Stepping Beyond Census Data for Community Impact Assessments

Transportation Research Board
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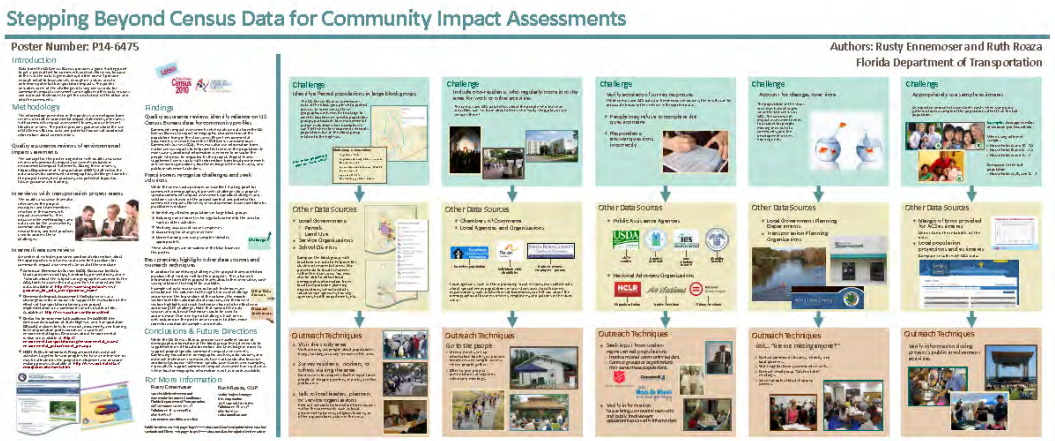


This presentation provides the text and graphics from the poster for on-line reading.

Introduction

Data from the US Census Bureau provides a good starting point to get a general feel for community context. However, because of the way the data is generalized, it often doesn't provide enough detail to focus closely enough on a study area to determine potential transportation impacts. This poster describes some of the challenges of using census data for community impact assessments and explores other data sources and outreach techniques to get the analyst out of the office and into the community.

Methodology

The information presented in this poster was developed from:

- Quality assurance reviews of environmental impact statements
- Interviews with transportation project teams
- Internet literature review

Quality assurance reviews

The concept for this poster originated with quality assurance reviews of community impact assessments included in environmental impact statements.

During these reviews, Florida Department of Transportation (FDOT) staff noted the data sources for community demographics, challenges faced by the project teams, best practices, and potential topics for future guidance and training.

Interviews

The team interviewed project managers and team members involved in the community impact assessments. They discussed:
methodology and data used for the assessments, common challenges encountered, and best practices used to address these challenges.

Internet literature review

A number of websites provided additional information about the appropriate use of census data and best practices for community impact assessments. Several of these include:

- **American Community Survey (ACS): Guidance for Data Users** provides quick tips, handbooks, presentations, and e-Tutorials about the subjects and geographies covered by the ACS, tools to access the data, and how to understand the data. Available at: http://www.census.gov/acs/www/guidance_for_data_users/guidance_main/

- **Community Impact Assessment Website** serves as a clearinghouse for resources to support the evaluation of the effects of transportation planning and project implementation on a community and its quality of life. Available at: http://www.ciatrans.net/index.shtml

Internet literature review (continued)

- **Center for Environmental Excellence by AASHTO (**the American Association of State Highway and Transportation Officials) includes links to research, documents, and training for transportation professionals on a variety of environmental topics. Resources about Environmental Justice are available at: **http://environment.transportation.org/environmental_issues/environmental_justice/recent_dev.aspx**

- **FDOT Public Involvement Program** identifies outreach activities targeted toward people who have an interest in or may be affected by the project development and decision-making process. Available at: **http://www.dot.state.fl.us/emo/pubinvolvement.shtm**

Findings

- Quality assurance reviews identify reliance on US Census Bureau data for community profiles
- Practitioners recognize challenges and seek solutions
- Best practices highlight other data sources and outreach techniques

Reliance on US Census Bureau data

Community impact assessments rely heavily on data from the US Census Bureau to report demographic characteristics of the population living in the study area. Recent environmental documents use results from the 2010 Census and American Community Survey (ACS). They may also use information from earlier census reports to help identify trends in the population.

In many cases, additional information is needed to describe the people who may be impacted by the project. Project teams supplement census data with information from local governments and service organizations, local knowledge of the study area, and public involvement activities.

Challenges

While the census data provides an excellent starting point for community demographics, it presents challenges for a project-specific community impact assessment. Specific challenges and solutions vary based on the project context and potential for community impacts. However, several common issues identified by practitioners include:

- Identifying affected populations in large block groups
- Including non-residents who regularly come into the area for work or other activities
- Verifying accuracy of survey responses
- Accounting for changes over time
- Understanding and using sample estimates appropriately

These challenges are described in the blue boxes [slides] on this poster.

Challenge

Best Practices

In addition to identifying challenges, the project teams identified practices that worked well for their projects. They also seek information from other project teams about other innovative, cost-saving solutions that might be available.

Examples of data sources and outreach techniques are described on the poster. Each challenge slide is followed by a tan slide identifying additional data sources, and then a peach slide highlighting outreach techniques found to be effective in addressing the challenge.

Other Data Sources

Outreach Techniques

Note that some of the data sources and outreach techniques could be used to address more than one type of challenge. Each one is only included on the poster once in order to allow more room for additional examples and details.

Conclusions & Future Directions

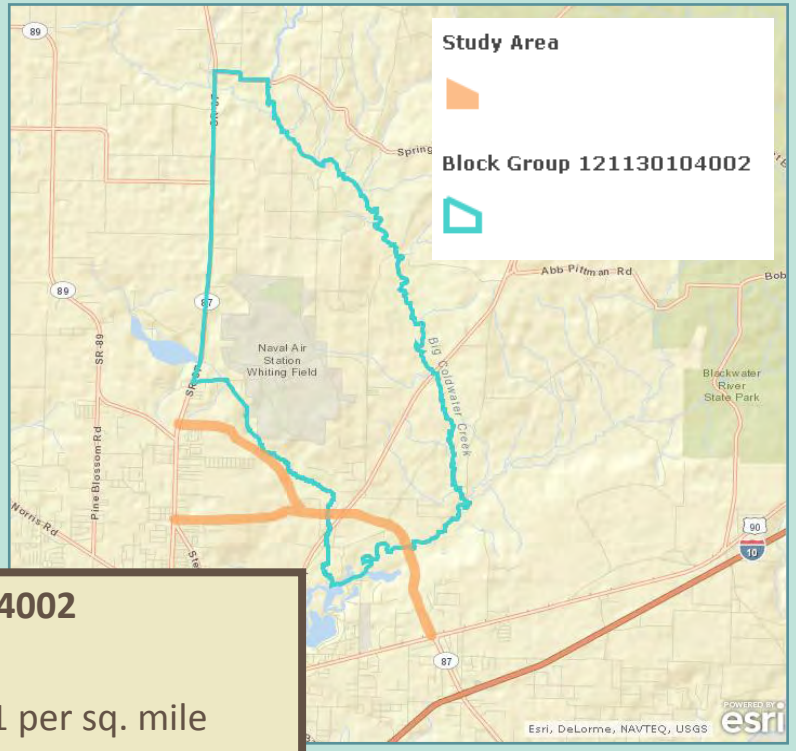
While the US Census Bureau provides an excellent source of demographic information at the block group level, it needs to be supplemented with local information and knowledge in order to support project-specific community impact assessments.

Continuing education in demographic analysis, data sources, and outreach techniques is desired. Future work could also focus on additional guidance with more specific case studies and examples, especially to support community impact assessments in rural areas where local demographic information is not as readily available.

Challenge

Identify affected populations in large block groups

The US Census Bureau summarizes data at the block group level to protect privacy. In some areas, these geographic units may be too large to identify locations of specific population groups, particularly for environmental justice evaluations. For example, we can't tell where low-income or minority populations live in this block group relative to the highway.



How many people live near my study area?

Block Group 1211303104002

Population: 1034

Population Density: 38.1 per sq. mile

Households: 401

Median Household Income: $32,157

Median Age: 41

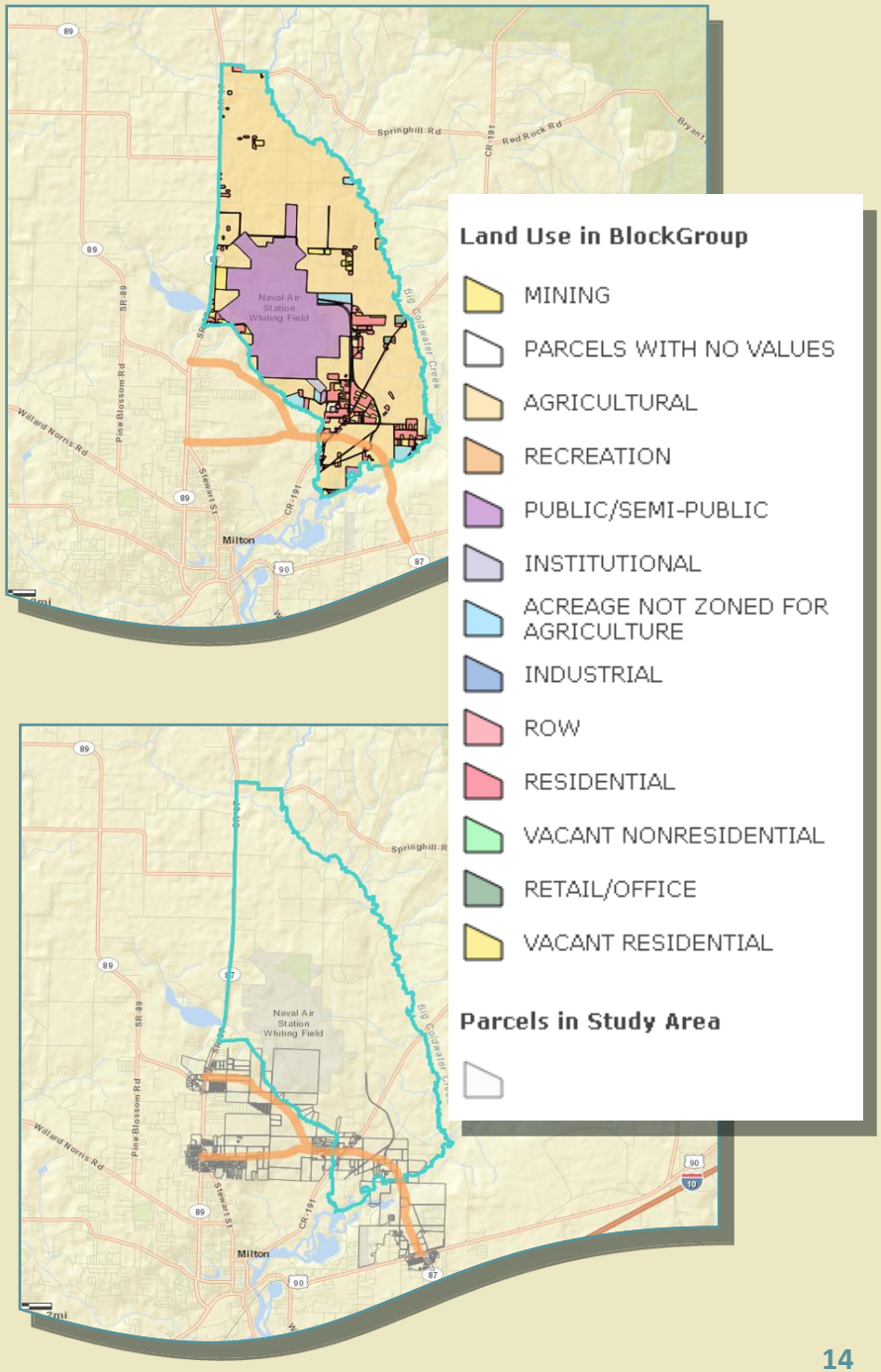
Age over 64: 15%

Non-white population: 10.8%

Other Data Sources

- Local Governments
  - Parcels
  - Land Use
- Service Organizations
- School Districts

Compare the block group with local land use data to help identify clusters of residential areas. Use parcel data to locate residents within the study area. You may also be able to obtain local demographic information from local transportation planning organizations, school districts, social service agencies, housing agencies, health departments, etc.



Outreach Techniques

♦Visit the study area

Walk around, ask people about populations living, working, or using services in the area.

♦Survey residents, workers, or others visiting the area

Mail surveys to residents. Gather input from people at shopping centers, in parks, or other public area.

♦Talk to local leaders, planners, or service organizations

Find out anecdotal information from sources within the community such as local government planners, religious leaders, or other organizations active in the area.

Challenge

Include non-residents who regularly come into the area for work or other activities

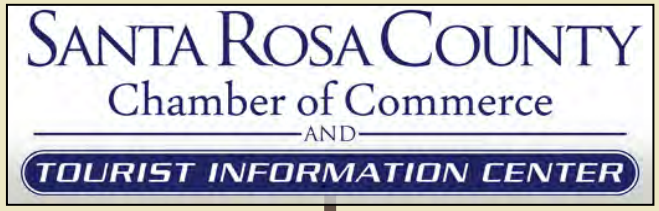
The census and ACS data tell us about the people who live in an area. How can we learn about others who work, shop, play, or use services there?

Other Data Sources

- Chambers of Commerce
- Local Agencies and Organizations

homeless population

individuals with disabilities



business owners, employees + patrons

Local agencies, such as those providing social services, may collect data about special needs populations in your study area. Local business organizations, such as Chambers of Commerce, can tell you about the demographics of business owners, employees, and patrons in the study area.

Outreach Techniques

Go to the people

- Attend events, set up information booths, or provide brochures and simple surveys where people gather.
- Offer to give project presentations at regularly scheduled meetings.

Challenge

Verify accuracy of survey responses

While census and ACS data are tremendous resources, the results can be inaccurate because they rely on self-reported data.

- **People may refuse to complete the questionnaire**
- **Respondents answer questions incorrectly**

Other Data Sources

♦ Public Assistance Agencies

SNAP
retailers

housing
assistance

race
ethnicity
income

disability
benefits

♦ National Advocacy Organizations

Hispanic or Latino

Native American

African American

Outreach Techniques

- **Seek input from under-represented populations**
  - Involve trusted community leaders.
  - Contact groups or organizations that serve these populations.

THE SALVATION ARMY
DOING THE MOST GOOD

Goodwill Industries International, Inc.

WE ARE Meals On Wheels
So no senior goes hungry

- **Verify information**

Use existing community networks and public involvement opportunities to verify information.

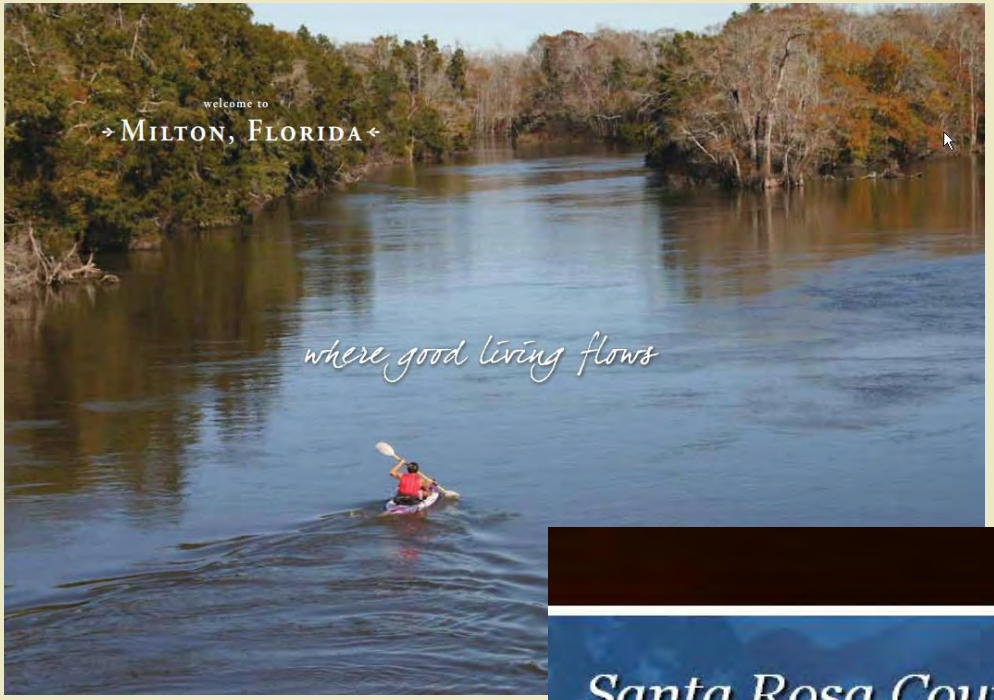
Challenge

Account for changes over time

The population in the study area may have changed since the last census or ACS. The community impact assessment needs to account for people moving in or out of a community, and the development of new housing units.

Other Data Sources

- Local Government Planning Departments
- Transportation Planning Organizations



Outreach Techniques

Ask... “Are we missing anyone?”

- Contact community leaders, schools, and local planners.
- Visit neighborhoods, community events.
- Conduct small group “kitchen table” meetings.
- Survey people at local shopping centers.

Challenge

Appropriately use sample estimates

An expected amount of uncertainty exists when using data gathered from a sample of the population rather than the full population.

Example: Average number of children per household

When using different samples:

- Households A and B = 1.5
- Households B and C = 2.5
- Households A and C = 2

Compared to the full population:

- Households A , B, and C = 2

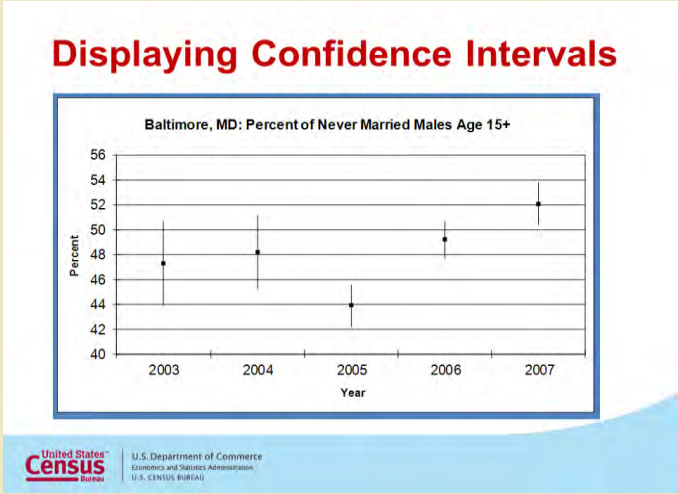
Other Data Sources

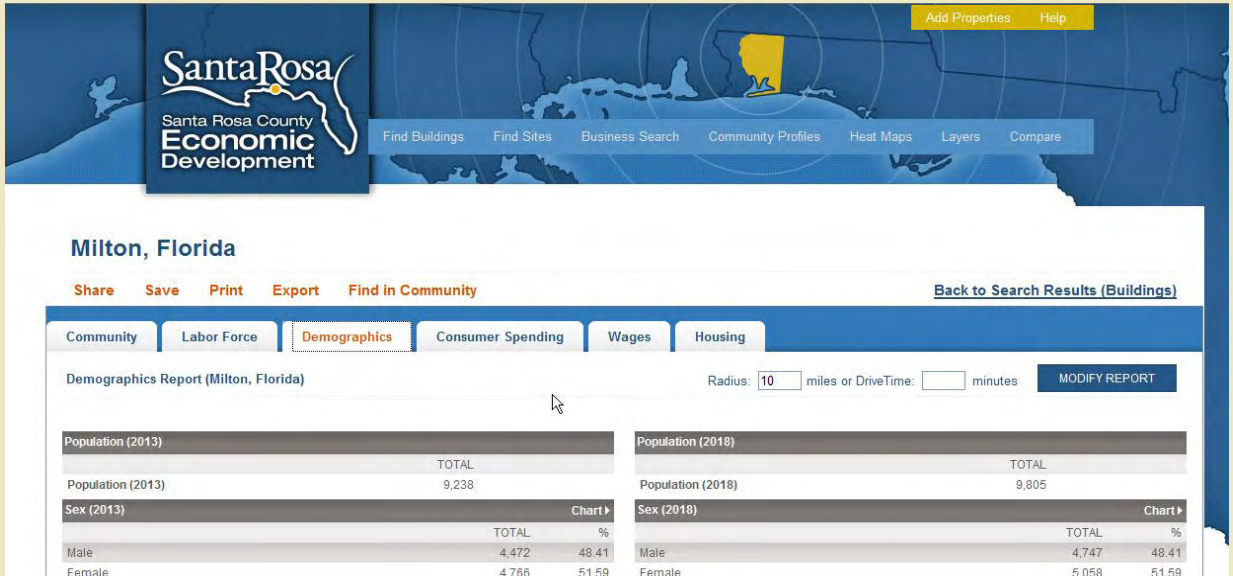
- **Margin of Error provided for ACS estimates**

  Understand the reliability of the data.

- **Local population projections and estimates**

  Compare results with ACS data.





Outreach Techniques

Verify information during project's public involvement activities

For more information

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Public Involvement web page: http://www.dot.state.fl.us/emo/pubinvolvement.shtm
Sociocultural Effects web page: http://www.dot.state.fl.us/emo/pubs/sce/sce1.shtm