

Data Visualization for Housing and Community Planning

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Today's Takeaways

1. Learn new and innovative data sources to incorporate in your housing and community planning efforts.
2. Acquaint yourself new (and free!) visualization techniques for spatial data.
3. Understand 'best practices' related to data visualization and GIS.



Agenda

Meet Community Science

So much data, so little time

On the Map / Tableau

HHUUD10 / ArcGis Online

NHPD / StoryMaps

Q&A

Meet Community Science

Effective Strategies. Equitable Systems. Strong Communities.

Community Science is an award-winning research and development organization that works with governments, foundations, and non-profit organizations on solutions to social problems through community and other systems changes fostering learning and improved capacity for social change.





Welcome



Your Host & Practitioner:
Michael Webb
Managing Associate
Community Science





How can we maximize the impact of data in our planning efforts?

So much data, so little time

- In recent years, there's been an explosion of online data sources and visualization software programs
- That's great! But....
 - How can you stay abreast of everything?
 - How can you know what's reliable?
 - How can you pay for all these subscriptions?



Our goal today

- Three cool data sources...
 - LEHD 'On the Map'
 - HHUUD10 Historic housing unit counts
 - National Housing Preservation Database
- Three cool visualization techniques
 - Tableau Public
 - ArcGIS Online Basic Webapp
 - ArcGIS Online StoryMaps





Data sources and
visualization
techniques

Community
Science

Effective Strategies
Equitable Systems
Strong Communities

'On the Map' and Tableau

- LEHD 'On the Map' – rich employment data
 - Available for both residents and workers in virtually any geographic unit
 - Employment industry, age, income, and commuting patterns
- Tableau
 - 'Freemium' model (free version is "Tableau Public")
 - Powerful data dashboard and visualization software



HHUUD10 and ArcGIS Online Basic WebApp

- HHUUD10 Historic Housing Counts
 - Recently compiled data on housing counts (every decade) back to 1940
 - Data normalized to modern-day Census boundaries
- ArcGIS Online
 - Also operates on 'freemium' model
 - Basic WebApp can be used to present data interactively with minimal complications



[Video How-To](#)

NHPD and Story Maps

- National Housing Preservation Database
 - Maintained by PAHRC
 - Information about every HUD-subsidized property in the U.S., including geolocation (XY coordinates)
- Story Maps
 - Available through ArcGIS Online
 - Powerful tool for incorporating maps, text, and other media into a single visualization








Visualization considerations

Community
Science

Effective Strategies
Equitable Systems
Strong Communities

Visualization Considerations



- Cartography: an **art** and a **science**
- Make each visualization communicate **one** concept
- Three types of data that may require colors:
 - Sequential: data not centered on 0 
 - Diverging: data centered on zero/average 
 - Qualitative: categorical data 
- Accessibility: limit **red** and **green**
- When in doubt: Google it.

Obama's Divided Nation

Obama presides over a more divided country than any time in 50 years that was riven by racial lines gathering in 2008 to elect its president. That president's four years dividing the country on the basis of economic class. The campaign revealed no evidence that Mr. Obama will close



problem with polls, especially verbally facile as Mr. Obama that in crunch time, Obama reverts to No. 1. Exit polls show that 9% of the electorate who to vote for just Tuesday; and among 42% said Mr. Obama's Sandy response—the tie photo-op—was a factor. Of those, 70% voted for Mr. Obama. Mr. Christie is a politician who is a Yes, Republican



Effective Strategies
Equitable Systems
Strong Communities

Q & A



THANK YOU