

ESTIMATING THE SIZE OF THE MAYA POPULATION IN NEW BEDFORD, MASSACHUSETTS

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Introduction

The Maya community in New Bedford, Massachusetts has grown substantially since the late 1980s, following a period of instability in Central America. A decades long civil war and a state-sanctioned genocide of the Maya in Guatemala drove many with indigenous roots to flee to the United States, with the New Bedford area becoming a destination for the subgroup of K'iche Maya (Kauner 2011, 2012). Since 1996, the Organizacion Maya K'iche (OMK) has assisted Maya immigrants settling in the city. The establishment of the OMK was part of a national trend of Maya immigrants founding organizations based around their language subgroup or hometown. These immigrant associations act as cultural touchstones for the community, and can help facilitate the process of chain migration, leading to a sustained flow of immigration to a particular city that has developed an established community (Davis, 2007).

The relative prevalence of undocumented Maya and their presence in low-paying, high-risk industries like seafood processing, garment factories, and material recycling has been an important issue for local advocacy organizations, human services agencies, and city leaders. Advocates in the Maya K'iche community express concern over unsafe working conditions and social and political marginalization. Low engagement with formal institutions and government agencies consequently make the Maya more vulnerable to crime and present public health challenges and other forms of economic or social insecurity. Regardless of the exact size of the Maya community in the city, they represent an increasingly important minority group, which presents unique challenges and opportunities for the city. To best understand the distinctive attributes of the Maya, and how best to address attendant public challenges, it is important to quantify the size of the group with as much precision as current data permit.

Estimating the Potential Maya

The best data available to estimate current demographic trends in New Bedford come from the American Community Survey (ACS) 2010-2014 five-year estimates (see Table 1), which pools survey estimates over the five year period in order to increase the accuracy of statistics at the municipal level. The data indicate that there are an estimated 94,873 people living in New Bedford.¹ Of those residents, a total of 16,642 identify as Hispanic or Latino of any race, or 18 percent of the city. It is important to note that an estimated 10,564 of these 16,642 Hispanic or Latino residents identify as Puerto Rican, which is 63 percent of New Bedford's Hispanic or Latino population, and 11 percent of the city's total population. Most relevant to this analysis is that Puerto Rico's indigenous heritage is distinctly non-Maya, and so this group is excluded from our calculations.

The remainder of the Hispanic or Latino residents in New Bedford includes those with national origins in Latin American countries where the Maya reside, such as Mexico, Guatemala, Honduras, and El Salvador (ACS, 2010-2014). Combining those who indicate national origins that could conceivably be Maya suggests an estimate of 4,048 Maya in New Bedford.² To be clear, the ACS does not record Maya ancestry. This is noteworthy because sizeable portions of these Latin American populations are not indigenous Maya groups, and thus it is likely that the

¹ The most recent 1-year estimate from the Census reports that the total population in New Bedford is 94,958 people <http://www.massbenchmarks.org/statedata/data/mdc2015/Appendix%20A%202015%20MCD%20Pop%20and%20Pop%20Change.xls>

² +/- 785; this represents the cumulative margin of error calculated using the ACS Handbook.

4,048 estimate includes both Maya and non-Maya Latino groups. Additionally, these figures are based on the entire population of New Bedford, and not limited to the foreign born, which allows us to capture any second or third generation Maya.

Table 1

Hispanic and Latino Origin in New Bedford ³		
Population	Estimate	Margin of Error
Total	94,873	+/- 69
Not Hispanic or Latino	78,231	+/- 1,111
Hispanic or Latino	16,642	+/- 1,113
Mexican	663	+/- 273
Puerto Rican	10,564	+/- 1,066
Guatemalan	1,881	+/- 562
Honduran	448	+/- 294
Salvadoran	695	+/- 321
All other Hispanic or Latino	361	+/- 191

Source: U.S. Census Bureau, 2010-2014 American Community Survey 5-Year Estimates

Estimating the size of the Undocumented Population in New Bedford

In 2007, Immigration and Customs Enforcement raided New Bedford textile manufacturer Michael Bianco Inc. following an investigation into worker abuse, and eventually arrested 361 employees (Juravich & Williams, 2011). The arrestees were undocumented immigrants from Guatemala, Honduras, and El Salvador, “over 200 of them Maya K’iche” (Knauer 2012, pg. 28). Central American immigrants represent a considerable share of all new arrivals to New Bedford, and the 2007 raid highlights the significant presence among these migrants of not only undocumented immigrants, but also the Maya (Chaudry et al., 2010).

Therefore, in order to better understand the size of the Maya population, it is necessary to estimate the number of undocumented immigrants in New Bedford by approximating the share of undocumented residents in this group. The ACS population estimates include undocumented, resident, legal noncitizen, and naturalized foreign-born individuals. However, it is likely that undocumented individuals are underestimated to a certain degree, due to sampling error. In other words, the undocumented, by nature of their status, are a difficult population to survey through Census questionnaires, because of issues related to concealment, cultural differences, and mobility (Rodriguez & Hagan, 1991).

At the national level, the Pew Research Center estimates the undocumented population using both ACS and Current Population Survey data (Passel & Cohn, 2014). In doing so, Pew’s researchers adjust the original data in order to account for the undercounting of both the foreign born in general, and undocumented immigrants in particular. These coverage adjustments are made several times throughout Pew’s estimation process, and done separately to accurately weight “groups based on age, sex, country of birth, and year of arrival” (Passel & Cohn, pg. 51). The number of known legal immigrants, which is obtained from the Department of Homeland Security, is subtracted from the adjusted estimate of the total foreign born (i.e. including undocumented residents). The

³ Please note that this is not a comprehensive breakdown of all Hispanic or Latino residents in New Bedford. The most prominent omission is that of an estimated 1,109 Dominican residents. The data presented call attention to the fact that most Latino residents are Puerto Rican, and those with Latin American roots consistent with indigenous Maya heritage sum to 4,048.

remainder (or residual number) is the estimated size of the undocumented population. This is called the “residual method.”

Unfortunately, Pew’s methodology does not make the reweighting formula available. However, a 2015 Census Bureau working paper details similar methods for addressing undercounts that align with those developed by Pew’s research team. In the paper, Jensen et al. (2015) developed coverage factors to estimate the degree to which the undocumented population is undercounted at the national level. The authors provide coverage adjustments that we apply to create a new estimate of the foreign-born population in New Bedford in order to generate an approximation of the undocumented population. This involves adopting the upper bound of the 90 percent confidence interval to arrive at an estimate of the foreign-born population (see Table 2).

Table 2

The Foreign Born Population of New Bedford		
Population	Estimate	Margin of Error
Total	94,873	+/- 69
Foreign born	18,723	+/- 960
Naturalized citizen	10,862	+/- 730
Noncitizen	7,861	+/- 801

Source: U.S. Census Bureau, 2010-2014 American Community Survey 5-Year Estimates

The Public Policy Center has made use of “the residual method” to estimate the size of the undocumented population in Worcester, MA. This technique is used also by the Pew Research Center and the Department of Homeland Security, and “variants of the residual method have been widely used and are generally accepted as the best current estimates” (Passel & Cohn, pg. 44). Most recently, Pew Research Center’s Hispanic Trends estimated undocumented populations at the state level. Estimates for Massachusetts indicated that 15 percent of the foreign-born population may be undocumented (Passel & Cohn, 2014).

In order to estimate for the number of undocumented immigrants in New Bedford, we use a combination of the methods outlined above. First, we inflate the total number of foreign-born residents to the upper bound of the ACS estimate in order to correct for under-sampling of the foreign born (Jensen et al., 2015). This yields a result of 19,683 people. Next, we apply the 15 percent state rate to the new figure, resulting in an estimate of 2,952 undocumented residents in New Bedford of any origin.

Population Estimation Scenarios

As evident in current national immigration trends, Latino groups with Maya heritage and the undocumented community overlap to a certain degree (Passel & Cohn, 2014). Thus, for the purposes of this analysis, we assume that some portion of the New Bedford Maya community is included in the undocumented population. However, since our estimate of the undocumented is based on the total foreign-born population in New Bedford, it does not allow us to differentiate by country of origin.

Given this difficulty, it may be helpful to present some hypothetical scenarios to offer a range for our estimates (see Figure 1). First, as noted above, the total number of potential Maya includes residents of Hispanic or Latino descent, and is not limited to immigrants. If we restrict our analysis to include only foreign-bon New Bedford

residents from the countries with indigenous Maya populations (see Table 3), the total potential Maya is 2,413.⁴ This would be lowest estimate, given the available data, if we assume that all the immigrants from these countries are potentially Maya and that all Maya in New Bedford were born outside of the United States.

Table 3

Foreign Born in New Bedford by Country of Birth (Central America)		
Population	Estimate	Margin of Error
Foreign Born	18,723	+/- 960
Central America	2,439	+/- 485
Guatemala	1,338	+/- 393
El Salvador	500	+/- 226
Honduras	337	+/- 220
Mexico	238	+/-125
Other ⁵	26	+/-56

Source: U.S. Census Bureau, 2010-2014 American Community Survey 5-Year Estimates and authors' calculations

Second, we cannot exactly allocate the estimated 2,952 undocumented foreign born, but we could conservatively assume that the shares of undocumented by country of origin are consistent with the distribution of the foreign-born population as whole. For the Maya countries, this is 13 percent of all foreign born, which translates to an estimated 383 undocumented.⁶ If we combine this number with our estimate of all potential Maya regardless of citizenship (4,048 New Bedford residents), we arrive at an estimated 4,431 people as a middle ground estimate.

Finally, we do know that the Central American and Maya immigrants in particular are both recent arrivals to New Bedford, and have higher likelihoods of being undocumented than other immigrants who have been in the country for a greater period of time. Therefore, as a maximum population estimate, we assume that all of the undocumented foreign born are Maya, and combine this with our potential Maya estimated based on Hispanic or Latino origin. This may help to account for any lingering uncertainty around the size of the undocumented population. By assigning all the undocumented to potential Maya estimate, we arrive at a sum of 7,000 people.

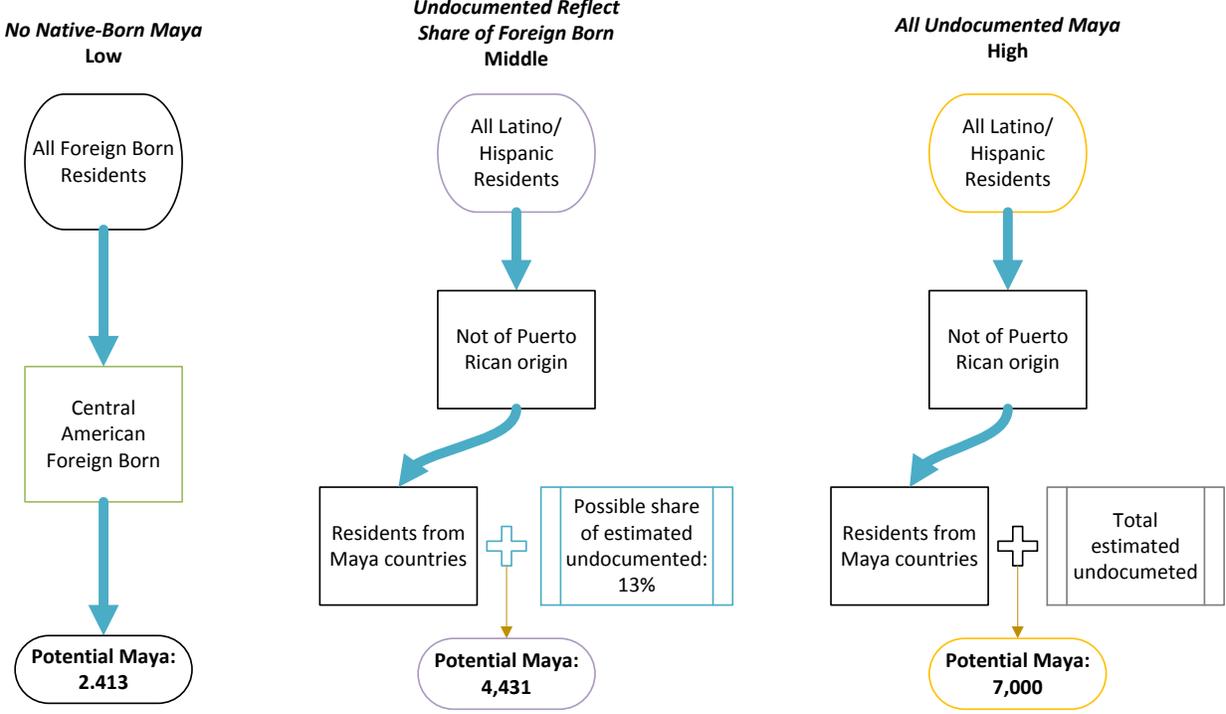
These estimates are consistent with the 2008 approximation of 5,000 provided by the OMK, referenced by Knauer (2011), and a separate study by Capetillo-Ponce and Abreu-Rodriguez (2010) that refers to an OMK estimate of between 3,000 and 6,000 Maya in the city. Currently, the OMK estimates 6,000 Maya in New Bedford. However, these estimations are based on advocate and community service provider interactions, so there is no empirical or institutional data to support these approximations.

⁴ +/- 519; the cumulative margin of error calculated using the ACS Handbook.

⁵ Sum of Belize (0), Costa Rica (0), "Other Central American" (0), and Panama (26)

⁶ The Portuguese make up the majority of the foreign-born in New Bedford (54%), followed by our contingent of indigenous Maya countries, and Cape Verdean (12%).

Figure 1
Estimation Scenarios for New Bedford’s Maya Population



Conclusion

It is increasingly important that local policy makers, civic leaders, and advocates know the relative size of the growing Maya community in New Bedford. Unfortunately, one of the challenges of estimating the size of any undocumented population is that, as implied by the term, they are difficult to document. Capetillo-Ponce and Abreu-Rodriguez (2010) note that particularly for the Maya K’iche “invisibility and socioeconomic marginality are two key components of...everyday life,” which creates difficulties for researchers, government agencies, and local service provider hoping to reach the Maya (pg. 64). This population has a significant prevalence of undocumented immigrants, who are limited to occupations in the “shadow economy” where wages are low, conditions are harsh, and the threat of deportation looms to prevent collective bargaining or organization.

Improving the safety, well-being, and economic opportunities for this population can be better accomplished with a more accurate sense of its size, and we are hopeful that methods used here provide the most reliable estimation of the Maya in New Bedford to date. To estimate the Maya population more accurately would require direct survey of documented and undocumented Mexican and Central American immigrants, which is beyond the scope of this brief. This process would involve outreach to community leaders in order to build relationships with the Maya, and survey that would focus on assessing the needs of the Maya and disaggregate them from other Mexican and Central American groups in the city, such as the Ladinos, who are of mixed European and indigenous descent.

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