003) Thinking outside the big box: retailers look to America's inner cities. Massachusetts Institute of Technology. Theses and Dissertations

Ryan, B., et al (2010) Retail and Service Business Mix Analysis of Wisconsin's Downtowns University of Wisconsin, accessed March 20, 2015 from http://fyi.uwex.edu/downtown-market-analysis/files/2011/02/Retail_and_Service_Business_Mix_Analysis041711.pdf

Sacchi, J. et. al (2014) Commercial Gentrification in Union Square. Field Project, Urban and Environmental Policy and Planning (UEP) Tufts University

Sassen, S. (1998). Globalization and Its Discontents: Essays on the New Mobility of People and Money. New York: New Press.

Schwirian, K. (1983). Models of Neighborhood Change. Annual Review of Sociology. 9, pp. 83-102

Seidman, K. F. (2002). Inner City Commercial Revitalization: A Literature Review. Unpublished draft report. Accessed January 18 from: http://ocw. mit. edu/OcwWeb/Urban-Studies-and-Planning/11-439Spring2003/DownloadthisCourse/index. Htm

Simon, C. (2014, August 30) Union Square is a hip central. *The Boston Globe* Accessed from http://www.bostonglobe.com/lifestyle/travel/2014/08/30/union-square-hipster-central/8fE2013t42xi4CfD6jycHM/story.html

Sonoran Institute (2014). *RESTORE, Commercial And Mixed-Use Development Trends In The Rocky Mountain West*. Flat Earth Media, accessed January 18 from http://communitybuilders.net/wp-content/uploads/2014/06/RESTORE-Report.pdf

Sutton, S. A. (2010) "Rethinking Commercial Revitalization: a Neighborhood Small Business Perspective". Economic Development Quarterly 24 (4) 352-371

The Pennsylvania Economy League and Econsult Corporation, (2003) "Toward a Strategic Framework for Investment in Philadelphia's Commercial Corridors," Report for the William Penn Foundation, Philadelphia LISC. Accessed on January, 18, 2014 from http://citizensplanninginstitute.org/wpcontent/uploads/2011/01/Econsult_Exec_Sum-Comm-Corridors.pdf

Talun, Tim (2015, June 25) Letter to the Editor: Maintaining Civic Presence in Union Square *The Somerville times* Accessed from http://www.thesomervilletimes.com/archives/59383

Turner, R. (2004)"Troost Avenue Revival: Breathing new life into neighborhood commercial corridors" *Paper presented at the annual meeting of the Western Political Science Association, Marriott Hotel, Portland, Oregon* 2009-05 -26 accessed January 18, 2014 from http://citation.allacademic.com/meta/p_mla_apa_research_citation/0/8/8/2/0/pages88205/p88205-1.php

Union United (2015, January 14) Putting Community in community benefits *The Somerville times* Accessed from http://www.thesomervilletimes.com/archives/55288

Urban Collaborators (2006) *Revitalizing Neighborhood Retail* Michigan State University Extension accessed February 5, 2015 from http://www.spdc.msu.edu/uploads/files/Urban_Collab/NeighborhoodRetail_FINAL_woquote.pdf

Urban Institute (2001) Retail Challenges in Washington D.C: An Analysis of six retail categories, accessed February 5, 2015 from http://www.neighborhoodinfodc.org/Resource-Links.html#Economic Development

Urban Land Institute (2006) Union Square: Where do we go from here? Technical Advisory Panel Report. Accessed February 23, 2015 from http://www.somervillema.gov/sites/default/files/documents/UnionSquareTAP-ReporFINAL.pdf

Vidal, Avis. (1992) Rebuilding Communities. A national study of Urban Community Development Corporations. Community Development Research Center, New School for Social Research, New York.

Wai J. (2012) Planning Union Square as an Intercultural Center: Opportunities for a Diverse Community. Academic Thesis, Urban and Environmental Policy and Planning (UEP) Tufts University

Zielebanch S. (2000). The Art of revitalization. New York, NY: Garland Publishing.

Zukin, S. (1989). Loft Living Culture and Capital in Urban Change. New York: Rutgers University Press.

Appendices

A. Union Square Business Inventory, March 2015

The business name and location were collected from Somerville Assessor's database and field research, and the approximately square footage from the Union Square creative uses report.

Name of Business	No	Street	Approx. Sq. F.
Convenience Stores			
La Internacional Food Corporation	322	Somerville Ave	2,452
Well Foods Plus	380a	Somerville Ave	1,100
Union Square Smoke Shop	54	Union Square	1,164
Union Mart	71b	Union Square	600
Vango Convenience	255e	Washington Street	500
Specialty/Wholesale/Bakery			
Capone Foods	14	Bow Street	2,415
Union Square Donuts	22a	Bow Street	1,325
Saloucao Casa de Carnes	40	Bow Street	1,494
Bombay Market	357	Somerville Ave	1,694
Graces Ice Cream	22	Union Square	800
Reliable Market	45	Union Square	5,282
Pao de Acurar Market	61	Union Square	1,800
Supermarket			
Market Basket	400	Somerville Ave	46,278
Liquor Store			
Jerry's Liquors	329	Somerville Ave	4,052
Restaurants			
Sweet Ginger	22b	Bow Street	600
The Neighborhood Res and Bakery	25	Bow Street	1,800
Barbeqiu International	40a	Bow Street	1,037
Machu Picchu Culinary Art	307	Somerville Ave	2,100
Ebi Sushi	290	Somerville Ave	4,458
Mandarin Chinese Restaurant	9a	Union Square	2,206
Union Square Korean Restaurant	9c	Union Square	2,206
India Palace	23	Union Square	800
Red House Chinese Restaurant	24	Union Square	800
Machu Pichu Restaurant	25	Union Square	800

El Potro	61	Union Square	1,200
Brass	66	Union Square	380
The Independent	76	Union Square	3,162
Journeyman	9	Sanborn Court	800
Taqueria La Mexicana	249a	Washington Street	1,795
Bronwyn	255	Washington Street	1,000
Casa B	255f	Washington Street	500
Pizza, Fast Food			
Dunkin Donuts	282	Somerville Ave	2,023
Mamma Gina’s	16	Union Square	1,877
Union Square Pizza & Subs	65	Union Square	800
Subway	71	Union Square	1,680
Bars			
Sally's O'Briens	335	Somerville Ave	1,564
P.A's Lounge	343	Somerville Ave	2,794
Bull McCabe	366a	Somerville Ave	814
Coffee Shops			
Block 11	11a	Bow Street	3,800
Fortissimo	365	Somerville Ave	1,000
Apparel			
Two Little Monkeys	75b	Bow Street	1,300
Kawaii Me	59b	Union Square	600
Music/Book/Video			
Hub Comics	19	Bow Street	2,015
M/S Caribbean Music and Products	383	Somerville Ave	1,289
Somerville Grooves	26	Union Square	800
Flowers/Plant Store			
Ricky's Flower Market	273	Washington Street	8,200
Jewelry			
Wagner Jewelers	8	Bow Street	980
Wagner Jewelers	301	Somerville Ave	822
Other Retail			
BeadCreative	369	Somerville Ave	637
Art Business	21	Union Square	600

Hair/Nail Salons			
Fernanda's Beauty Salon	75	Bow Street	1,067
Hollywood Nails Design	389	Somerville Ave	1,289
Odelios Hair Design	362b	Somerville Ave	1,162
Angel Nails	9b	Union Square	709
Fashion Way Salon	16a	Union Square	1,193
Grace Salon	56b	Union Square	1,164
Elegant Salon	255d	Washington Street	300

Dry Cleaners/ Laundry			
Somerville Dry Cleaners	21	Union Square	800
Community Laundry	10	Bow Street	1,440

Travel Agent			
Bacc Travel	362	Somerville Ave	946

Tailor			
G&T Custom Tailoring	36	Union Square	600

Instruction			
Tree of Life Tai Chi Center	11b	Bow Street	600
Dance @ Union	16b	Bow Street	5,000
Bow Street Yoga	34	Bow Street	600
The Green Room	62	Bow Street	600
Counter Culture Coffee Boston	374	Somerville Ave	2,944
Third Life Studio	33	Union Square	2,830
Org. for Permanent Modernity	33a	Union Square	-
Fred Villaris Studios and Self-Defense	54	Union Square	1,893
CrossFit	35	Prospect Street	3,732
MA Alliance for Portuguese Speakers	92	Union Square	4,756

Printing and Publishing			
Master Print	60	Union Square	1,700

Banks			
East Boston Savings Bank	38b	Union Square	1,546
Citizens Bank	41	Union Square	5,913
Bank of America	62b	Union Square	111

Insurance			
Amazonia Insurance	66	Bow Street	1,000
Allstate	51	Union Square	1,164

Wire, Transfer, Lottery			
Brasil Starr	25b	Bow Street	650
Western Union	11a	Union Square	600
All Checks Cashed	11b	Union Square	1,879
Midnight Convenience	15	Union Square	2,176
Scom	28	Union Square	400
Medical / Dental			
Mt. Auburn Health Care	33	Bow Street	6,335
Advanced Dental Care	36	Bow Street	1,328
Union Square Family Health	337	Somerville Ave	6,000
Parenting Journey	366	Somerville Ave	13,786
Union Square Chiropractic	66b	Union Square	750
Accounting / Legal			
Law Office of Edward Lang	23	Bow Street	1,300
Wayne A. Snow CPA	53	Union Square	1,893
Francis D Privitera Realty	59	Union Square	3,214
Richard Schifone Law Offices	60b	Union Square	1,660
Design/Arts			
The Uniun	11	Sanborn	-
Boyes Watson Architects	30	Bow Street	1,151
Stanhope Framers	55	Bow Street	12,300
Nama Productions	33b	Union Square	250
Seitz Architects	33c	Union Square	5,203
Heimarck & Foglia: Landscape Architecture Collaboration	33d	Union Square	300
Eileen Gillespie	33e	Union Square	600
EVB Design	33g	Union Square	600
Social Service Providers			
Somerville Community Corporation	335	Somerville Ave	5,088
Community Outreach Group	33h	Union Square	600
Union Square Main Streets	66c	Union Square	-
Respond Inc.	66d	Union Square	-
International Physicians	66f	Union Square	600
CAAS	66i	Union Square	2,915
The Ruby Rogers Center	71	Union Square	1,221
Alternative Healthcare			
Union Square Acupuncture	21	Bow Street	2,015

Open Space Acupuncture	66a	Union Square	750
Other Professional Services			
Somervelo	361b	Somerville Ave	702
Metro PCS	11c	Union Square	989
Relish Management	76b	Union Square	600
Sullivan, J.J. Plumbing and Heating	346	Somerville Ave	3,141
Somerville Community Access TV	90	Union Square	4,756
Genesis Tax House	304	Somerville Ave	933
International Optical	311	Somerville Ave	1,929
Income Tax Plus	371	Somerville Ave	500
River Dog	321	Somerville Ave	2,000
JJ Vacaroo Construction Group	38	Union Square	6,184
Assonance LLC	33f	Union Square	-
Boynton Yards Associates	38c	Union Square	-
KGS Building	66h	Union Square	-
Brown Flaherty	263	Washington Street	-
Church	300	Somerville Ave	4,238
Psychic Readings By Nina	380b	Somerville Ave	1,952
Car related			
Monro Muffler Break	223	Washington Street	3,203
Gulf Gas Station	231	Washington Street	2,288
Good Year Tires	1	Bow Street	8,268
Auto Repair	71	Bow Street	1,195
Fred M. Susan & Sons	269	Somerville Ave	6,142
Mikes Automotive Service	298	Somerville Ave	1,200
Tech Auto Body	9	Union Square	10,377
Hawkins Auto body	7	Hawkins Street	600
Public Administration			
Old Post Office	237	Washington Street	20,000
Post Office	16a	Bow Street	2,000
Police Station	220	Washington Street	57,534

Source: Somerville Assessor’s database, City of Somerville. Accessed Feb 25, 2015 from http://gis.vgsi.com/somervillema/, Union Square creative uses report (2008) and Field Research.

B. List of Ethnic Union Square Businesses in 2012
List from "Planning Union Square as an Intercultural Center: Opportunities for a Diverse Community" by Jong Wai Tommee

Amazonia Insurance*
Angela Nails*
Bombay Market*
Boston Japanese Christian Church*
Braz Transfer*
Buk Kyung*
Burma Design and Antique Restoration
C&N Beauty Supply*
Caesar Pizza & Subs*
Cantina La Mexicana*
Capone Foods*
Casa de Carnes*
Continental Hair Design*
Davidson's Laundromat*
Elegant Salon*
El Potro Mexican Grill*
Fashion Way Hair Salon *
Fiesta Bakery
G&T Custom Tailor*
Girl from Ipanema Salon
Great Thai Chef
Halal Market
India Palace*
International Optical*
J&J Restaurant*
La International Food*
Little India
Macchu Picchu Charcoal Chicken Coal*
Mamas Gina's*
Mandarin Chinese Restaurant*
Neighborhood Restaurant and Bakery*
New Asia
New Market
New Bombay Market*
Odilio's Hair Design*
P.A's Lounge*
Pao de Acucar and Brazilian Buffet*
Padaria Brasil
Red House Chinese Restaurant*
Reliable Market*
Roma Seafoof
Sallys O'Brien's*
Sherman Cafe
Sophia's Beauty Salon
St. Joseph's Church*
Sunny's Deli
Sweet Ginger Thai Cuisine*
Taqueria La Mexicana
The Independent*
Thir Na Nog
Toast
Union Square Pizza*
Wu Chon Restaurant

Note: *Businesses currently operating in Union Square

C. List of interviewees

The identity of the 23 Union Square's residents interviewed cannot be disclosed due to confidentiality reasons. However, the following are their key characteristics:

- Thirteen were women and ten were men.
- All of them live in Union Square and the range of years living there was from 2 to 40.
- They had diverse professions including four students, four people who work in architecture or real estate field, three academics, three social workers, one retiree, two business owners, and six subjects with other professions.
- Five participants work in Union Square.
- Fifteen rent their house.
- Sixteen identified themselves as a white.
- Almost all of them walk or use the bicycle in the Square.
- The majority showed interest to help improving the area by attending community meetings or working on projects related to commercial revitalization.

D. Union Square Residents Interview Questions

Shopping Habits

1. When do you usually visit Union Square shopping area?
2. Are you a frequent shopper in Union Square?
3. If you are not a frequent shopper in Union Square, what is the primary reason for this?
4. Where do you usually shop your groceries?
5. Please Indicate whether the next statement is true: When I go to shopping for groceries, I generally visit other stores in the neighborhood
6. How often do you shop in Union Square specific stores?
7. How much do you usually spend in Union Square per week?

Food Services

8. How often do you eat in Union Square shopping district?
9. How often do you go out for dinner in Union Square and what is your budget?
10. When you go out to eat, what is the primary reason for choosing a restaurant that is not in Union Square?

Union Square Attributes and Disadvantages

11. What are the major advantages of shopping or doing business on Union Square?
12. Why Union Square neighborhood is unique or different from other neighborhoods?
13. Are there any other shopping districts in the region that you particularly like?
14. What are the things you like about this district?
15. Would this be appropriate for Union Square district?
16. Would you shop at any chains establishments if they were on Union Square?
17. What additional type of businesses would you not like to see in Union Square?
18. What are the major disadvantages of shopping or doing business on Union Square?
19. What are the advertising techniques used by local merchants do you notice the most?
20. If this neighborhood could be like another neighborhood, which would you want it to be like, and why?

Missing Stores, Access and Safety

21. What types of stores and services do you think are needed on Union Square?

22. How do you usually access to Union Square shopping district?
23. Do you have difficulty parking?
24. How safe do you feel during the daytime in Union Square?
25. How safe do you feel at night in Union Square?

Personal Information

26. Do you work in Union Square?
27. Are you renting your house or do you own?
28. How far do you live from where you work?
29. Would you be interested in helping to improve the area by attending community meetings or working on projects related to commercial revitalization?
30. How do you identify in terms of race/ethnicity?
31. What is your profession?
32. What is your gender?
33. What is you marital status?
34. What is your age?

E. IRB Exemption

OFFICE OF THE VICE PROVOST FOR RESEARCH

Social, Behavioral, and Educational Research
Institutional Review Board
FWA00002063

Title: An Assessment of Retail Environment in Union Square, Somerville.

December 17, 2014 | Notice of Action

IRB Study # 1412008 | Status: EXEMPT

PI: Maria Fernanda Martinez Vazquez
Faculty Advisor: Weiping Wu
Review Date: 12/17/2014

The above referenced study has been granted the status of Exempt Category 2 as defined in 45 CFR 46.101 (b). For details please visit the Office for Human Research Protections (OHRP) website at: http://www.hhs.gov /ohrp/humansubjects/guidance/45cfr46.html#46.101(b)

- The Exempt Status does not relieve the investigator of any responsibilities relating to the research participants. Research should be conducted in accordance with the ethical principles, (i) Respect for Persons, (ii) Beneficence, and (iii) Justice, as outlined in the Belmont Report.
- Any changes to the protocol or study materials that might affect the Exempt Status must be referred to the Office of the IRB for guidance. Depending on the changes, you may be required to apply for either expedited or full review.

IRB Administrative Representative Initials: ЯWS

20 Professors Row, Medford, MA 02155 | TEL: 617.627.3417 | FAX: 617.627.3673 | EMAIL: SBER@tufts.edu