How the **Census** and Other **Data** Can Be Used to **Inform** Local **Initiatives**

By Alvaro Lima and Mark Melnik

Cities and towns are privileged sites for human interactions. Here people settle and form families, become educated, work and play. These many collective and individual acts shape and reshape communities generation after generation. In order to meet evolving needs for services, it is important for local officials and policy makers to understand how their areas are shifting and recreating themselves. One of the best ways to do this is by using secondary data sources.

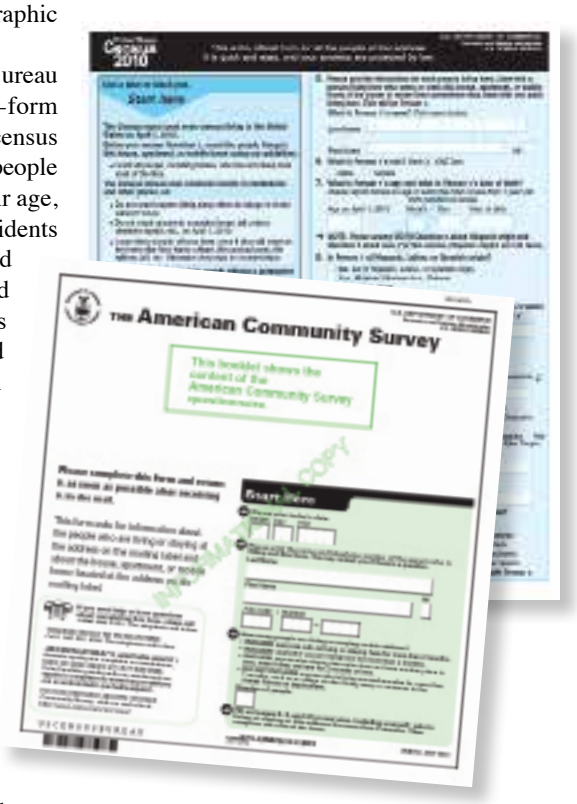
In the state's largest city, the Boston Redevelopment Authority's Research Division uses population, housing, and economic data to help inform planning projects as well as economic development and programmatic initiatives both at the BRA and at other agencies of city government. The BRA uses Bureau of Labor Statistics and Bureau of Economic Analysis data on jobs and unemployment, state data on industrial and occupational growth projections, and city data on housing and building permits. All of these data sources help us to understand better how Boston is changing and what types of policy initiatives would make sense for our ever-changing city.

This is an exciting time for researchers interested in demographic change. U.S. Census data for 2010 are available for many areas, with more data releases planned for the summer. And the American Community Survey, conducted annually by the U.S. Census Bureau, has released five-year estimates (for 2005-2009); for the first time, users can analyze ACS data at the "small geography" level. These two data sources can be extremely informative for municipal leaders and policy makers. There are, however, limitations to both data sets that users should be aware of before doing analyses and drawing conclusions.

Census vs. ACS

Traditionally, the decennial U.S. Census has had two objectives: to count the population for apportioning seats in the U.S. House of Representatives, and to obtain demographic, housing, and economic information for administrating federal programs. For decades, this information was collected through a census long-form and short-form. The short-form would ask basic questions such as the number of people living in a home, as well as the age, sex and race of residents. The long form would cover more detailed questions regarding economic and demographic characteristics.

In 2010, the Census Bureau did away with the long-form questionnaire. Instead, the census asked only the number of people in a household as well as their age, gender, race, whether the residents are of Hispanic origin, and whether the home is owned or rented. Several questions that were typically asked during the U.S. Census, such as income, education or nativity status, are now only asked in the annual American Community Survey.



As data sources, the 2010 Census and the ACS have different strengths and weaknesses. The census provides a complete official count of the population, but only limited additional information. Census data also age somewhat quickly, since the census captures "a point in time." The 2000 Census was a snapshot of the nation's population on April 1, 2000, and the Census Bureau estimated that the country's population increased by about 20.2 million between that date and July 1, 2007. It is projected that the U.S. population will increase by 35 million in just three years following the 2010 Census.

American Community Survey data are constantly updated because they are gathered in rolling surveys. The main weakness of the ACS is its error rate due to the relatively small sample size. (When fully implemented, the ACS covers about 3 million addresses.) Sample size makes it difficult to look at specific variables for small geographies, such as neighborhoods or sub-neighborhood areas, or small segments of the population. For the ACS to release data for small geographies such as the Census Block Group or Tract, results from five years of sampling are averaged in order to reduce sampling error. The first five-year estimates for the ACS are now available, including the 2005-2009 data collections.

In short, it is best to use U.S. Census and ACS data separately. The former provides a count of the total population and its racial, age and sex distribution. The latter provides information about demographic characteristics such as income, educational attainment, ancestry, occupation, poverty rates, nativity, and language.

Understanding Diversity

The BRA uses both census and ACS data to provide basic information to city agencies, neighborhood organizations, and media outlets with citywide profiles of Boston's population, specific

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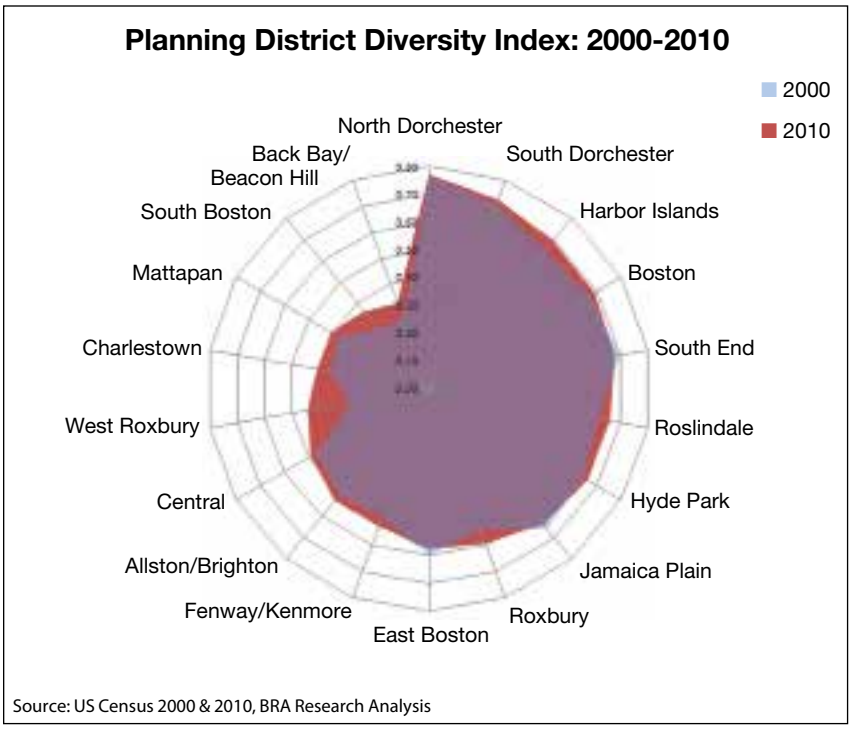


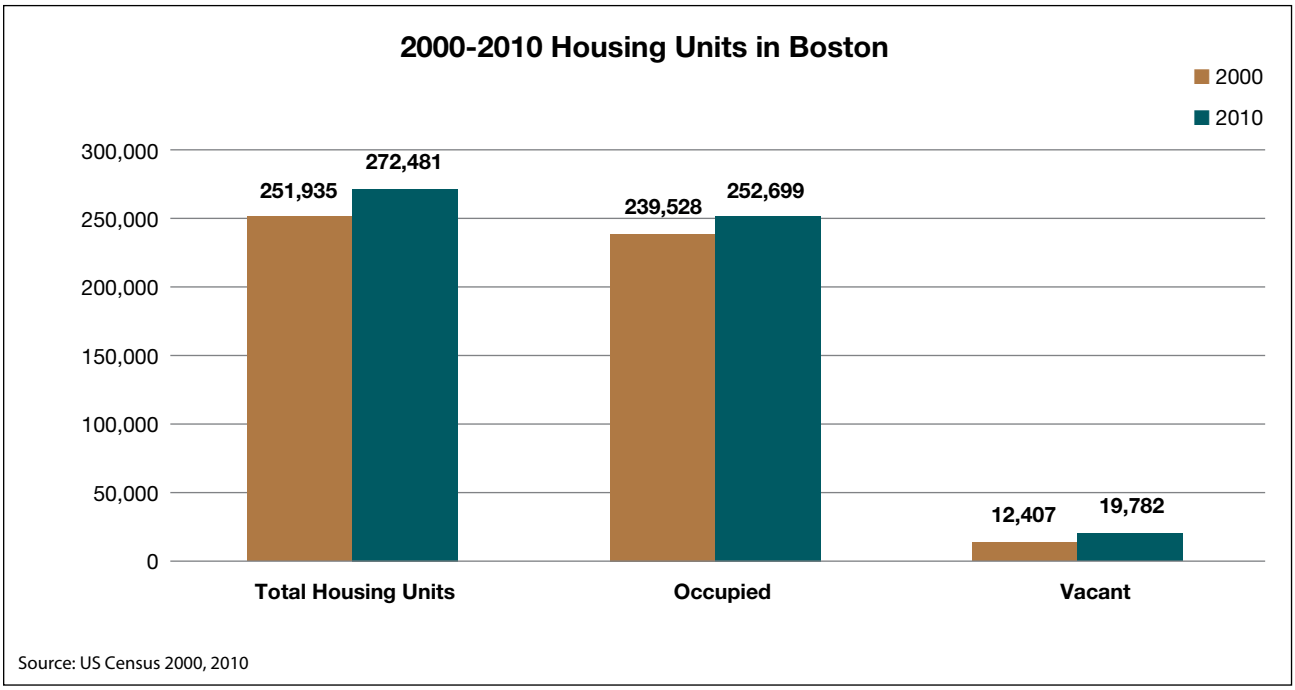
Source: US Census 2000 & 2010, BRA Research Analysis

segments of the population (e.g., women or low-income households), or specific geographic areas of a city. For example, the 2010 Census shows strong population growth for Boston—an increase of 28,453 people (4.8 percent)—since 2000. It also shows that Boston strengthened its status as a "majority-minority" city, increasing from just over 50 percent minority population to 53 percent today. Not only is Boston a more diverse city than it was in 2000, but almost all of its neighborhoods are more diverse than they were in 2000.

The 2010 Census also shows that the city's housing stock grew significantly—its strongest growth in more than half a century. All neighborhoods of Boston, except the Harbor Islands, saw significant increases. This information is being used to evaluate the city's housing policies regarding production goals and spatial distribution.

Information from the ACS has been used in combination with other databases to help design public programs. The Research Division of the Boston Redevelopment Authority published a report, "Language Skills in Metro Boston's Labor Market," that looked at the language ability of Greater Boston's immigrant population and the job opportunities and wage differences in the region for each level of English proficiency. The report also projected industrial and occupational growth over a ten-year period. The report informed public policies developed by the Mayor's Office of New Bostonians and helped nonprofit organizations involved in English for Speakers of Other Languages (ESOL) courses and workforce training programs for immigrants.

In general, the BRA's research found that the majority of jobs in the region required at least a modest level of English language skills. On average, occupations requiring more language skills pay significantly more than occupations requiring less language skills. The projections show that the relationship between



Source: US Census 2000, 2010

language skills, job availability, and wages will likely become more pronounced in the coming years. These data further underscore the importance of ESOL training both for Greater Boston's immigrant communities, as well as the long-term economic health of the region.

It is commonly held that work today requires more education, technical, and social skills than in the past and that this trend is likely to continue. With the baby boomer generation approaching retirement age and foreign-born residents accounting for most, if not all, of the population growth in the region, immigrants are expected to play an important role in filling critical job vacancies. Educational attainment and English language proficiency of the foreign-born population, therefore, is an important economic development issue.

Putting Data to Work

Another BRA research report, "Boston Still a Magnet for 20- to 34-Year-Olds," coupled city data sources with census data. The report indicates that Boston attracts and retains a large number of young adults; in fact, it ranks first among the twenty-five largest cities in the country in terms of the proportion of adults between the ages of 20 and 34. Analyses such as these led to the creation of Boston's "One in 3" program, which connects young adults with resources related to home buying, business development, professional networking, and civic engagement.

BRA Research Division analysis of ACS data provided to the Boston Public School Department helped in the design of "Thrive in 5," a program that helps families to prepare toddlers and preschool children for entry into the public school system. Data such as the number of children in this age bracket, the age and educational attainment of their parents, economic status, and the racial distribution of the children and parents were combined to create a clear picture of the various demographic and economic segments to inform "wrap-around" services needed to accomplish the city's goal of universal school readiness.

The BRA itself uses various data sources to help project demographic characteristics and economic impact. These analyses help to inform public policy decisions as they relate to capital investments and potential neighborhood development. One example of this is the new initiative within the city to develop an Innovation District, which imagines a large scientific research and development area, including laboratory space, light manufacturing, and a cluster of life-sciences growth industries, as well as a large concentration of housing and retail space. The Innovation District would be a vibrant neighborhood where entrepreneurs and workers in innovative industries would live, work and play. Using census data in association with other secondary sources and modeling software, the BRA Research Division was able to assess the existing economic conditions of the area, project the potential residential and workforce size of the Innovation District, and estimate the economic impact of the proposed development plan.

These are just a few examples of how population, housing, demographic and economic data from the U.S. Census and the ACS, among other sources, can help local officials make well-informed decisions for their communities. Various federal, state and local data sources can be used to get a better understanding of what a community is like today, what it will be like in the future, and what programmatic decisions and policy initiatives would be most effective in helping it grow.

For more information about the Boston Redevelopment Authority's work with census and ACS data, visit www.bostonredevelopmentauthority.org.