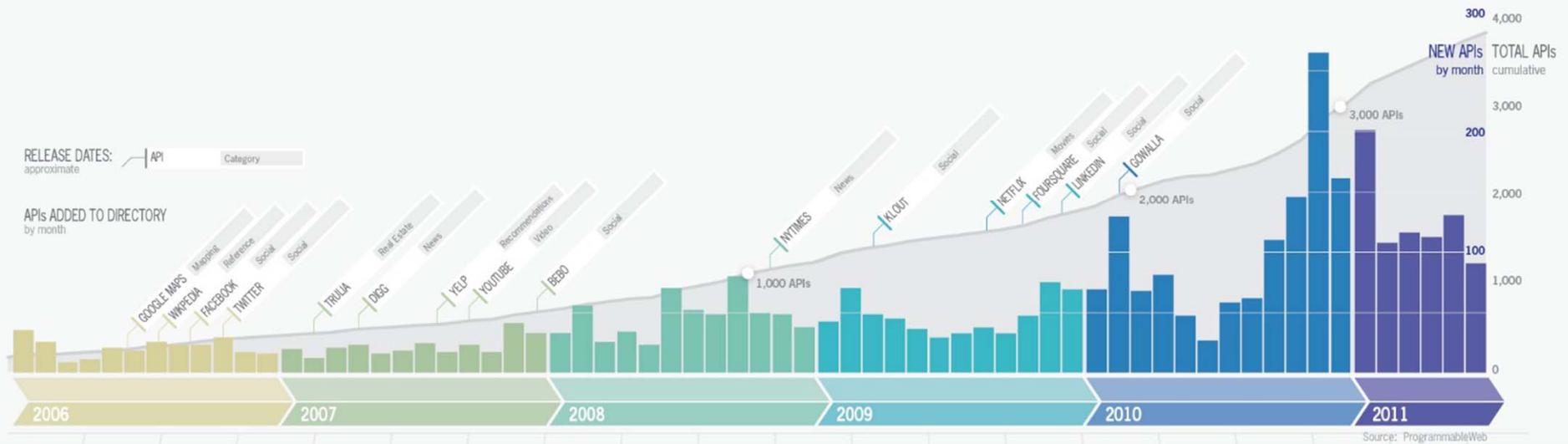


# Open Data Platforms: How Open Data Leads to Transparency

Holly St. Clair

ICMA Conference Presenter





SEPTEMBER 24, 2013

# OPEN DATA PLATFORMS: HOW OPEN DATA LEADS TO TRANSPARENCY

# MAPC's Data Services Group

MISSION: SHARE INFORMATION



# Data

## OUR PHILOSOPHY



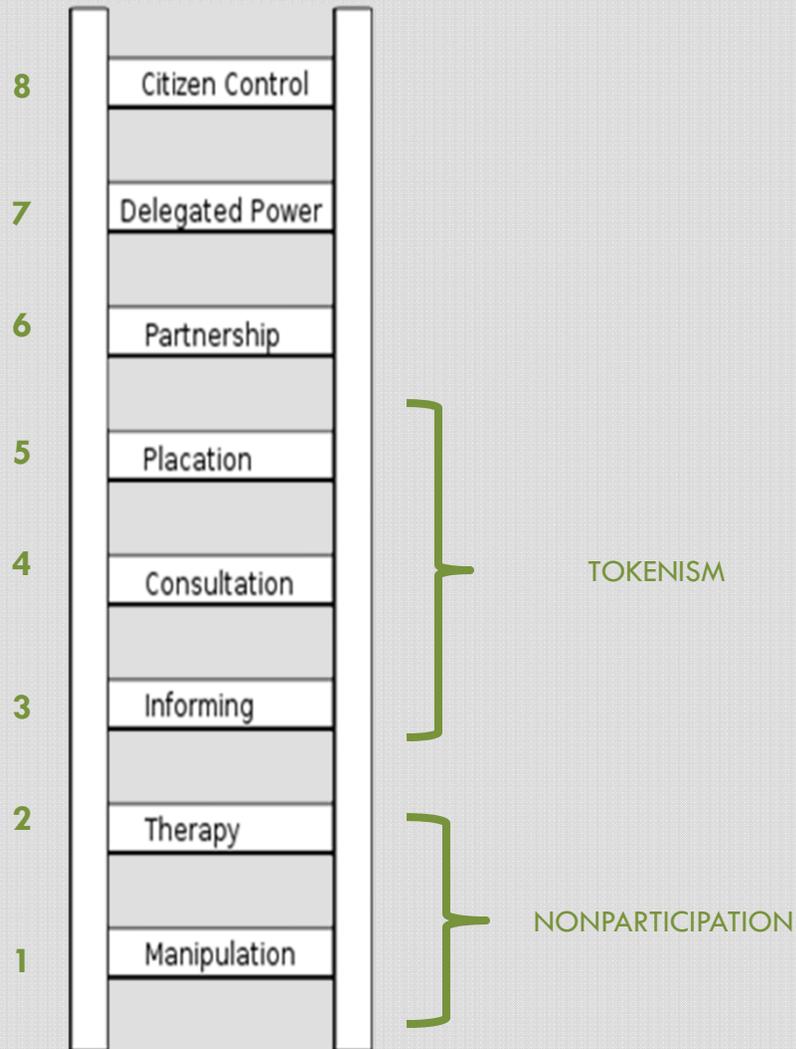
Be responsible stewards of our resources, passing on an environmentally, financially, and

live, work, and play.

Create a world-class region that is vibrant, competitive, and connected.

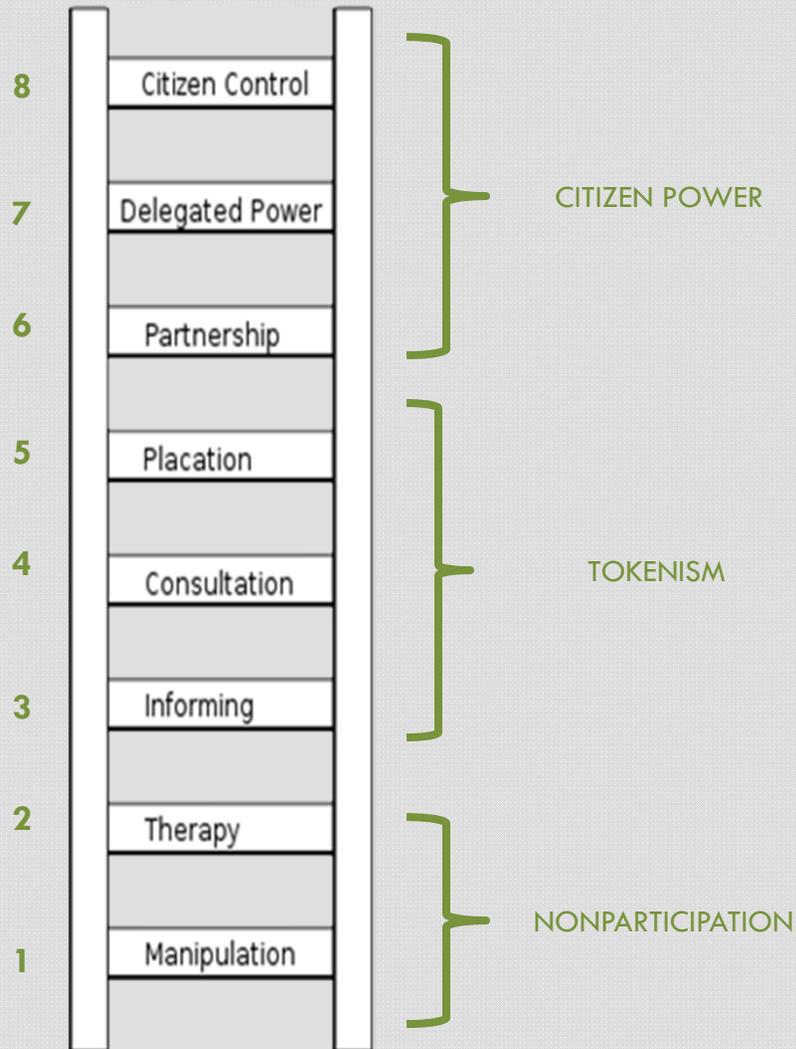
# Decision-Making Power

## ARNSTEIN'S LADDER OF CITIZEN PARTICIPATION



# Decision-Making Power

## ARNSTEIN'S LADDER OF CITIZEN PARTICIPATION



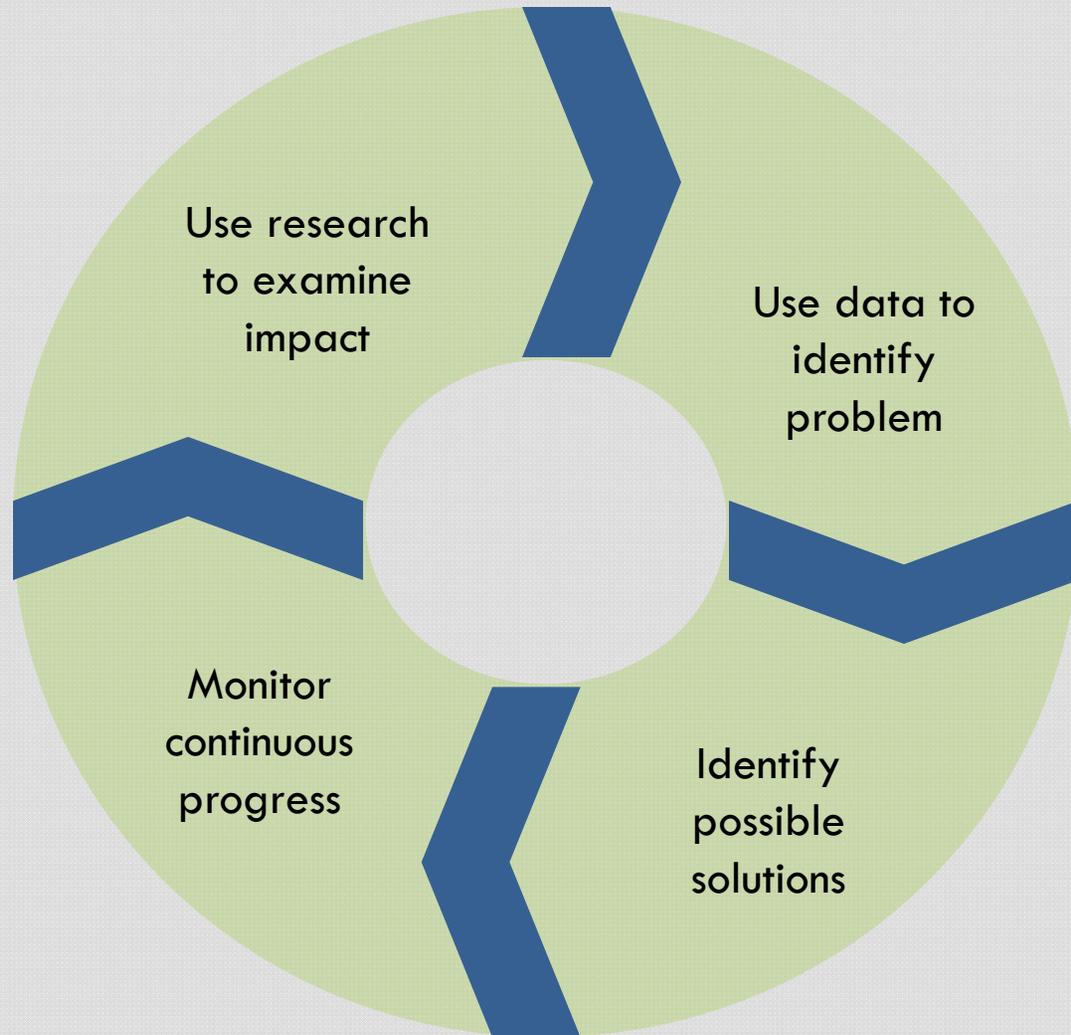
# Current Conditions



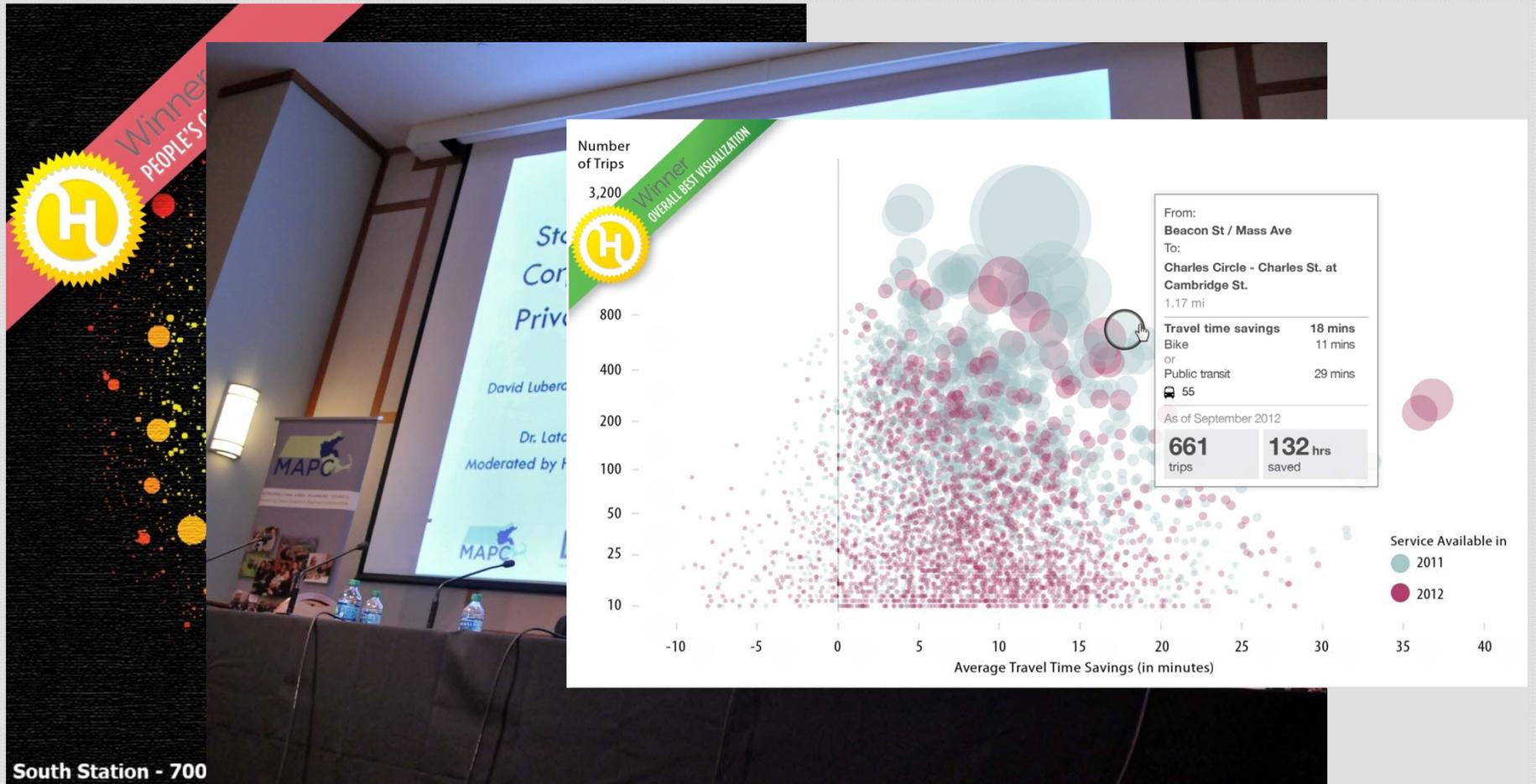
[Image: The Govloop Guide: Innovating at the Point of Citizen Engagement](#)

# Role of Data in Decision Making

## EASTON'S CYCLE OF INQUIRY



# Example of Open Data to Transparency



# National Neighborhood Indicators Partnership



0 250 500 1,000 Miles

-  States with NNIP Partners
-  States with Potential NNIP Partners



Created by MAPC 2013  
Data Sources: NNIP, ESRI Basemap

MEXICO

Gulf of Mexico

Copyright: ©2013 Esri, DeLorme, NAVTEQ

# National Examples

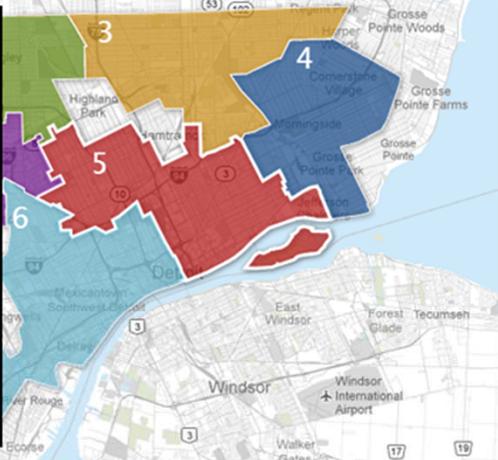
## DATA DRIVEN DETROIT

t f inLOGIN | REGISTERQ

[PROJECTS](#) | [DATA & MAPPING](#) | [NEWS & OPINIONS](#) | [MEDIA CENTER](#) | [ABOUT US](#) | [CONTACT US](#)

### Detroit City Council Districts

This year's upcoming municipal election will be the first time in nearly 100 years that Detroiters will elect the city council from defined districts. With the passing of Detroit's new City Charter, only two City Council members are elected at-large, and seven are elected by district. [Use our new interactive tool to explore the districts.](#)



Download District 5	
District Name	Central
2010 Population	97,279
Population >18	76,497
Race & Ethnicity	
Hispanic	1,118
Non-Hispanic White	6,539
Non-Hispanic African American	86,614
Other Race	3,008
Income & Poverty	
Per Capita Income	\$19,287
Percent of Households in Poverty	35%
Highest Educational Attainment	
Percent without High School	22.4%
Visualizations	

- [Detroit City Council Districts](#)
- [Census Comparison](#)
- [Student Dispersion](#)
- [Neighborhood Parcel Tool](#)
- [State of the Detroit Child 2012](#)



### ASK KURT

## THE DATA THAT DRIVE DETROIT

**February 14, 2013**  
This year's upcoming municipal election will be the first time in nearly 100 years that Detroiters will elect the city council from defined districts. Historically, Detroit's nine City Council members have been elected at-large with each of them representing the city as a whole rather than a particular district. However, with the passing of Detroit's new City Charter, which took effect on January 1, 2012, only two members are elected at-large, and seven members are elected by district. [Use our new interactive tool to explore the districts.](#)

**January 29, 2013**

### NUMBER OF THE WEEK

# 16

Miles of bike lanes in Greater Downtown Detroit

# National Examples

## CONNECTICUT DATA COLLABORATIVE

CONNECTICUT DATA COLLABORATIVE

### CT Commission on Health Equity Portal

LOGIN | REGISTER

ABOUT DATA CATALOG WEAVE IT! GALLERY RESOURCES CTDATA KNOWLEDGE CENTER

IMPROVING THE QUALITY OF HEALTH FOR ALL CONNECTICUT RESIDENTS ADDRESSING INEQUALITIES IN HEALTH OUTCOMES BASED ON RACE, ETHNICITY, GENDER, AND LINGUISTIC ABILITY [LEARN MORE](#)

CT NONPROFIT STRATEGY PLATFORM

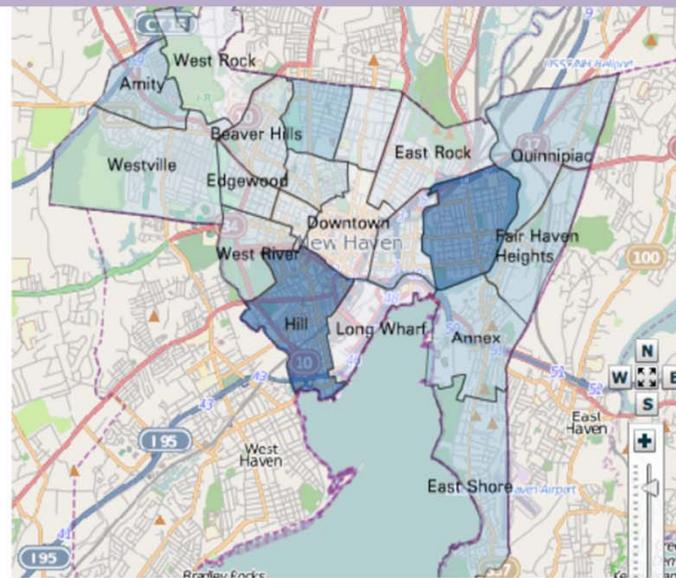
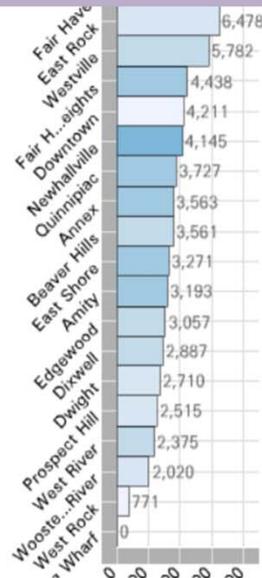
Data and tools for collaboration & communication

### WEAVE IT!

VISUALIZE THE DATA USING OUR POWERFUL TOOLS.

### DATA CATALOG

FIND THE INDICATORS YOU NEED.



### KNOWLEDGE CENTER

Building a body of knowledge about data—its generation and use. [>more](#)

### NEWS

Access the full CT Health Data Scan [here](#)

Upcoming Webinars in Introduction to CTData.org and Advanced Weave. [Sign up here](#)

Join the CTdata.org User Group for updates and to get help Find out about Connecticut Open Data Policy Directions and new open data web sites [here](#)



# National Examples

## RHODE ISLAND DATA HUB

The screenshot shows the Rhode Island DataHUB website. At the top right, there is a 'Sign In' section with input fields for 'email' and 'password', and a 'go' button. Below this are links for 'Register for an account' and 'Forgot Password?'. A navigation bar contains buttons for 'About', 'Data Stories', 'Reports', 'Data Catalog', 'Weave', and 'User Guides'. The main content area features a large heading 'Welcome to the Rhode Island DataHUB' followed by a paragraph describing the hub as a partnership between state and local agencies and The Providence Plan. Below this, a list of topics includes Demographics, Education, Health, Adolescent Risk Factors, and Adolescent Protective Factors. A call to action encourages users to explore 'Data Story' or 'Reports'. A video link is provided for more information. A large graphic on the right asks 'How do social and demographic factors affect student achievement?' and features a 'Making Connections Schools' section with three small images: a person at a desk, a school hallway, and a green chalkboard with dollar signs.

Sign In

[Register for an account](#) | [Forgot Password?](#)

[About](#) [Data Stories](#) [Reports](#) [Data Catalog](#) [Weave](#) [User Guides](#)

## Welcome to the Rhode Island DataHUB

A partnership among several state and local agencies and The Providence Plan, the RI DataHUB links together data from national, state, and local sources. Data are summarized and made available on this website to all who are interested in using data to analyze and improve the well being of Rhode Islanders.

Topics include:

- Demographics
- Education
- Health
- Adolescent Risk Factors
- Adolescent Protective Factors

Begin by exploring a ["Data Story"](#) or browsing [Reports](#) that interest you.

Watch this [Video](#) to learn more about the DataHUB and how you can make the most of your visit.

### How do social and demographic factors affect student achievement?

#### Making Connections Schools

# National Examples

## MIAMI-DADE MATTERS



Search

GO

Advanced Search

Home

News

Demographics

Indicators

Topic Centers

Promising Practices

Report Assistant

Indicator Comparison

Resource Center

Community Pages

Contribute Content

Translate

Select Language

INITIATIVE OF: **HCSF** Health Council of South Florida, Inc.

Join Our Mailing List

PRESENTING SPONSOR **HEALTH FOUNDATION of South Florida**

GOLD SPONSORS **MIAMI-DADE COUNTY**

**COMMUNITY DASHBOARD**

Daily Ozone Air Quality

DUI Arrests

Hospital Admissions: Diabetes

Teen Birth Rate

Commute Time

Mortality Ranking

View the Legend

See all indicators

**IN THE NEWS**

Feature Story

**MDC Health Report Card**

Which section of this website do you find most useful?

News

Local resources

Health and social indicators

Promising practices

Event calendar

Other

View Results

Beach Water Quality

View beach water alerts

Local Resources

Provided by Switchboard of Miami 211

**Initiative wants to make Little Havana more pedestrian friendly**

Barreiro, Mustalier and fellow Vista Alegre resident Zoila Zeppenfeldt, all 79 years old, took visitors on a walking tour of their Little Havana neighborhood recently, strolling west from Southwest 22nd Avenue. They pointed out over-large trees, corners that flooded in the rain, homeless men sleeping behind ixora bushes, tripping hazards in uneven sidewalks, and a red light that gives them barely enough time to cross the intersection.

And of course, the speeding bikers. Always the bikes.... [Read the full story](#)

Local News

House Panel Rejects Medicaid

Welcome to Miami Matters, an initiative of the [Health Council of South Florida!](#)

[Click here](#) to view the Miami Matters-Measuring What Matters in Miami-Dade County Community Health Report Card, 2010 Update

Miami Matters is a dynamic, interactive web-based information system that provides easy to understand health, environmental and other quality of life [indicators](#) for Miami-Dade County. Here you can connect to [promising practices](#), local resources and [information](#) that encourages and promotes informed community action. Miami Matters seeks to provide a road map for collaborative community improvement by highlighting where we have been, where we are and where we need to go. We invite you to use the site

Search

GO

Advanced Search

Home

News

Demographics

Indicators

Topic Centers

Promising Practices

Report Assistant

Indicator Comparison

Resource Center

Community Pages

Contribute Content

Translate

Select Language

Home > Community Dashboard

Share | Facebook | Twitter | My | RSS | Print

RELATED CONTENT

**211 RESOURCES**

**Switchboard**  
Answering the Call since 1988

- Naples Police Department - Security Survey Services
- I Have A Dream - Overtown
- NAFC - Resource Directory of Children & Family Services
- Greater Naples Chamber Of Commerce

NEWS

- House Panel Rejects Medicaid Expansion
- Rewards to healthy employees ramping up
- Ahead of health care ruling, massaging public opinion
- Congress takes aim at critical Census survey

INDICATORS

- Unemployed Workers in Civilian Labor Force
- Adults with Health Insurance

PROMISING PRACTICES

- WomenVenture

Average | Time Period

**Firms Owned by Women**

Value: 28.9 percent

Measurement Period: 2007

Comparison: 28.8

Unit: percent

Location: County : Miami-Dade

Comparison: U.S. Value

Categories: Economy / Economic Climate

View the Legend

What is this indicator?

This indicator shows the percentage of firms that are owned by women.

Why this is important:

Women-owned firms are those owned by sole proprietors who identified themselves as female or were categorized as female on their applications for a Social Security Number, or, in the case of firms with multiple owners, where 51 percent or more of stock interest, claims or rights were held by females. The percentage of women-owned firms is an indicator of gender equality in the region.

Technical Note: The regional value is compared to the national value.

Source: U.S. Economic Census

URL of Source: <http://www.census.gov/>

URL of Data: <http://www.census.gov/econ/sbo/index.html>

Maintained By: Healthy Communities Institute

**Time Series Data**

Year	Value (percent)
2002	29.6
2007	28.9

Zoom to: County : Miami-Dade | Go

Create Indicator Comparison Report

# Metro Boston

## DATACOMMON & REGIONAL INDICATORS

**Metro Boston DataCommon**  
 A partnership between the Metropolitan Area Planning Council & the Boston Indicators Project at the Boston Foundation

EXPLORE DATA: By Topic & Geography  
 COMMUNITY SNAPSHOTS: Regional Trends & Current Conditions  
 DO-IT-YOURSELF: Create Your Own Charts & Maps  
 RESOURCES: User Guides & More  
 LEARNING COMMUNITY: Get Involved

**The 2012 Boston Indicators Report**  
 City of Ideas: Reinventing Boston's Innovation...

START A DATA SEARCH: Topic: All

Explore Data by Topics:

- Demographics
- Arts & Culture
- Civic Vitality & Governance
- Economy
- Education
- Environment & Energy
- Housing
- Land Use & Zoning
- Public Health
- Public Safety
- Technology
- Transportation

**Introducing WEAVE...**  
 A web-based visualization platform designed to enable visualization of any available data by anyone for any purpose. WEAVE is in development by the Open Indicators Consortium (OIC). To learn more about WEAVE, check out [www.oicweave.org](http://www.oicweave.org).

**Map: Housing Cost Burden: Renters (Census Tracts)**  
 Years(s): 5yr Avg 2006-10 • Source(s): American Community Survey  
 By Susan Brunton

**Hands-on Training Available**  
 MetroBoston DataCommon Training session are held every month at offices of the Metropolitan Area Planning Council in downtown Boston. Participants receive an orientation to the various components of the website, and complete a hands-on tutorial of the DataMap Tool to create their own customized maps. Attendees have included community leaders, city and town planners, government employees staff from non-profit organizations and research organizations, and many others.

**REGISTER FOR A TRAINING**

Recent Data Visualizations from our Community:

Unemployment Rate (Line chart showing rates from 2006 to 2011)

Unemployment Rate, 2006-2011: Table

Year	Unemployment Rate
2006	4.2
2007	4.3
2008	4.3
2009	4.3
2010	4.3
2011	4.3

Employment Change (Map showing regional changes)

demo showing multiple color (Map showing multiple data series)

**Metro Boston Indicators Project**  
**The State of Equity in Metro Boston**

An equitable region, where "all people have full and equal access to opportunities that enable them to attain their full potential" is one featuring a diverse labor force prepared for the region's knowledge economy; healthy residents and low health care costs; and communities where people of different ages, incomes, races and ethnicities have real options to live, work, learn and play side by side.

We credit King County, Washington with this [definition of equity](#).

**MetroFuture**, the region's plan for growth through the year 2030, directs us to achieve this vision by eliminating unfair, preventable, and systematic differences between groups that not only harm individuals and families, but threaten the vibrancy of our region.

The State of Equity Indicators report, funded by the Barr Foundation is the first report in MAPC's Regional Indicators program. This report establishes a baseline for our equity-related indicators and will track the region's progress towards the MetroFuture goals. Click the preview to the right to view the report full-screen. You can also download (due to large file size it's recommended to right-click on the link and choose to download the file directly to your computer):

- 12-page executive summary (6 MB) [pdf](#)
- Full report for web viewing (111 MB) [pdf](#)
- Full report for printing (18 MB) [pdf](#)

Thanks to the over 200 of you who joined MAPC at the report's formal release at Harvard Law School on December 13, 2011. The event featured remarks by David Harris, Director of the Charles Hamilton Houston Institute for Race and Justice at Harvard Law, and Mary Skelton-Roberts, Senior Program Officer at the Barr Foundation. Six respondents, including officials from HUD and Governor Patrick's Administration provided insightful responses to a presentation of the data included in the report. To download a copy of the presentation, [click here](#).

The policy report will be released later in 2011 and will identify key policy and programmatic recommendations to "bend the trends" towards greater regional equity. MAPC will reach out to a wide variety of stakeholders in translating our data findings to policy; stay in touch to learn more. [Click here](#) to view the MetroFuture equity-related recommendations for policy and program change.

**We are Becoming More Diverse**  
 Metro Boston Population by Race/Ethnicity, 2009 (Bar chart showing population counts for various groups)

**We are Becoming Less Equal**  
 The Richest 5th of the Population Earns More than 10 Times that of the Poorest 5th (Line chart showing income inequality trends from 1974 to 2008)

Metro Boston is changing. The face of the region in 2030 will look substantially different than it does now. Segregation not only harms individuals but also hinders Metro Boston's potential for equitable growth and prosperity.

**Inequity Impacts Us at Each Stage of Our Lives**

- CHILDREN** as they try to grow up healthy, learn, and play.
- YOUNG ADULTS** as they try to learn, stay safe, and establish independence.
- ADULTS** as they try to make a good living, build a home, and stay healthy.
- SENIORS** as they try to remain active, retire comfortably, and stay connected.

# MetroBoston Data Common User Profiles



## CZARINA BITON

REGIONAL EMERGENCY PREPAREDNESS COORDINATOR

### GOALS

Public health emergency preparedness

Social justice & civic engagement

Visualizing community assets

### TOOLS UTILIZED

Community snapshots

Datamap tool

# MetroBoston Data Common User Profiles

## JOHN FITTERER

NUUESTRA COMUNIDAD CDC



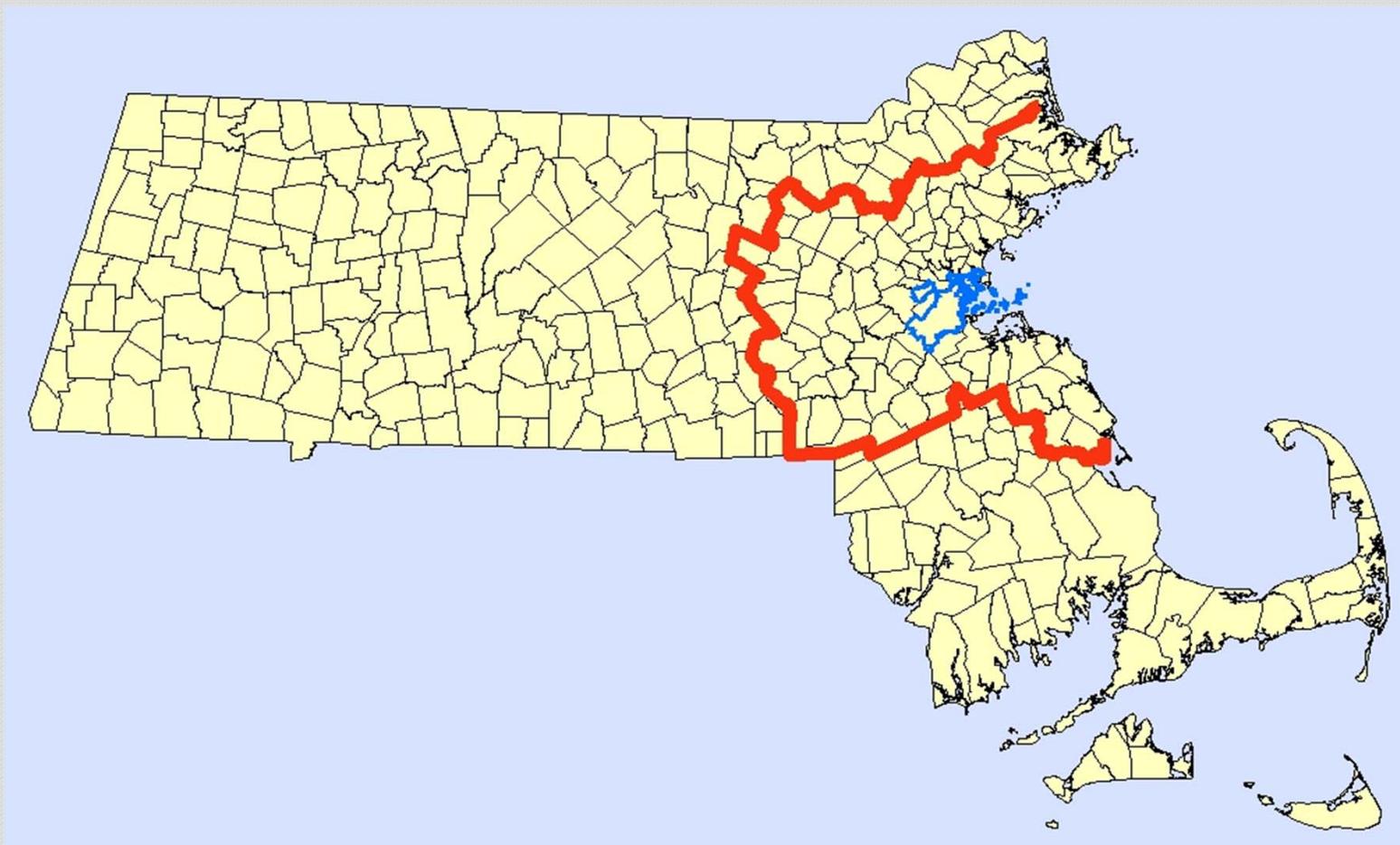
### GOALS

- Neighborhood foreclosure crisis analysis
- Explore connections between lending & race/ethnicity
- Proactive, hands-on community analysis
- Develop a way to tell story to funders

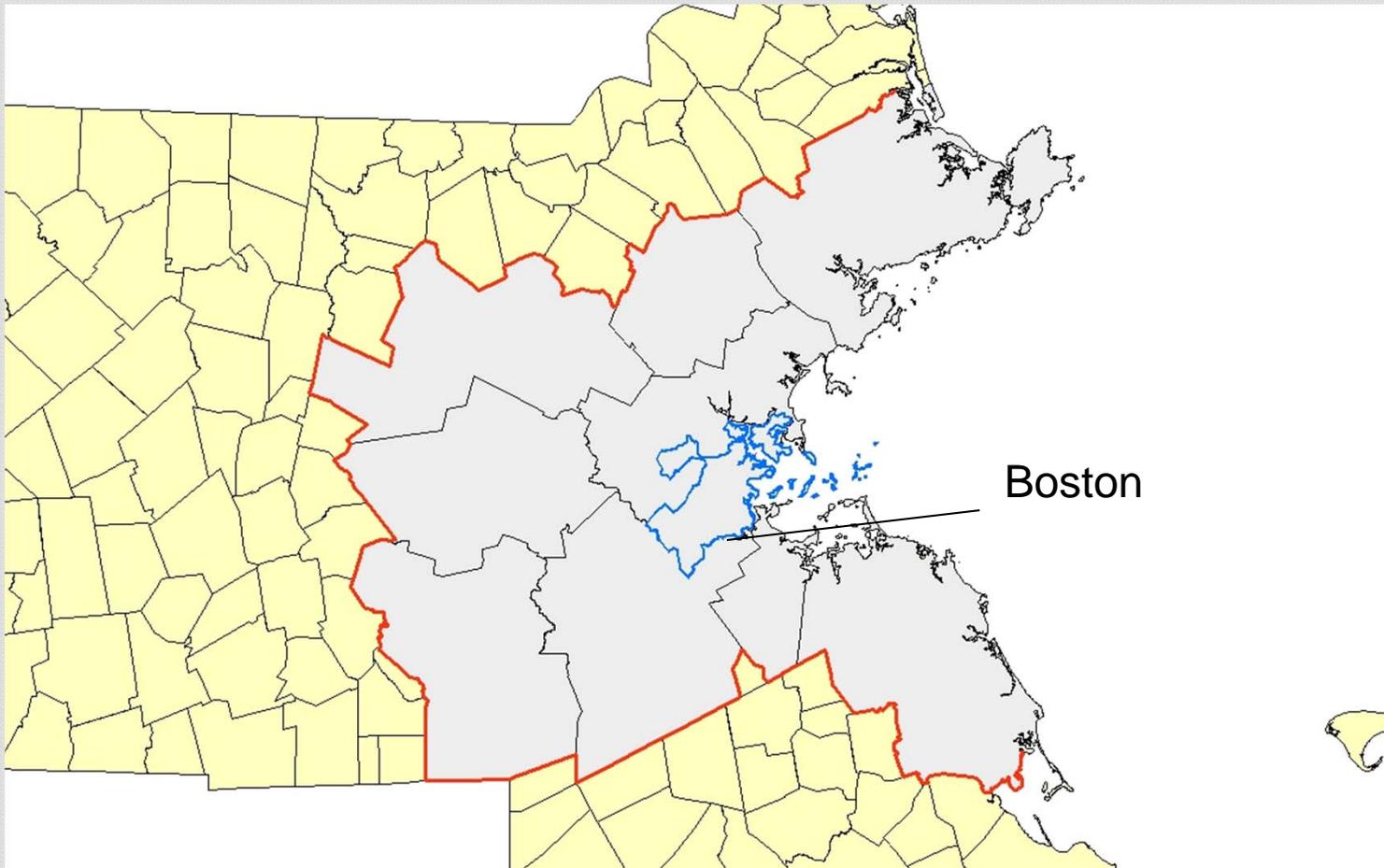
### DATA UTILIZED

- Subprime lending data
- Foreclosure data
- Transit, schools and other neighborhood facilities

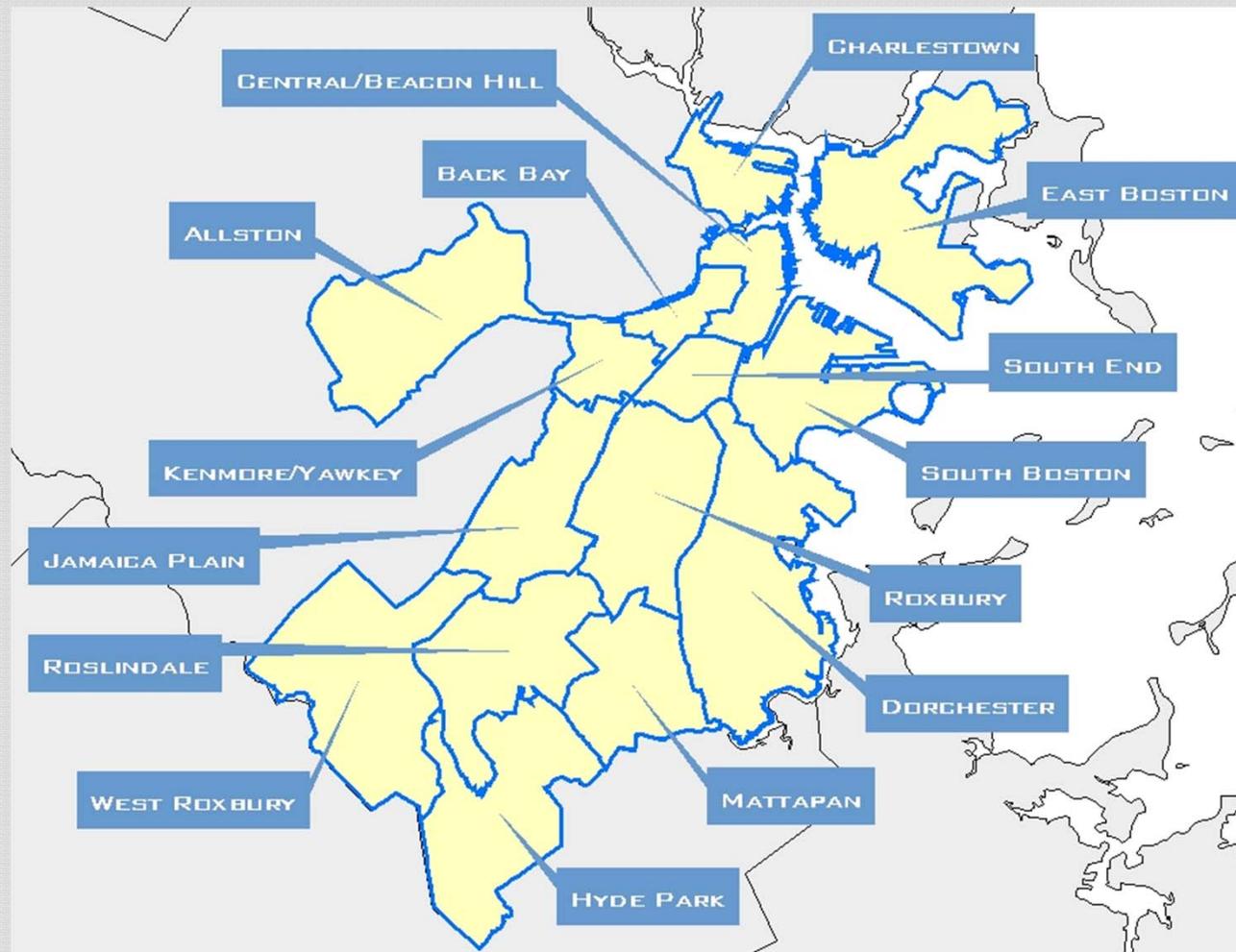
# Massachusetts and the Metropolitan Area Planning Council Region



# Metropolitan Area Planning Council Region and Boston



# Boston and Neighborhoods



# Lessons Learned

## STORY TELLING & FRAMEWORK

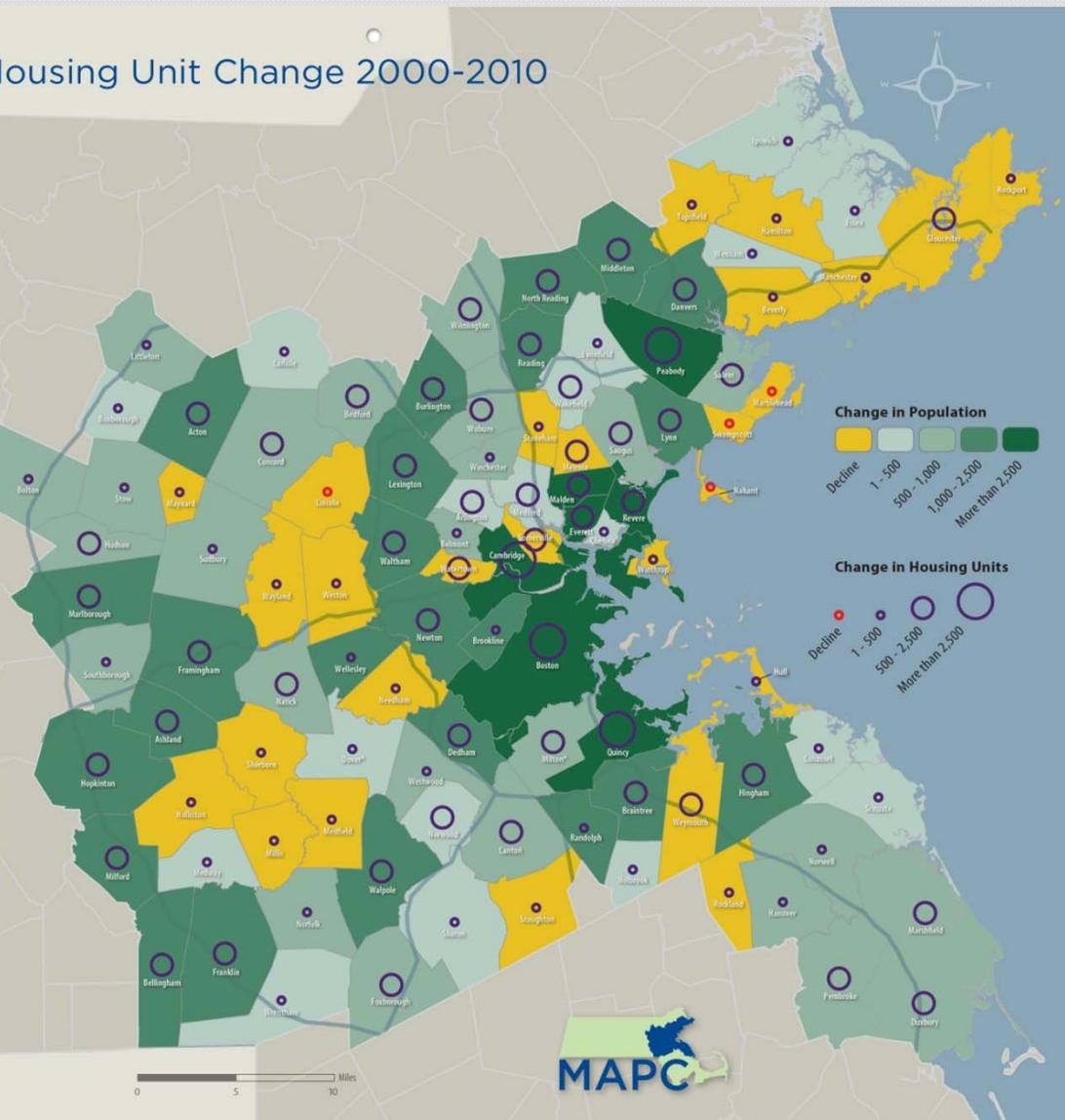
### Population and Housing Unit Change 2000-2010

#### Metro Boston gained 95,000 residents from 2000 to 2010.

Despite some indicators of population decline early in the decade, the MAPC region grew by 3 percent, to 3.16 million people. Boston led the pack with 28,500 new residents, and Cambridge, Everett, Quincy and Revere each gained over 3,500 people. Surprisingly, 27 municipalities lost residents over the decade, ranging from a decline of just 25 people in Needham to over 1,700 people in Somerville.

Since 2000, the region added 81,000 housing units, an increase of 7 percent. About 34,000 households moved to the region since 2000, and new units are also needed for residents who move or create a new household. Even so, the number of vacant units regionwide increased by 35,000, and housing unit growth is not always correlated with population growth. A notable example is Somerville, which added 1,200 housing units but lost 1,700 residents due to higher vacancy rates and smaller households. Only four towns lost housing since 2000, led by Lincoln, which lost nearly 300 units due to changes at Hanscom Air Force Base.

The growth shown here differs considerably from past decades. The Inner Core—home to 44% of the region's residents—accounted for 48% of the region's population increase, compared to only 26% of growth in the 1990s and 5% during the 1980s. Meanwhile, growth rates in the region's low-density Developing Suburbs slowed considerably. These towns grew by 14% in the 1990s but just 4% since 2000. With robust growth inside Route 128 and decidedly mixed growth in suburbs, the past decade represents a transition from previous decades characterized by suburban sprawl and urban decline, toward a more balanced pattern of growth.



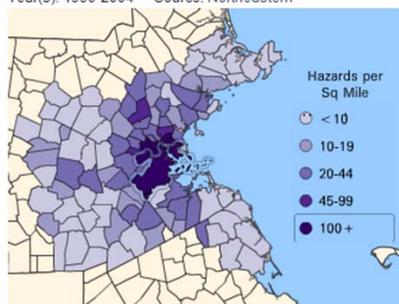
# Lessons Learned

## INFORMATION INFRASTRUCTURE

### Environment & Energy [View All](#)

#### Environmental Hazards

Year(s): 1990-2004 • Source: Northeastern



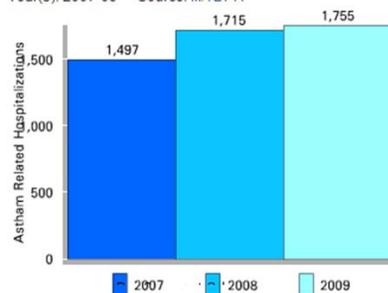
Click image for interactive Weave Visualization.

Choose Visualization

### Public Health [View All](#)

#### Asthma Related Hospitalizations

Year(s): 2007-09 • Source: MA DPH



Click image for interactive Weave Visualization.

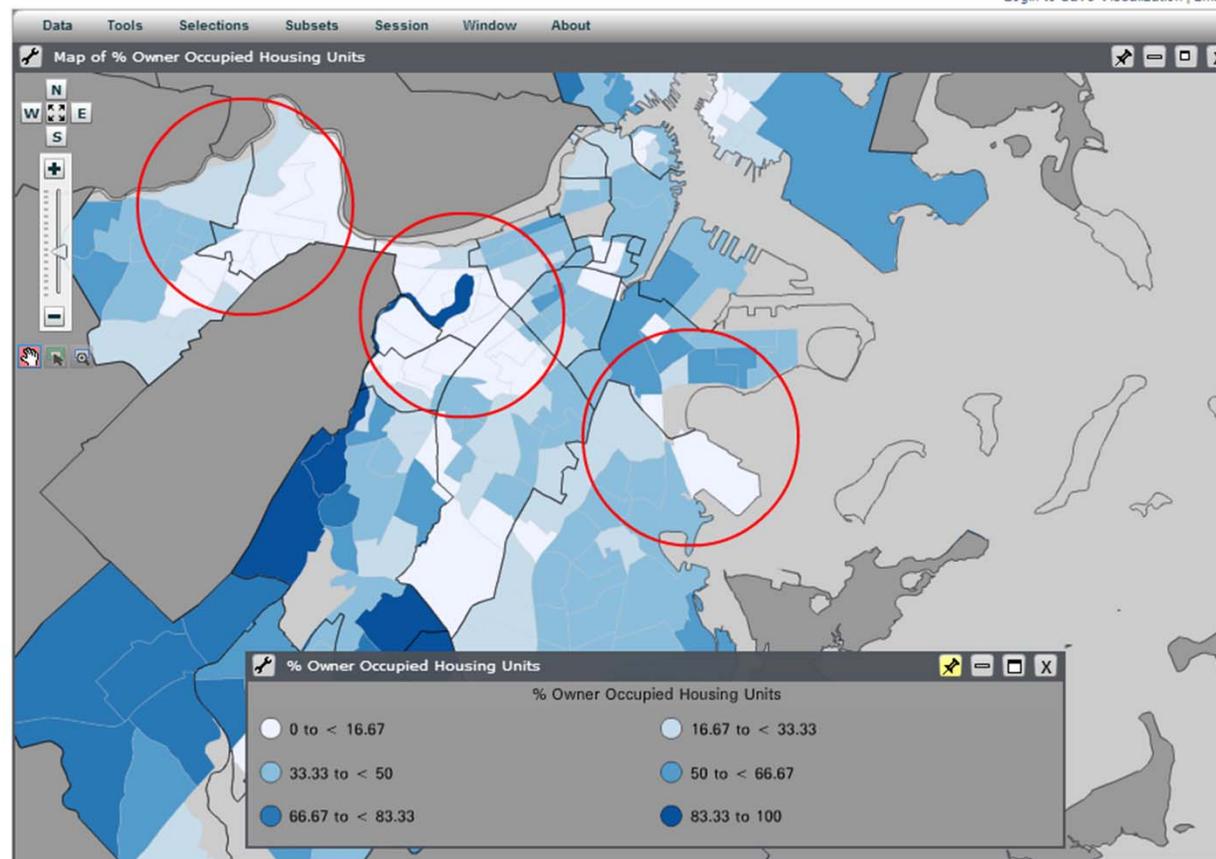
Choose Visualization

### Owner-occupied housing

By Boston Indicators Project

Year(s): 2006-2010 • Source(s): ACS

[Login to Save Visualization](#) | [Embed](#)



# Lessons Learned

ADVOCACY AGENDA, IMPARTIAL DATA & CAPACITY BUILDING



# ..... and the importance of: PARTNERSHIPS & COLLABORATION



The screenshot shows the homepage of The Boston Indicators Project. At the top left is the logo, a colorful hexagon, followed by the text "The Boston Indicators Project" and "MEASURING WHAT WE VALUE". Below this is the tagline "An Initiative of The Boston Foundation ■ A Project of Boston's Civic Community". To the right is a search bar and a "Blog" link with a speech bubble icon. A navigation menu below the header lists five categories: "INDICATORS: What We Measure", "OUR REPORTS: Key Findings", "COMMUNITY SNAPSHOTS: Boston Neighborhoods to the Region", "TOOLS & RESOURCES: Data, Mapping & Research", and "SHAPING THE FUTURE: Civic Agenda 2030 & Innovations". The main content area features a photograph of a group of diverse people running in a park. To the right of the photo is a teal box with the text "Experience the NEW Boston Indicators Project Website" and a paragraph describing the website's features, including access to a research library, a future blog, and a hub of innovation. Below the photo and text is a paragraph of text starting with "Learn about Boston's neighborhoods and region" and listing various sectors of community life. At the bottom, a dark blue bar contains a white arrow pointing down and the website URL "www.bostonindicators.org".

**The Boston Indicators Project**  
MEASURING WHAT WE VALUE  
An Initiative of The Boston Foundation ■ A Project of Boston's Civic Community

Search

Blog

**INDICATORS:**  
What We Measure

**OUR REPORTS:**  
Key Findings

**COMMUNITY SNAPSHOTS:**  
Boston Neighborhoods to the Region

**TOOLS & RESOURCES:**  
Data, Mapping & Research

**SHAPING THE FUTURE:**  
Civic Agenda 2030 & Innovations

**Experience the NEW Boston Indicators Project Website**

Understand Boston as never before when you enter this unique portal into a wealth of data and information—along with an in-depth analysis of the challenges and opportunities facing Greater Boston, the Commonwealth and New England. For the first time, the new site also offers access to Weave, a groundbreaking open-source platform that connects to hundreds of datasets at [MetroBostonDataCommon.org](http://MetroBostonDataCommon.org). Track change and progress on more than 150 indicators through cutting-edge, interactive visualizations.

Learn about **Boston's neighborhoods and region** and access new sources of information through a **Research Library** and **SHAPING THE FUTURE BLOG** as well as a **HUB OF INNOVATION**. Gain in-depth insight into 10 sectors of community life: *Civic Vitality*, *Cultural Life & the Arts*, *Economy*, *Education*, *Environment & Energy*, *Health*, *Housing*, *Public Safety*, *Technology* and *Transportation*. Read Boston Indicators reports, including the 2012 report: *City of Ideas: Reinventing Boston's Innovation Economy*.

[www.bostonindicators.org](http://www.bostonindicators.org)

# ..... and the importance of:

BALANCING IMMEDIATE  
DATA NEEDS & BUILDING  
DATA SERVICES FOR THE  
FUTURE



BIKE SHARE  
**100,000**  
BIKE  
TRIPS   
**7.7** MILLION  
CALORIES BURNED  
**20,000**  
FEWER CAR TRIPS

SHANNON GRANT  
**1,000**   
YOUTH ENGAGED IN  
VIOLENCE PREVENTION

MUNICIPAL HEALTH  
CARE REFORM  
YEAR ONE SAVINGS  
**\$20** MILLION  
METROBOSTON  
DATACOMMON.ORG  
 **8,649**  
ONLINE USERS

PROCUREMENT  
**18** FIRE TRUCKS  
**\$360,000**  
SAVED 

REGIONAL RESOURCES   
**\$16** MILLION  
NEW FEDERAL FUNDS  
TO IMPLEMENT  
METROFUTURE  
TECHNICAL  
EXPERTISE

**70**   
MUNICIPALITIES  
NEW PLANS  
POLICIES AND  
PRACTICES

**101** **3,161,712** **146,069** **134**  
UNIQUE CITIES AND TOWNS RESIDENTS BUSINESSES COUNCIL MEMBERS



**METROPOLITAN AREA PLANNING COUNCIL**  
**2012 CALENDAR AND ANNUAL REPORT**

*Promoting Smart Growth and Regional Collaboration*

# Questions/Comments?

Additional Information...

