Refugee Housing in Worcester: A Neighborhood Case Study of Bell Hill

Tyler Seth Maren
Clark University, tmaren@clarku.edu

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Refugee Housing in Worcester: A Neighborhood Case Study of Bell Hill

Tyler Maren
May 2020

A MASTERS PAPER

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And accepted on the recommendation of

Kathryn Madden, Chief Instructor
ABSTRACT

This paper examines refugee resettlement practices at the neighborhood level, asking what neighborhood characteristics are conducive to achieving positive integration and housing stability outcomes. Using data from a quantitative study of refugee resettlement case files from Ascentria Care Alliance as a foundation, this research takes the form of an analysis of the Bell Hill neighborhood in Worcester, MA, a major resettlement destination. Using Ascentria data, secondary data sources such as US Census data and the Worcester Assessor’s Database, and site visits, this paper constructs a profile of Bell Hill along four major dimensions: community characteristics, housing, social infrastructure, and physical infrastructure. The results paint a picture of a diverse neighborhood in terms of residents, housing stock, amenities, and businesses that likely primes refugees for integration success. The paper concludes with a recommendation that resettlement agencies consider neighborhood characteristics, especially along the lines of those found in Bell Hill, as a key part of their refugee placement strategy.

Kathryn Madden, M.C.P, S.M.Arch.S
Chief Instructor

Dr. Anita Fabos, PhD
Associate Professor
ACADEMIC HISTORY

Name (in full): Tyler Seth Maren  
Date: May, 2020

Baccalaureate Degree: Bachelor of Arts in Geography

Source: University of Massachusetts, Amherst, Massachusetts

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1. Introduction

Worcester, Massachusetts is a city of immigrants and a major destination for refugees settling in the state. In this paper I seek to explore and understand the experience of newly arrived refugees attempting to adapt to a new home, identifying factors that currently help them achieve stability and areas where improvements can be made. First, I address the question: How can we evaluate the success of refugee settlement? Based on a review of the existing literature surrounding refugee integration, I argue that the characteristics of the neighborhood where refugees are placed can act as key indicators for their potential integration success. This paper’s analysis frames neighborhood characteristics along four dimensions: integration (directly addressed), housing, social
infrastructure, and physical infrastructure. To provide a brief background and context for my research, I introduce the concepts of refugee status, and resettlement as a permanent solution to that status, describe the mechanisms by which individuals are placed in Worcester, and discuss characteristics of the city that are relevant to immigration. Next, I conduct a review of the literature that will inform the neighborhood analysis along the four dimensions.

This research is part of a study launched by Ascentria Care Alliance, Clark University, and the City of Worcester in 2017 to conduct quantitative and qualitative analyses of their refugee case files in order to understand persistent problems and gaps in refugee services. I built upon previous students’ complete inventory of the case files, which documented information for each refugee resettlement case: country of origin, family size, English proficiency, the location in Worcester they were originally resettled in, and personalized notes written by the case worker. Therefore, the starting point for this paper’s analysis is a set of data drawn from Ascentria’s case files. Past Clark University students working on the Refugee Housing Initiative performed a detailed quantitative analysis of this data (Phase 1), providing a unique window into the settlement patterns of refugees in the City of Worcester. This analysis served to frame the spatial bounds of my research in specific neighborhoods where refugees were resettled at the highest rates and to orient my research questions based on variables such as housing type and condition or language proficiency. At the time of writing, Ascentria no longer resettles refugees in Worcester, although it continues to serve its existing refugee clients.
The analysis portion of this paper takes a case-study approach, focusing intently on a single Worcester neighborhood- Bell Hill (see Figure 1)- where many refugees are settled. Analysis is based on several different data sources: an existing quantitative analysis of case files from Ascentria Care Alliance, tract-level US Census data, Worcester Assessor’s data analyzed using GIS software, and site visits. Synthesizing this data, I explore what it can tell us about how refugees are able to stabilize and integrate into the fabric of the Bell Hill neighborhood and what lessons can be applied to refugee resettlement in Worcester and elsewhere more generally. This paper’s analysis and findings are broken down into four dimensions that emerged naturally from the literature review and neighborhood analysis results:

1. **Community Characteristics**: First, I look at the demographics of Bell Hill at the census tract level and refugee-specific data, as well as examine some crime data. These factors affect how easily new arrivals will integrate into their communities, but subsequent analysis sections also have implications under this paper’s integration framework.

2. **Housing & Housing Stability**: I examine the housing characteristics of Bell Hill as a whole and the specific locations where refugees were settled.

3. **Social Infrastructure**: The potential for arrivals to form and maintain social, cultural, and economic connections within the Bell Hill community. My analysis
focuses on local service providers, nonprofits, ethnic businesses, public services such as schools, and religious institutions.

4. Physical Infrastructure: An examination of the transportation options for the neighborhood, including public transit, walkability, and road/sidewalk conditions.

Having conducted my analysis, I apply my findings from Bell Hill to the specific criteria found in my conceptual frameworks for integration and housing stability. I conclude that the ethnically and linguistically diverse community makes it easier for those who have limited English skills and lack of experience with American culture to adapt initially, and ultimately help facilitate positive integration outcomes. My findings regarding housing stability are more of a “mixed bag.” Positive elements include the many supportive services designed to foster stability in Worcester’s refugee population, the strong legal standing refugees have to live and work in the United States, and the presence of seemingly responsible and experienced landlords. There are also some potentially problematic indicators for refugee housing stability, including shorter-than-average tenure, the potential to have to rely on previously unknown roommates to pay rent, and the relatively limited scope of the initial refugee assistance that would serve to mitigate potential financial and educational issues.

I also found that the indicators for refugees’ ability to form a strong social infrastructure in Bell Hill were strong. Several small business catering to the needs of immigrants, a large number of medical care facilities, and multiple significant outdoor
recreation areas are found within the neighborhood. Just outside of the area of study are Ascentria’s client center with its myriad of refugee-focused assistance programs, a high-quality elementary school, and a diverse array of religious institutions. The physical infrastructure of Bell Hill, however, may cause problems for some who seek access to these services and locations. While sidewalks and crosswalks are abundant, they along with some roads may not be well-maintained. This combined with steep terrain may make walking difficult for some and biking impractical. Bus service may prove reliable for those with the right schedules, but stops are relatively infrequent and unreliable outside of regular working hours. Thus, Bell Hill represents a model for one type of suitable resettlement location: an urban neighborhood with pre-existing diversity and density that is located close to a downtown while being a self-contained enough to provide local businesses and amenities.

2. Background

The Refugee Resettlement System

Refugee resettlement is a tightly regulated bureaucratic process by which individuals and families meeting the United Nations definition of a “refugee” are permanently settled in a country that agrees to take in a certain number of new refugees per year. The United Nations High Commission for Refugees (UNHCR 2019) carries out the UN’s refugee programs and uses a specific legal definition:
“Someone who is unable or unwilling to return to their country of origin owing to a well-founded fear of being persecuted for reasons of race, religion, nationality, membership of a particular social group, or political opinion.”

Globally, 25.9 million people met this definition in 2018 and therefore fell under the UNHCR’s mandate (UNHCR 2018). The agency recognizes three long-term “durable solutions” to the problem of refugee status: repatriation to the country of origin when it becomes safe, integration in the host country to which a refugee has initially fled, or resettlement to a 3rd country, usually one in the Global North with the resources required to invite such settlement (unhcr.org 2020). This paper concerns itself with the latter of these three routes.

Resettlement is a solution that sees refugees finding a new place to live indefinitely; it is a “solution” to the problem of refugees in that they are provided with new national identities and communities in which to live peacefully, even though they cannot return to their home country. Although resettlement is the most visible form of refugee movement in the Global North, only a small percentage of refugees are resettled globally each year (for example, around 80,000 resettlement submissions were made in 2018 according to UNHCR) due to systems of tightly controlled arrival quotas by the receiving nations. A relatively large proportion of resettled refugees become citizens in their new countries compared to those who stay in the primary country to which they have fled; in the United States, for example, 84% of long-term refugee residents become citizens (Bernstein & DuBois 2018).
In the United States, a national ceiling for refugee arrivals is set annually by the president; notably, this is a maximum number of allowed arrivals, not a quota to be actively met. The process for being screened and accepted by the US Department of State for resettlement is long and intensive: between background checks, medical exams, and security screenings, many refugees wait years before being resettled (Bernstein & DuBois 2018) Complicating matters for those wishing to come to the United States, Bernstein & DuBois (2018) note that the 2018 admission ceiling had been slashed by over 50% from 2017 to “an historic low” (p. 2). In 2020 the ceiling was cut even further still to 30,000 for the 2019 fiscal year and to 18,000 for 2020 (Shear & Kanno-Youngs 2019). This increasing hostility to refugee resettlement has its local effects, as all local agencies are funded from federal programs.

Once cleared for resettlement, federal agencies work with nine national private “voluntary agencies” who then contract with smaller local agencies to facilitate placement. Worcester is currently home to only one resettlement agency, the Refugee & Immigrant Assistance Center (RIAC), although previously Catholic Charities and Ascentria Care Alliance also provided these services. Agencies are responsible for assisting new arrivals in finding and maintaining housing and jobs, orienting culturally to the United States and Worcester more specifically, and usually provide a host of other vital services (see Analysis section for a more detailed exploration of services offered to refugees in Worcester). Federal funds are available to help cover “refugees’ most immediate needs” over their first 30 to 90 days in the United States, an amount set an $2,075.00 per refugee in 2018 (Bernstein & DuBois
This initial period sees the relationship between the resettlement agency and the refugee at its most intense; Ascentria’s case files often ended after the first 90 days unless clients went out of their way to return seeking additional services. Refugees, even those who are still noncitizens, are also eligible for multiple federal-level US Department of Housing and Urban Development (HUD) affordable housing programs such as Section 8, public housing, and HUD-assisted housing for the elderly and handicapped (ACF 2017).

**Worcester as a City of Immigrants**

Worcester, Massachusetts, New England’s second largest city, represents one of the largest and most diverse concentrations of foreign-born residents in the region. Approximately 21% of the city’s 185,877 residents were born outside of the United States as of 2018, compared to the statewide figure of 15%. (US Census 2018). Worcester is one of Massachusetts’ “Gateway Cities,” defined as “midsize urban centers that anchor regional economies around the state” (MassINC 2020). It has the highest absolute number of foreign-born residents and is fourth overall in terms of percentage (UMass Dartmouth 2015). The city also stands out for diversity in its residents’ countries of origin: Worcester’s foreign-born population originated in 85 different countries with no single nationality or continental grouping dominates the population. The top three countries of origin for foreign-born residents are Ghana, the Dominican Republic, and Vietnam, each with a population of 3,000 to 4,000 (UMass Dartmouth 2015).
No analysis of immigration and housing in Worcester is complete without discussing the ongoing role that the “triple-decker” style of dwelling has played in housing newcomers to the city. Adaptable, three-story, multifamily structures largely built around the turn of the 20\textsuperscript{th} century, there are nearly 5,000 triple-deckers in Worcester (Campbell 2018). The style is predominant in Bell Hill, with some typical examples from the neighborhood shown in Figures 2 and 3. Described as the “backbone” of the city’s housing stock (Campbell 2018), many of Worcester’s low-income and immigrant residents still reside there, and refugees are no different (see Table 2). Due to their age, the condition of triple-deckers and their nonconformance with modern building codes are of concern to city officials, although many have been retrofitted or well-maintained by their owners (Campbell 2018).

\textbf{Figure 2:} Typical Bell Hill residential street (E. Kendall St.), with triple deckers (Source: Google Maps)
The diverse, international nature of Worcester and its relative affordability are key reasons why the city has been a major destination for refugee resettlement. The city was the final destination for 2,196 new refugee arrivals between 2007 and 2012 (Fabos et al 2014). Top countries of origin for refugees include Iraq, Somalia, Bhutan, and the Democratic Republic of the Congo. During the 2014-2017 study period, Ascentria processed 314 resettlement cases of various family sizes, all within the City of Worcester.
3. Conceptual Frameworks

To inform my analysis of refugee housing issues, I examine the literature surrounding issues of integration, housing, and social and physical infrastructure as they relate to refugees and immigrants. I adopt specific frameworks related to integration and housing stability that I will use to frame my analysis and examine my findings.

Integration

Scholars have often used an integration framework to try and understand the extent to which refugees have been able to thrive in their new homes. Integration has sometimes been a controversial subject and has undergone changes in definition throughout the years, sometimes being equated, problematically, with assimilation. Throughout American history, assimilation has often been understood as the process by which immigrants must change to match an imagined default American society, ignoring the nation’s existing cultural and ethnic diversity (Alba & Nee 1997). However, the history of assimilation theory is long and complex, and has come to hold a more nuanced definition that allows for the incorporation of distinct cultural, ethnic, and racial groups without erasure. For example, residential assimilation theory has equated an increase in opportunity with a change in location, asking questions such as: Is a minority group integrated into the same physical spaces as the majority? More recently, though, a version of the theory looks at equality of opportunity
and quality when it comes to housing, even if ethnic enclaves continue to exist (Alba & Nee 1997).

Zhou et al (2008) point out that measures of immigrant “incorporation” still measure immigrants’ “convergence to the mean” of socioeconomic indicators associated with the white middle class. Alba & Nee (1997) note that throughout American history, immigrant groups have relied on “ethnic economies” in which immigrants rely on “ethnic resources and solidarity in the accumulation of start-up capital and in competition with white firms” (p. 851). However, the authors argue that while such ethnic businesses can play a vital role in the initial accumulation of resources within ethnic enclaves, “economic integration” - the joining of the mainstream American economy- may be the more important way to gain long-term financial stability (Alba & Nee 1997).

Given the complex history and cultural baggage of the term “assimilation,” this paper eschews the term entirely in favor of “integration.” The UNHCR, in their 2002 handbook on refugee resettlement, conceptualizes integration as follows:

“Integration is a mutual, dynamic, multifaceted and on-going process. “From a refugee perspective, integration requires a preparedness to adapt to the lifestyle of the host society without having to lose one’s own cultural identity. From the point of view of the host society, it requires a willingness for communities to be welcoming and responsive to refugees and for public institutions to meet the needs of a diverse population.” (UNHCR 2002 p.12)

While this definition is nuanced and multidimensional, we must interrogate the continued presence of assimilation-like thinking in modern conceptions of integration.

Janine Dahinden, criticizing trends in mainstream integration thinking, writes that
“integration is... a question of when, how and on behalf of which markers specific boundaries between ‘us’ and ‘them’ are established, transgressed or dissolved, and what consequences such boundary processes have” (Dahinden 2016, p. 2216). I likewise conceptualize integration as a multifaceted process requiring adaptations on behalf of both refugees and host communities, which is compatible with the more progressive definitions of assimilation, such as the definition of residential assimilation that allows for either an even mixing of ethnicities or the existence of ethnic enclaves with equal housing opportunities.

![A Conceptual Framework Defining Core Domains of Integration](image)

*Figure 4: from Ager & Strang 2008, p. 170*

A helpful integration framework is proposed by Ager & Strang (2008). Figure 4 depicts a diagram of the “core domains of integration,” which includes housing outcomes as
a key marker of successful integration and stability as a foundational element of integration.

As a final note on integration, Kovacs (2015) cautions that it is a mistake to use only legal status or refugee-specific experiences to account for integration outcomes, as other factors experienced by other groups in a society (such as income or ethnicity-based challenges) may explain those outcomes better. I take Kovacs’ advice and note here that although this paper focuses specifically on refugees, no outcomes I discuss should be taken to be wholly unique to refugees or solely unique to that status.

**Housing Stability**

Frederick et al (2014) conceptualize housing stability as a complex, “multidimensional construct” that must be measured along many dimensions. They pull from a comprehensive review of housing stability literature as well as interviews with at-risk individuals to come up with a series of criteria meant to evaluate an individual’s level of stability based on multiple factors. For Frederick et al, housing stability is “best assessed in terms of threats to housing security” and therefore they define it “as the extent to which an individual’s customary access to housing of reasonable quality is secure,” (2014, p. 970) noting that level of stability will be measured along a spectrum rather than falling into discrete categories of “stable” and “not stable” (Frederick et al 2014). Table 1 summarizes their eight measurable dimensions of housing stability.

Stability is mentioned as an important prerequisite for successful integration to occur throughout the literature (see Sherrell et al 2007; Carter & Osbourne 2009; Strang &
Ager 2010), often in the specific context of finding a safe and dependable dwelling. According to Ager & Strang (2008, p. 121), “the effect that housing has on refugees’ overall physical and emotional wellbeing, as well as on their ability to feel ‘at home’, is well established.” They also cite housing stability (among other types of stability) as an important factor allowing refugees to form the social connections that help “enable integration” (Ager & Strang 2008) [refer back to Figure 4]. In Carter and Osbourne’s (2009) study of refugee resettlement in Winnipeg, Canada, a refugee tenant’s relationship with their landlord played an important role in achieving housing stability. Due to language barriers, lack of literacy skills, and lack of knowledge regarding tenant rights and landlord responsibilities, respondents in the study faced problems such as incurring financial penalties by unknowingly breaking leases, or not asking for vital repairs to which they were entitled.
Table 1: Selected Dimensions of Housing Stability from Frederick et al 2014

<table>
<thead>
<tr>
<th>Housing Stability Dimension</th>
<th>Rationale</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type of housing (temporariness, roommate situation, availability of supports/subsidies)</td>
<td>Used to gauge how much control someone has over their living environment/tenure</td>
</tr>
<tr>
<td>Recent history of maintaining housing &amp; tenure of current living situation</td>
<td>Measures presence of evictions, but allows for multiple planned moves as long as housing is maintained generally</td>
</tr>
<tr>
<td>Time spent in current accommodation</td>
<td>Moving frequently leaves individuals vulnerable to “unforeseen problems and conflicts.” The authors note that moving can be a positive sign of a transition to a more stable environment</td>
</tr>
<tr>
<td>Finances</td>
<td>Assesses the ability to pay rent</td>
</tr>
<tr>
<td>Employment/education status</td>
<td>Builds both life skills and earning potential, leading to greater independence</td>
</tr>
<tr>
<td>Harmful use of drugs and alcohol</td>
<td>Causes financial trouble, interpersonal/landlord issues, legal trouble</td>
</tr>
<tr>
<td>Standing within the justice system</td>
<td>Legal trouble usually disrupts access to housing, work</td>
</tr>
<tr>
<td>Subjective assessments</td>
<td>Asking individuals whether they feel stable in/satisfied with their housing allows assessment of intangible aspects</td>
</tr>
</tbody>
</table>


Social & Physical Infrastructure

Infrastructure is “the background structures and systems that allow social, economic, cultural, and political life to happen” (Latham & Layton 2019, p. 3).

Correspondingly, the literature on refugee resettlement emphasizes a series of environmental and facilitating factors that contribute to community-building and other forms of social well-being that encompass traditional infrastructure (roads, utilities, etc.) as well as “social infrastructure.” According to Klinenberg (2018) social infrastructure is made
up of publicly-accessible spaces where social connections and community can be formed, examples of which include public institutions like libraries, community organizations like churches, or outdoor spaces like parks or sidewalks. Applying this definition to the study of refugee integration, I include programmatic and community factors that facilitate the same goals. These factors include supportive social programs, specific cultural institutions, or the presence of a community that speaks a certain language. Ager and Strang’s (2008) integration framework incorporates social infrastructure through their “social connection” dimension, in which social “bridges, bonds, and links” play a crucial role in reaching positive integration outcomes (Figure 4). A report from refugee resettlement organization Mercy Housing on best housing practices notes that “reconnecting social, cultural and familial ties” are high priorities for many newly arrived clients and that where they live affects their ability to pursue such networking (Olson 2006, p. 46). Returning to Winnipeg, Carter and Osbourne (2009) state that in addition to financial considerations, refugees tended to settle in neighborhoods that offered proximity to refugee support agencies and where they could form social bonds.

A neighborhood’s physical infrastructure is also important for promoting stability and integration for refugee arrivals, and facilitating access to spaces where connections can be made. The same sources that discuss the importance of social infrastructure also describe how the quality and availability of public transit affect refugee experiences, mainly through convenience and cost. Transportation costs can be a major burden on a family without an established stream of income, and long transit times make it more difficult to fir
important but nonessential supportive services into busy schedules (Carter & Osbourne 2009; Olson 2006). When commuting to work or running errands access to “convenient mass transit” (Olson 2006) improves refugees’ quality of life and saves them money. Immigrants in general are more likely to rely on public or alternative (such as walking or biking) modes of transportation and are less likely to own personal vehicles (Blumenberg 2008). Therefore, aspects of transportation infrastructure such as sidewalks and convenient public transit stops and schedules will be of particular importance to a diverse neighborhood like Bell Hill.

4. Methodology

Figure 5: Ascentria Initial Refugee Settlement Heatmaps by Country of Origin, By Ayodele Agboola 2018
This research is an in-depth qualitative neighborhood analysis carried out in Worcester’s Bell Hill neighborhood, identified in Phase 1 of the Clark University Refugee Housing Project as a major resettlement site for Ascentria’s refugee clients. Bell Hill was the most common destination for Ascentria resettlements in the 2014-2017 study period, with Table 2 showing that 37 out of 268 placements for which data was available (full placement information was missing for 49 files) were in Census Tract 7319, which is roughly contiguous with the neighborhood. The high concentration of refugee resettlement and diverse representation of almost every major nationality settling in Worcester (see Figure 5) allows the neighborhood to serve as a meaningful example of locations where Worcester’s refugees are initially housed and where they try to make lives for themselves. A neighborhood housing ecosystem provides a deeper understanding of place than looking at a whole city as a unit of analysis. The neighborhood was defined as the area between Green Hill Park to the north and Belmont Street to the south (Figure 6 shows Belmont Street), and an adjacent commercial corridor along Lincoln Street.
This paper makes use of available data for Ascentria’s refugee placements in 2014-2017 from Phase 1 of the Clark University Refugee Housing Project as well as some data specific to the Bell Hill neighborhood where it can be sufficiently anonymized. Of particular importance is a 2018 masters practitioner’s report by Molly Weilbacher from which this paper draws its tables and graphs related to the Ascentria refugee resettlement cases. This analysis draws on 314 case files containing information “pertaining to all aspects of a refugee’s resettlement within the initial 90-day period” (Weilbacher 2018, p. 18), which were anonymized in a manner agreed upon by Clark and Ascentria so as to protect the identities of any individuals described by the case files. The case files focus primarily on the initial settlement period, with inconsistent documentation on housing status in the cases.
where refugees did return later for additional services. Therefore, this paper only analyzes initial placements and cannot track whatever subsequent relocations refugees may undertake.

![Figure 6: Looking east down Belmont Street, a busy road that serves as a neighborhood boundary](image)

Bell Hill and its nearby commercial corridor along Lincoln Street are roughly contiguous with Census Tract 7319, allowing for the direct use of US Census estimates in constructing a demographic profile of the neighborhood. Figure 1 shows Tract 7319 in the wider context of Worcester. The neighborhood is positioned in a corner where the major highway Route 290 and Route 9/Belmont Street Intersect, and is bordered by Green Hill
Park, one of Worcester’s largest, on its east side. This unique location gives the neighborhood unusually clear boundaries, excepting where Lincoln Street blends north into the Brittan Square neighborhood. The “core” residential neighborhood lies on the slopes of Belmont Hill for which the area is named.

My analysis consisted of the following five steps:

a. Demographic/Neighborhood Profile

First, I put together a profile of the Bell Hill neighborhood based on two primary sources: US Census data and Worcester Assessor’s data, for demographic and housing information, respectively. My primary tools in organizing and analyzing this data were Microsoft Excel for creating tables and spreadsheets and the open-source geographic information systems (GIS) software QGIS for mapping. For the neighborhood as a whole, further analysis of the Assessor’s data identified which properties were owner-occupied and which property owners lived in the neighborhood, elsewhere in Worcester, or outside Worcester.

b. Refugee-Specific Profile

Having constructed a neighborhood profile using publicly available data, I created a complementary set of statistics specific to Bell Hill’s refugee population using the 2014-2017 data. Due to the relatively small population covered by that data (37 total placements), this step of the analysis was limited in what it could
describe without compromising the anonymity of its subjects, but information on refugee demographics and housing placement specific to Bell Hill were extracted without identifying any individual refugee, property, or landlord. While I have depended on the Phase 1 quantitative analysis of the Ascentria data for this portion of the analysis, I did conduct an additional examination of the raw data in potential areas of interest. Information on landlords was of particular interest due to its importance in the concept of housing stability. I identified “major landlords” as those responsible for at least six refugee placements citywide, of which there were seven. I analyzed the properties represented in the 37 Bell Hill placements to determine properties that had remained under continuous ownership from the time of initial placement to the present, for use in areas of analysis where it is important that current conditions match those at time of settlement.

c. Online Secondary Data Search

After analyzing my primary data sources regarding the neighborhood but before going out into the field, I explored additional online sources to supplement my analysis. I drew from official sources on crime, transportation, and education, relying on the Worcester Police Department, Worcester Regional Transportation Authority, and Massachusetts Department of Education, respectively. I also consulted the websites of local institutions such as various churches and the
Ascentria Client Center to better understand what services they offer and the role they might play in the neighborhood.

A publicly available source for assessing the neighborhood’s “walkability” is Walk Score, a company that attempts to calculate a walkability index for every neighborhood in the United States expressed in the titular Walk Score, a rating out of 100 points meant to describe the ease by which typical errands can be accomplished on foot. It measures “choice and proximity—the more amenities (restaurants, movie theaters, schools) you have around you, and the closer they are, the higher your Walk Score” (Vanderbilt 2012).

d. Field Observation

Further analysis was conducted through a series of site visits (enumerated in Table 3) using photography and note-taking and particular sites of interest whose characteristics were relevant to my conceptual frameworks. Therefore, attention was paid to elements such as public transit, educational facilities, healthcare facilities, open recreational space, appropriate ethnic businesses and religious institutions, housing type and condition and the overall quality of the buildings and roads. Over the course of my visits I walked and drove up and down commercial corridors, through residential areas and Green Hill Park, and visited several local businesses. I paid particular attention to walkability and the ease by which I could go in between key locations, as well as to and from amenities and residential areas. My
impressions in this regard are necessarily colored by the fact that I am a relatively fit able-bodied 26-year-old man. My visits were conducted on both weekdays and weekends, although I was only able to visit in the afternoons and therefore could not observe any trends particular to mornings or evenings.

<table>
<thead>
<tr>
<th>Site Visit Date</th>
<th>Site Visit Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>November 6, 2019</td>
<td>1:30pm-4:00pm</td>
</tr>
<tr>
<td>January 7, 2020</td>
<td>1:00pm-3:00pm</td>
</tr>
<tr>
<td>January 30, 2020</td>
<td>12pm-1:30pm</td>
</tr>
</tbody>
</table>

To better understand the landlord issues that the refugees in the 2014-2017 dataset settling in Bell Hill might have had, I conducted an on-site analysis of the specific properties where they were settled. I used a list of every refugee placement in Census Tract 7319 and focused on those locations that were under the same ownership as during the study period, the goal being to gain an understanding of how well the average refugee landlord in the area maintained their property.

Measures of property condition tend to be subjective, with the US Department of Housing and Urban Development offering only a short definition of when a property is “blighted”: “when it exhibits objectively determinable signs of deterioration sufficient to constitute a threat to human health, safety, and public welfare” (HUD 2009). Therefore, this analysis focuses on observable signs of deterioration in aspects of a property such as building siding, building roof, building windows, lawn/grounds, and accessory structures.
e. Integration & Stability Measure Analysis

After compiling results from the previous four steps of analysis, I returned to my conceptual frameworks and performed the analytical exercise of fitting the information I had gathered about Bell Hill into them. For this paper’s analysis, Frederick et al’s stability measure cannot be perfectly applied because it will rely on existing case studies and my own observations rather than the interview form in which the housing stability index was meant to be administered. Despite this limitation, my analysis was able to indirectly address nearly all of Frederick et al’s dimensions of housing stability.

5. Neighborhood Analysis

Recognizing the integration frameworks discussed in the previous section, the neighborhood analysis of Bell Hill will consider Community Characteristics, Housing Characteristics, Social Infrastructure, and Physical Infrastructure as dimensions along which the potential for successful integration can be measured.

Community Characteristics

In this section of my analysis I look at the demographics of Bell Hill at the census tract level and refugee-specific data from Ascentria, as well as examine some crime data.
These factors affect integration outcomes for the neighborhood under Ager & Strang (2008)’s framework and describe the environment and community in which refugees will attempt to build new lives.

**Demographics**

As the scale of analysis narrows from the state to city to Bell Hill, the population becomes poorer and less white (Table 4, Figure 7). Bell Hill has a significantly greater proportion of residents identifying as Hispanic/Latino than the city overall, and non-Hispanic white residents, a clear majority at other levels, made up barely more than a third of the population (Figure 7). Worcester’s poverty rate is nearly twice that of Massachusetts’, and Bell Hill’s is higher still (Figure 7). With 40% of residents born outside of the United States, census data reveals the extent to which Bell Hill is a diverse neighborhood and to which it struggles economically (Table 4).

**Table 4: Bell Hill - Demographic Overview**

<table>
<thead>
<tr>
<th></th>
<th>Bell Hill</th>
<th>Worcester</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total population</td>
<td>5,011</td>
<td>184,743</td>
</tr>
<tr>
<td># of households</td>
<td>1,934</td>
<td>70,792</td>
</tr>
<tr>
<td>Average household size</td>
<td>2.56</td>
<td>2.43</td>
</tr>
<tr>
<td>Average family size</td>
<td>3.61</td>
<td>3.22</td>
</tr>
<tr>
<td>Median household income</td>
<td>$31,862</td>
<td>$45,869</td>
</tr>
<tr>
<td>Born outside of US</td>
<td>40.30%</td>
<td>21.07%</td>
</tr>
</tbody>
</table>

*Source: US Census*
Linguistic diversity is another hallmark of the Bell Hill neighborhood. Figure 8 shows that only 54% of residents speak English at home, which is significantly less than Worcester as a whole. Notably, a majority of those who speak a language other than English at home report speaking English “less than very well.” While the Census does not contain data related to refugees specifically, it does reveal distinctive characteristics of Bell Hill that matter in the context of refugee resettlement. Based on my overall demographic analysis of the neighborhood, I will refer to Bell Hill as a “diverse neighborhood” due to the large
presence of foreign-born residents, a racially and ethnically diverse population, linguistic diversity, housing diversity (see Housing section), and economic diversity.

**Figure 8: English proficiency comparison (Source: ACS 2017 5-yr estimates)**

**Table 5: Country of Birth for Ascentria Refugees in Bell Hill**

<table>
<thead>
<tr>
<th>Country</th>
<th># of Households</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bhutan</td>
<td>11</td>
</tr>
<tr>
<td>Central African Republic</td>
<td>7</td>
</tr>
<tr>
<td>Democratic Republic of the Congo</td>
<td>5</td>
</tr>
<tr>
<td>Syria</td>
<td>3</td>
</tr>
<tr>
<td>Somalia</td>
<td>3</td>
</tr>
<tr>
<td>Iraq</td>
<td>3</td>
</tr>
<tr>
<td>Iran</td>
<td>2</td>
</tr>
<tr>
<td>Burundi</td>
<td>2</td>
</tr>
<tr>
<td>Palestine</td>
<td>1</td>
</tr>
<tr>
<td>Nepal</td>
<td>1</td>
</tr>
</tbody>
</table>
Figure 9 shows the country of birth for the entire set of case files reviewed in Phase 1, representing a diverse set of nationalities but with a clear majority from Africa and the Middle East (a combined 68%). Table 5 shows the recorded country of birth for each of the refugee households resettled in Bell Hill during the 2014-2017 study period. Middle Eastern refugees are underrepresented in the neighborhood compared to their overall share of Worcester’s refugees, but are still present. The most common was Bhutan, followed by the central African nations of the Democratic Republic of the Congo and Central African Republic.

<table>
<thead>
<tr>
<th>Country of Birth</th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
<th>2017</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>AFGHANISTAN</td>
<td></td>
<td></td>
<td></td>
<td>3</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>BHUTAN</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>4</td>
<td>4</td>
<td>14</td>
</tr>
<tr>
<td>BURMA</td>
<td>2</td>
<td></td>
<td></td>
<td>1</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>BURLUNG</td>
<td>1</td>
<td>4</td>
<td>4</td>
<td></td>
<td></td>
<td>9</td>
</tr>
<tr>
<td>CENTRAL AFRICAN REPUBLIC</td>
<td>8</td>
<td>6</td>
<td></td>
<td></td>
<td></td>
<td>14</td>
</tr>
<tr>
<td>CHINA</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>DEM REP CONGO</td>
<td>14</td>
<td>13</td>
<td>18</td>
<td>4</td>
<td>4</td>
<td>45</td>
</tr>
<tr>
<td>ETHIOPIA</td>
<td>3</td>
<td>2</td>
<td>5</td>
<td></td>
<td></td>
<td>10</td>
</tr>
<tr>
<td>EQUATOR</td>
<td>4</td>
<td>6</td>
<td></td>
<td></td>
<td></td>
<td>10</td>
</tr>
<tr>
<td>IRAQ</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>IRAN</td>
<td>3</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>IRAQ</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td></td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>IVORY COAST</td>
<td></td>
<td></td>
<td></td>
<td>3</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>KENYA</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>KUWAIT</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>MAU</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>NIGERIAL</td>
<td>2</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>NIGERIAL</td>
<td>2</td>
<td>1</td>
<td></td>
<td>1</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>PALESTINE</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>RWANDA</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>SAUDI ARABIA</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>SOMALIA</td>
<td>1</td>
<td></td>
<td></td>
<td>1</td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>SYRIA</td>
<td>1</td>
<td></td>
<td>4</td>
<td>2</td>
<td>16</td>
<td></td>
</tr>
<tr>
<td>TANZANIA</td>
<td>2</td>
<td></td>
<td>4</td>
<td></td>
<td>8</td>
<td></td>
</tr>
<tr>
<td>THAILAND</td>
<td></td>
<td>2</td>
<td>2</td>
<td></td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>TONGA</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>UGANDA</td>
<td></td>
<td></td>
<td>2</td>
<td></td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>YEMEN</td>
<td>1</td>
<td></td>
<td></td>
<td>1</td>
<td></td>
<td>2</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>2</td>
<td>100</td>
<td>98</td>
<td>89</td>
<td>24</td>
<td>194</td>
</tr>
</tbody>
</table>

*Figure 9: Ascentria case files by country of birth (Source: Weilbacher 2018)*
Crime

Neighborhood safety is a key concern cited in the literature in establishing a stable living situation. It is difficult to make a home in an area that one perceives as dangerous. The Worcester Police Department keeps a detailed, up-to-date map showing every reported incident in the city using the “CityProtect” platform. Figure 10 is a map from this service and shows every reported instance of violent crime and property crime in the wider Central and South Worcester region, including Bell Hill, for the month previous to January 15, 2020. There is a visible cluster of incidents in the residential sections of the neighborhood, but this seems indistinguishable from the density of crime found throughout many other Worcester neighborhoods. The map suggests that the Worcester Police are not called to respond to crimes at a particularly higher nor lower rate in Bell Hill than in comparable neighborhoods such as Main South or Piedmont.
Figure 10: Selected Criminal Incidents, month prior to January 15, 2020 (Source: Worcester Police Department)
In this section, I examine the housing characteristics of Bell Hill as a whole and of the specific locations where refugees were settled. The analysis includes housing type, landlord characteristics, ownership trends, tenure, property condition, and rents. These housing characteristics affect the ability of refugees to achieve and maintain housing stability.
**Housing Stock**

The majority of residential buildings (84%) in Bell Hill contain multiple units. Figure 11 shows residential parcels classified by the type of dwelling (with increasing density signified by colors moving from cool to hot), and notable here is the diversity of housing types found in the neighborhood. Table 2 shows that Ascentria clients were placed into at least one of nearly every housing type found in the neighborhood, but with the largest number being placed into three-family homes. The most common housing classification present in the neighborhood is three-family (refer again to Figure 11), owing in large part to the presence of Worcester’s signature triple-deckers. Out of a total of 37, twenty-two of Ascentria’s placements in Bell Hill (about 60%) were classified as “3 family” units, most of which are triple-deckers. Note that these 37 placements were placed in 20 different properties within the neighborhood; some units received multiple refugee households over time.

**Ownership Trends & Landlords**

According to the 2017 American Community Survey, only 21% of units in the greater Bell Hill neighborhood are owner-occupied, while the majority are rented by tenants. Therefore, the experience of renting (including relationships with landlords, managing the payment of rent, dealing with the condition of a building one does not own, etc.) is key to understanding what living in the neighborhood is like. Figure 12 depicts the prevalence of properties owned by “absentee landlords” (defined as owners who live outside of the Bell
Hill neighborhood) based on Assessor’s data. The assumption is that landlords who live closer have more opportunities to be involved in neighborhood affairs and be more personally invested in their tenants’ concerns than those who do not live alongside their tenants. The tendencies of refugee-settling landlords in Bell Hill may not match up with the overall neighborhood characteristics. Table 6 shows the landlord type for the twenty Bell Hill properties where Ascentria clients were placed during the study period and where landlords live in relation to those properties, with only six being owner-occupied and the remainder living elsewhere in Worcester and outside of Worcester.

Figure 12: Bell Hill Landlord Place of Residence (Source: Worcester Assessor’s Database)
Table 6: Bell Hill Refugee-Settling Landlords by Type

<table>
<thead>
<tr>
<th>Landlord Residency</th>
<th># of Properties</th>
</tr>
</thead>
<tbody>
<tr>
<td>Owner-occupied</td>
<td>6</td>
</tr>
<tr>
<td>Elsewhere in Worcester</td>
<td>5</td>
</tr>
<tr>
<td>Outside of Worcester</td>
<td>9</td>
</tr>
</tbody>
</table>

Landlords who rent multiple properties to refugees seem responsible for an outsized portion of placements with the top landlord handling over 50 placements citywide at numerous properties. In addition to this significant property owner there were several other landlords responsible for more than five placements each, and in total this handful of “major landlords” settled over one third of Ascentria’s clients citywide throughout the study period. These findings imply that the agency may have maintained long-term working relationships with trusted individuals and groups to find housing for their clients, which further implies that these landlords may have been able to gain experience and expertise in having refugees as tenants. Finally, these landlords maintained multiple repeat settlement destinations in Bell Hill, underscoring the neighborhood’s value as a representative case for settlement trends.

Table 7 shows the results of the field observations designed to assess the overall condition of properties where Ascentria refugees were settled. The Ascentria landlords tend to keep their properties in good condition, and in fact there are relatively few properties in the Bell hill neighborhood that show noticeable signs of blight, although poorly maintained properties are certainly to be found. A typical triple-decker, shown in Figure 13, matches
the buildings classified as “good,” showing some visible signs of wear but overall well maintained, and a building like the one in Figure 2 would be classified as “excellent,” a property that stands out for the attention paid to its upkeep. “Average” quality would have been described as having one or two areas of significant deterioration, but I did not observe any refugee settlement properties that fell to this level.

Table 7: Conditions of Bell Hill Ascentria Landlords’ Properties

<table>
<thead>
<tr>
<th>Property Condition</th>
<th># of Ascentria Landlord Properties</th>
</tr>
</thead>
<tbody>
<tr>
<td>Excellent</td>
<td>3</td>
</tr>
<tr>
<td>Good</td>
<td>10</td>
</tr>
<tr>
<td>Average or below</td>
<td>0</td>
</tr>
</tbody>
</table>

Figure 13: Example of a triple decker with some wear but still in “good” condition (Source: Google Maps)
Tenure

Average housing tenure is shorter in Bell Hill than Worcester as a whole. Figure 14 summarizes the Census data regarding how long residents have lived in their current housing accommodations, presented for the total population and then broken down for renters and owners. At both the neighborhood and city scale those who own their homes tend to have lived in the same place longer than renters, but the average tenure for both groups combined tends to be shorter in Bell Hill than the city as a whole. It is necessary to keep in mind that the majority of Bell Hill residents, approximately 79%, rent their homes as opposed to approximately 54% citywide.

Figure 14: Housing tenure statistics (Source: ACS 2017 5-yr estimates)
One final dimension of tenure is the real estate market. I found that seven out of a total of 20 properties owned by refugee-settling landlords were transferred to new owners just in the past two to three years (leaving the 13 properties in Table 7). The fact that over one third of the subject properties in Bell Hill had been sold to new owners that did not necessarily have a history of working with refugees might indicate a shift in the market that marks a decrease in the average length of tenure in the area. Notably, the “major landlords” identified in the analysis did not sell their properties, which may lead to greater housing stability for refugees. Expanding the analysis of tenure to the entirety of Bell Hill, out of a total of 723 tax parcels located wholly within the neighborhood, 255 or approximately 35% were most recently sold within the five-year period of 2013-2017. This signals that property values are likely increasing, affecting affordability and potentially landlords’ willingness to rent to refugees.

Rent and Affordability

According to Frederick et al (2014) the ability to not only afford rent but to not be overly burdened by rent payments as a percentage of overall income is vital to ensuring housing stability. Rents for refugees’ initial placements were recorded in Ascentria’s case files, but to a limited extent. Figure 15 (from Weilbacher 2018) shows two complementary measures of what refugees paid in rent: “case file rent” is the amount that an individual or
family unit payed in rent at the time of initial settlement, and “initial placement address rent” shows the total rent owed for the entirety of the housing unit where the placement has occurred. These amounts may differ because multiple households (usually single-person households) may be placed together, and in this case each case file rent would only be a portion of the total initial placement address rent (Weilbacher 2018). While the data on initial placement address rent was incomplete (recorded in only 57 of 314 case files), Figure 15 gives an idea of what the average refugee’s rent payments were in 2014-2017. As a comparison, Figure 16 shows the rents owed per unit for the entire City of Worcester in 2017. The largest group of Ascentria’s refugee households owed less than $400 in monthly rent, which is less than a household would owe as the sole occupants of a majority of Worcester’s rental units. This indicates that families settled by Ascentria often owed less in rent than the average Worcester household during their initial settlement period. The less complete dataset of Initial Placement Address Rent seems to match overall city trends more closely.

Figure 15: Ascentria refugee case file rents (Source: Weilbacher 2018)
Social Infrastructure

This paper uses Klinenberg (2018)'s definition of “social infrastructure” to describe the spaces, institutions, and programs that provide the framework in which new arrivals try to form and maintain social, cultural, and economic connections within the Bell Hill community. To this end my analysis focuses on local service providers, nonprofits, ethnic businesses, public services such as schools, and religious institutions.

Patterns of Activity

A clear separation of commercial and residential uses is apparent in the Bell Hill neighborhood (Figure 17). The core Bell Hell neighborhood contains only residential uses or vacant lots, while Lincoln Street and the westernmost portion of Belmont Street are mostly commercial or institutional uses (medical, religious, etc.). Residential uses occupy the vast majority of properties in the neighborhood, and even amongst non-residential parcels regular commercial uses (red) are a minority. The western portion of the census tract is
zoned for industrial uses, but this area is separated from the Lincoln Street corridor by a steep hill and has minimal impact on the neighborhood’s character. Green Hill Park represents a significant amount of recreational open space, but other smaller parks like Bell Hill Park located south of Belmont Street (see Figure 18) provide significant public amenities such as a basketball court. These parks are close to the core residential area of Bell Hill and are accessible by foot.

*Figure 17: Bell Hill Land Use by Parcel (Source: Worcester Assessor’s Database)*
Local Institutions

Medical institutions play a large role in the area, anchored by the presence of two University of Massachusetts Memorial Hospital locations: the Medical Center Memorial Campus at the corner of Belmont Street and Oak Avenue, and the Hahnemann Family center on Lincoln Street to the north. In addition to these major health centers, many smaller doctor’s offices and health clinics are to be found in the commercial area along Lincoln and Belmont Streets (see the “medical institutions” category on Figure 17). Less than one mile east from the edge of the study area on Belmont Street is a major medical complex that includes the Worcester Recovery Center and Hospital, University of Massachusetts Medical School and Nursing School, and UMass Memorial Hospital University Campus. Access to healthcare is more complex than physical proximity to facilities, of course, but residents of Bell Hill do enjoy a close proximity to a wide array of healthcare professionals.
There are no schools within Census Tract 7319, but directly south of Belmont Street the Belmont Street Community School serves students Pre-K through Grade 6, operated by Worcester Public Schools. Figure 19 is an excerpt from the Massachusetts Department of Education’s profile of the school, showing that the unique demographic profile of the neighborhood is reflected in its student population. About 95% of the school’s 621 students are classified as “High Needs”, with large proportion of students additionally classified as “economically disadvantaged” and “English language learners” (MA DoE 2019). Despite these challenges, the MA Department of Education classifies the Belmont Street Community School as an exceptional “school of recognition” in terms of meeting and exceeding state education goals. The school’s close proximity to the residential portion of Bell Hill should allow children to easily walk to school. The requirement to cross the busy Belmont Street could be an obstacle, but my observations revealed that crossing guards are regularly employed in the area. On every occasion I visited the neighborhood in the period after
school let out, even smaller side streets were bustling with students and parents (Figure 20 shows the busy Belmont Street around 2 o’clock PM).

Figure 20: Looking west down Belmont Street in the late afternoon, showing vehicular and pedestrian traffic

As the neighborhood’s children advance in Worcester’s school system, they attend Worcester East Middle School, which the state considers in need of significant attention to improve academic outcomes (MA DoE 2019). High schoolers would attend either North High or Doherty Memorial High School, which are rated as making “moderate progress towards targets” and “requiring assistance,” respectively. All of these schools fall outside of reasonably walkable range from Bell Hill, with the closest, East Middle, being a 45-minute
walk away. One alternative much closer to Bell Hill is Worcester Technical High School, a relatively new facility located within nearby Green Hill Park. Finally, Worcester is known for its many colleges and universities, including Quinsigamond Community College, College of the Holy Cross, Worcester State University, Worcester Polytechnic Institute, and Clark University.

Figure 21: Bell Hill local businesses
Local Business/Faith Organizations

Various businesses and other institutions can play a major role in helping newly settled refugees and immigrants find stable footing, such as markets that sell familiar ethnic foods or churches that conduct services in a person’s native language. Figure 21 shows the businesses in Bell Hill that provide useful services and products locally. The distribution of these places corresponds closely to the neighborhood’s parcel-by-parcel recorded land use map (Figure 17). Practically, this means that there are a few small clusters along Lincoln Street and one large grouping along the southern side of Belmont Street.

Aside from the CVS and 7-Eleven shown in Figure 21, most of the businesses highlighted in this section are locally run and cater to the diverse clientele of immigrants who live in Bell Hill. Out of 22 retail establishments highlighted in Figure 21, 18 appear to be locally owned small businesses (i.e. not national chain stores or franchises). Figures 22-25 show several of the local convenience and grocery stores on Lincoln Street with particular attention paid to how they advertise to clientele seeking goods associated with particular nationalities. Besides food and groceries, connectivity and communication is the major business of Bell Hill retailers. Image 22 shows the window display of the Simple Mobile store on Lincoln Street (see Figure 21) advertising money transfers to Ghana and the Dominican Republic and mobile services that can make international calls. The businesses marked as money or communications services all offer international money transfers as do some convenience stores, such as the Nepal Bazaar offering transfers to Nepal (see Figure 25).
Figure 22: Shop window on Lincoln St. advertising international calling and money transfers

Figure 23: Lincoln St: local grocery store advertising “tropical” foods. Also a mixed-use property
Figure 24: Small ethnic businesses offering Caribbean and South American food & groceries

Figure 25: Store catering specifically to Nepalese population on Belmont St.
Figure 26 focuses only on religious organizations and places of worship, as it is necessary to zoom out and look a larger portion of Worcester to understand Bell Hill residents’ options for faith-based community building. It is notable in and of itself that so many of these locations are outside of the neighborhood boundaries, making them less convenient to reach (Figure 27 shows one church within neighborhood boundaries, St.
Bernard’s Church). Still, a large variety of churches of various denominations: Catholic, Methodist, and Baptist options are located within walking distance of the residential portion of Bell Hill. Most of the area’s religious organizations offer community outreach and education programs, and some, such as The Journey Community Church, offer programs specifically aimed at refugees through a partnership with the Worcester Alliance for Refugee Ministry (WARM). WARM offers churches in Worcester training and education related to refugee issues to help them offer outreach and services (WARM 2020). For non-Christians, options are more limited. There is a mosque and Islamic center only a few blocks south of Belmont Street, but those seeking Buddhist temples would have to travel much farther (see Figure 26).

Figure 27: St. Bernard’s Church (Catholic), one of the few major religious institutions located within neighborhood boundaries (Source: Google Maps)
**Services**

Newly settled refugees have access to numerous services through their resettlement agency, and may choose to continue to engage with social, health, and educational providers long after the initial 90-day settlement period. Refugees have a unique relationship to services oriented towards immigrants to the United States; because refugees are required to undergo cultural orientation programs while they wait for resettlement, they have at least a very basic background in English language and American cultural skills to build on, but because they have usually escaped some kind of dangerous situation they may suffer significant physical and mental health issues. Ascentria offers many of these services themselves (Table 8), and through partnerships with entities like the Massachusetts ORI, out of a Client Center just north of the Bell Hill neighborhood.

Language is a frequently cited barrier to achieving housing stability (Sherrell et al 2007; Olson 2006), as those who cannot speak English may face difficulty dealing with landlords or finding employment. As discussed in the demographic analysis, English-language skills are significantly lower than the city average in Bell Hill. While it can be an advantage to live in an environment where proficiency is English is not assumed, it is also true that many new Americans will want to improve their English to better integrate into the jobs market and avoid negative economic outcomes associated with limited English skills (Zhou et al 2008). The Worcester Welcoming Network, a program of Worcester Public Library, maintains a current list of English classes in the city, mapped out in Figure 28.
<table>
<thead>
<tr>
<th>Category</th>
<th>Specific Classes/Services/Programs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Education</td>
<td>English language, literacy, math, SNAP education, cultural orientation, computer literacy, citizenship prep, driver’s ed., children’s education</td>
</tr>
<tr>
<td>Legal Assistance</td>
<td>Form assistance for Green Card, citizenship application, travels docs, etc., asylum applications, domestic violence, family unification, referrals to other legal services</td>
</tr>
<tr>
<td>Resettlement</td>
<td>Securing housing, community orientation, connecting to social services/healthcare, enrolling children in school, transportation assistance, access to all other Ascentria services</td>
</tr>
<tr>
<td>Workforce Development</td>
<td>Job readiness training, vocational training, college/career counseling, employment placement &amp; post placement services, liaisons with employers</td>
</tr>
<tr>
<td>Health</td>
<td>No medical/clinical services but refers clients to providers as needed</td>
</tr>
</tbody>
</table>

Source: ascentria.org

A notable feature of refugee service providers in Worcester is the Refugee Quarterly Meeting, a federally-mandated effort to get the entities in the city that work with refugees to share information and foster cooperation. The local resettlement agencies, representatives from state and federal refugee agencies, healthcare providers, city employees, university professors, and anyone else who works with refugees come to hear updates about each other’s activities and discuss ways to better integrate their services to more effectively help their clients.
Residents of Bell Hill can only take advantage of their neighborhood’s social infrastructure if they are able to physically travel throughout the area in an appropriately convenient manner. This section of the analysis consists of an examination of the transportation options for the neighborhood, including public transit, walkability, and
road/sidewalk conditions. Both proximity and ease of access for more remote locations are considered.

Transportation

The only form of public transportation in Worcester is its bus system. An MBTA commuter rail line terminates in the city but it is not suitable for intracity travel as it stops only once in Worcester (mbta.com). Four different Worcester Regional Transit Authority (WRTA) bus routes go through Bell Hill, following both inbound and outbound routes to and from the central bus hub at downtown Union Station. Shown in Figure 29, Route 24 follows Belmont Street to the UMass Medical Center to the east, and Routes 14, 23, and 26 run along Lincoln Street and connect to points in northern Worcester (WRTA 2020). Between the three routes there are multiple buses running along Lincoln Street every hour during weekdays, although any individual bus will not arrive more frequently than every half-hour. Service is even more limited on weekends and ceases altogether by around 9:30pm on every day of the week (Table 9).
Figure 29: WRTA Bus Routes in Bell Hill (Source: theta.com)
Table 9: Approximate Schedules for WRTA Bus Routes in Bell Hill

<table>
<thead>
<tr>
<th></th>
<th>Route 14</th>
<th>Route 23</th>
<th>Route 24</th>
<th>Route 24A*</th>
<th>Route 26</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Weekdays</strong></td>
<td>Every ~30 min, or ~60 min outside of commuting hours</td>
<td>Every ~30 min</td>
<td>Every ~30 min</td>
<td>Every ~60 min</td>
<td>Every ~30 min</td>
</tr>
<tr>
<td><strong>Weekends</strong></td>
<td>No service</td>
<td>Every ~50-60 min</td>
<td>Every ~60 min (Sundays: 24A only)</td>
<td>Every ~60 min</td>
<td>Every ~30 min</td>
</tr>
<tr>
<td><strong>Service Hours</strong></td>
<td>6:30am-9:30pm</td>
<td>5:30am-9:35pm</td>
<td>5:45am-9:00pm</td>
<td>7:12am-4:12 pm (weekdays) 9:12am-6:47pm (weekends)</td>
<td>5:20am-9:10pm</td>
</tr>
</tbody>
</table>

*Inbound-only special branch of Route 24 stopping at Green Hill Apartments*

*Source: therta.com*

None of the regular buses deviate from the major commercial corridors except for a special branch of Route 24 sometimes called Route 24A which travels up Hooper Street to reach the Green Hill Apartments (shown as dashed line in Figure 29). This route only occurs once every hour for a limited portion of the day and only for inbound buses, making it significantly less dependable than the other routes. Unlike Route 14 and the main branch of Route 24, however, it does run all weekend. However, for many Bell Hill residents, this is by far the closest the bus will come to their homes. Bus stops are placed at regular intervals on either side of Belmont and Lincoln Streets, although more frequently on Belmont, as shown in Figure 29. Fares are a flat $1.75 at the time of writing.
*Walkability*

For new arrivals who are establishing themselves economically and may not own a vehicle, walking is another vital form of transit. The services and amenities discussed in the previous sections are limited in their impact on the neighborhood if they cannot be easily reached by residents. Even with the use of WRTA buses some walking will be required to reach a commercial corridor from the core residential area of Bell Hill. Figure 30 shows the results for Bell Hill from the Walk Score website. At a score of 58, Bell Hill is described as “somewhat walkable” and a place where “some errands can be accomplished on foot” (walkscore.com 2020). The neighborhood ranks as only the 14th most walkable neighborhood in Worcester. The walkability heatmap included with the score (also shown in Figure 30) reveals that Walk Score’s definition of the Bell Hill neighborhood differs from the one used in this paper and the area of Census Tract 7319 may be less walkable than Walk Score’s Bell Hill Neighborhood.
Criticism of the Walk Score points out that it says nothing about factors that might make a particular stretch of road walkable, such as sidewalk quality, street lighting, or perceived public safety; it only takes into account distance from amenities (Vanderbilt 2012). Notably, it also does not take topography into account, and true to its name Bell Hill contains many steep slopes. A topographic map (Figure 31) shows the rapid localized changes in elevation that characterize the hilly area, but on-the-ground photographic evidence may be easier to understand in terms of what the topography might mean for a resident. Figures 32-34 (presented in chronological order) were taken on a walk from an
arbitrarily selected point on Eastern Avenue meant to represent an average starting point for a resident of Bell Hill’s core residential area to Lincoln Street, and then up that street towards the Ascentria Client Center. The Client Center represented a place where refugees in the neighborhood would need to visit often to receive essential services, and this route would also be a way to reach many of Bell Hill’s local businesses. Once Lincoln Street is reached one could catch a bus if the timing is just right, but this would likely involve some waiting unless errands were timed perfectly and would only cover a portion of the journey. The walk took 25 minutes and was not particularly difficult with sidewalks available almost the entire way. However, the steep slopes and icy conditions shown in Figures 33 and 34 could easily pose serious obstacles for those with limited mobility.

Figure 31: USGS Topographic Map of Bell Hill
Figure 32: Walk to Ascentria: steep slopes and icy sidewalks on Catharine St.

Figure 33: Walk to Ascentria: downhill towards Lincoln St; uneven pavement

Figure 34: Walk to Ascentria: along Lincoln St, crosswalks and well maintained sidewalks
The Walk Score can provide insight into two final areas: the Transit and Bike Scores. Scored out of 100, Figure X shows that both are low, and 40 and 30 points respectively, with the site noting that “Bell Hill has some public transportation and does not have many bike lanes” (walkscore.com 2020). There are few if any designated safe bike lanes in the area and given the poor condition of some less trafficked roads (see Figure 35), it would not be advisable to rely on bicycle transit in the area.

Figure 35: Ivah St., a poorly-maintained and treacherous road (Source: Google Maps)

6. Discussion

This paper’s findings are separated into four major areas: integration, housing, social infrastructure, and physical infrastructure. These areas serve as benchmarks for successful
refugee resettlement; the more positive indicators observed along the four dimensions, the more conducive to successful refugee settlement a neighborhood is likely to be.

Integration Findings: The Advantages of a Diverse Neighborhood

Bell Hill is a neighborhood of immigrants, and my analysis has found that a diverse neighborhood provides many advantages in the realm of integration. To demonstrate this, Table 10 shows Ager & Strang’s (2008) dimensions of successful integration alongside corresponding factors demonstrated in the Bell Hill neighborhood analysis. I focus on the “Markers and Means,” the main dimensions by which successful integration can be assessed and measured, and the “Facilitators,” the two key components that the authors see as facilitating successful integration outcomes.

The presence of nearby English classes, ethnic food markets, businesses specializing in overseas cell phone plans and money transfers, are some of the characteristics particular to a diverse neighborhood, as defined in this paper, that are present in Table 10. Ager & Strang (2008) also note that feelings of isolation or lack of community can impede integration. The fact that refugee settlement is clustered in Bell Hill means that families and individuals are more likely to have someone with a similar experience nearby, even if they do not share a cultural background. Refugees in the neighborhood are also likely to have immigrants as neighbors, who may also share struggles with language and cultural adaptation and serve as resources or support structures. Overall, the indicators show that Bell Hill has many potential elements for facilitating successful integration for refugees.
settling there. Positive findings in the subsequent discussion sections on housing and social/physical infrastructure are also strong indicators for successful integration under Ager and Strang’s framework.

Table 10: Ager & Strang (2008)’s Integration Framework in Bell Hill

<table>
<thead>
<tr>
<th>Integration Domain</th>
<th>Corresponding Bell Hill Attributes</th>
</tr>
</thead>
<tbody>
<tr>
<td>“Markers &amp; Means”</td>
<td></td>
</tr>
<tr>
<td>Employment</td>
<td>Potential employers nearby (hospitals, retail stores, downtown), job training programs available through Ascentria</td>
</tr>
<tr>
<td>Housing</td>
<td>Overall positive housing situation</td>
</tr>
<tr>
<td>Education</td>
<td>Elementary-level education located close by, multiple ESL programs nearby or accessed by public transit</td>
</tr>
<tr>
<td>Health</td>
<td>Numerous healthcare facilities within neighborhood, access to plentiful outdoor recreation space</td>
</tr>
<tr>
<td>“Facilitators”</td>
<td></td>
</tr>
<tr>
<td>Language &amp; cultural knowledge</td>
<td>Multiple ESL programs nearby or accessed by public transit; neighborhood where knowledge of English/American culture is not necessarily presumed</td>
</tr>
<tr>
<td>Safety &amp; Stability</td>
<td>Crime is present but not particularly high; opportunities to stay connected to home culture through international communications and familiar foods</td>
</tr>
</tbody>
</table>

Housing Findings

Bell Hill’s housing stock, especially the locations where refugees have been placed, is dominated by Worcester’s signature triple-deckers and is therefore mostly multifamily and aging. Despite the average age of the neighborhood’s homes, they are generally well maintained and the typical Bell Hill street does not give the impression of blight. As a
majority-rental area, landlord behavior is important to understanding the housing experience, and in Bell Hill the majority of properties are owned by individuals or entities local to Worcester, and a significant portion of those owners live in Bell Hill themselves. The generally high level of landlord connection to the community could be one reason why many of the properties analyzed in this paper were kept in good shape. The relatively low rents paid by refugees in the neighborhood are another advantage for individuals still trying to establish themselves in the labor market. Housing tenure, the length of time people are able to stay in one place, is affected by rent, landlord relationships, and many other potential factors, but is also driven by the economy. There are indications that tenure in Bell Hill may be more short-term than elsewhere in Worcester, and several properties where Ascentria had developed relationships with landlords are now under new ownership.

To measure housing stability in Bell Hill, I return to Frederick et al’s eight dimensions of housing stability. Using the stated rationale of what each dimension of stability is meant to measure, I have formulated a set of corresponding indicators for Bell Hill to assess the level of housing stability to be expected for refugees settling in the neighborhood (Table 11). There are several advantages that refugees can claim in this area, largely due to support programs designed to assist them with their initial financial burdens and foster financial stability through job training. The largest missing piece from this framework is the subjective assessment; a follow-up study that interviews refugees directly about their housing experiences would go a long towards confirming my initial findings.
Table 11: Neighborhood Analysis Findings Within a Housing Stability Framework

<table>
<thead>
<tr>
<th>Housing Stability Dimension</th>
<th>Elements of Bell Hill Analysis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type of housing (temporariness, roommate situation, availability of supports/subsidies)</td>
<td>Most residents of Bell Hill are renters, and single refugees may be placed in roommate/housemate situations per Ascentria policy; refugees are eligible for federal subsidized housing</td>
</tr>
<tr>
<td>Recent history of maintaining housing &amp; tenure of current living situation</td>
<td>Housing trajectory beyond initial placement is difficult to track; must infer based on information in above and below categories</td>
</tr>
<tr>
<td>Time they have spent in their current accommodation</td>
<td>Average tenure in Bell Hill is lower than city average; several past refugee-settling landlords have recently sold properties</td>
</tr>
<tr>
<td>Finances</td>
<td>Initial cash assistance for 90-day period; continued access to job training programs afterward</td>
</tr>
<tr>
<td>Employment/education status</td>
<td>Availability of adult education programs such as ESL classes; access to Worcester Public Schools of variable quality; presence of large employers in the immediate area and some public transportation options for commuting; availability of job training programs</td>
</tr>
<tr>
<td>Harmful use of drugs and alcohol</td>
<td>(Falls outside the scope of this study)</td>
</tr>
<tr>
<td>Standing within the justice system</td>
<td>Refugees have solid legal standing to reside in the US and utilize various federal and state services</td>
</tr>
<tr>
<td>Subjective assessments</td>
<td>(Falls outside the scope of this study)</td>
</tr>
</tbody>
</table>


The housing stability indicators as described above are more mixed and less complete than the integration indicators.

Social & Physical Infrastructure Findings

This paper’s analysis revealed that the infrastructure of Bell Hill is conducive to creating the social and community bonds that Klinenberg (2018) and Latham & Layton...
say good infrastructure leads to. The neighborhood’s social and physical infrastructure forms the spaces in which refugees create new lives and put down roots. Bell Hill can feel like an isolated enclave or connected to the heart of the city depending on how we choose to measure connectivity: hemmed in by major roads or parks on almost every side, the neighborhood is nonetheless physically close to downtown Worcester, roughly a 25 to 30-minute walk away. Multiple food markets and convenience stores along Belmont and Lincoln Streets allow shopping to be done within the community, often at locally owned establishments. National retail chains are also helpful in providing access to staple goods and products, but local businesses may create a stronger local community that can cater to residents’ specific needs (Zhou et al 2008). There are multiple churches of multiple denominations and cultural affiliations in and around Bell Hill, with options for Muslims and Buddhists. The local institutions tend to match the incoming refugee populations in terms of specific cultural needs: stores offer Nepalese and African food, and multiple churches on Map X orient themselves toward serving African populations. The public open spaces such as fields or paths in Green Hill Park or the basketball court in Belmont Park are also vital spaces for community building.

Sidewalks and crosswalks are found throughout the area and many amenities and points of interest are walkable though not always convenient; for example, it could easily take a slower walker over an hour of total walking to get to the Ascentria Client Center and back. The hilly terrain and some poorly maintained roads are also concerns, as is lack of opportunities for biking. Public transit is limited to buses, but there are enough bus lines
and stops in the area that for residents who live closer to a stop, the bus could be a viable option for commuting and errands if timed correctly. Ultimately, despite these limitations, Bell Hill contains many vital amenities within its borders and is in close proximity to service providers, shops, and outdoor spaces, as well potential employers like hospitals, schools, and downtown businesses. The self-contained nature of the neighborhood also limits the extent to which residents may need to depend on the city’s limited public transit system. Therefore, Bell Hill’s physical infrastructure compliments its social infrastructure and connects residents to amenities within the neighborhood and to other parts of the city. Furthermore, its rich social infrastructure makes places like Bell Hill useful locations to examine new models of integration; rather than assimilating into a homogenous American culture, refugees in Bell Hill find themselves in a diverse community where different cultures from around the world are actively expressed. The challenge before them is to fit themselves into a complex puzzle of languages, cuisines, religions, and other cultural practices while contributing their own.

7. Conclusion

The main takeaway from this paper’s findings is that despite some challenges, neighborhoods such as Bell Hill have many strong advantages for refugee resettlement, including a diverse population, generally well-maintained and diverse housing stock, and proximity to vital service providers and local institutions make it a good place for refugees
to settle. It follows that my recommendation is for refugee resettlement agencies to pay attention to the neighborhood characteristics of the homes they places their clients into, and as Ascentria Care Alliance has done in the case of Bell Hill, choose locations that provide opportunities to build housing stability and the capacity for successful integration. It is my hope that when the influx of refugees to Worcester and other cities increases once again, this paper can serve as an example and a tool to assess the qualities of potential settlement sites to thoughtfully decide where in a city will maximize refugee wellbeing.

There is a huge amount of further research that should be done related to refugees in the City of Worcester alone. This paper’s analysis focused on a single neighborhood, but there are several others that served as major refugee resettlement points during the 2014-2017 study period. Replicating this research in these other neighborhoods and comparing the results would provide a much more comprehensive picture of life for newly arrived refugees in the city. Exploring the same topic through a different methodology, mainly interviews, would be the other major avenue of inquiry I would recommend. Interviewing service providers or even landlords who work with refugees would reveal practical knowledge about refugee experiences in Worcester that this paper could never hope to uncover. Finally, working with refugees themselves would also be an extremely valuable addition to this body of knowledge that has been missing in the Worcester context.
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