COMMUNITY CHANGE: ENGAGING THROUGH DATA

BIG DATA FEST, NY
MARCH 28, 2015
Why Data?

- Understanding current reality
- Creating a comprehensive strategy, with actions that can achieve desired results
- Operationalize the strategy
- Monitoring progress
- Feeding back on results and improving the strategy
Why Data?

- Where to buy a house, rent an apartment
- Where to invest in a business
- Writing grant proposals
- Targeting programs and activities, setting up for success
- Communicate with your government
- Advocate for change
Existing Data Sources
Existing Data Sources - Federal
Existing Data Sources - Federal

Longitudinal Employer-Household Dynamics
American Community Survey
Population Estimates

United States Census Bureau
FactFinder
Existing Data Sources - Federal

- Longitudinal Employer-Household Dynamics
- American Community Survey Population Estimates
- Census Explorer
- FactFinder
- NCCS
- National Center for Education Statistics
- United States Environmental Protection Agency
Existing Data Sources: Federal

- Longitudinal Employer-Household Dynamics
- American Community Survey Population Estimates
- Census Explorer
- U.S. Department of Commerce Bureau of Economic Analysis
- HUD User
- IRS
- NCCS National Center for Charitable Statistics
- United States Environmental Protection Agency
- National Center for Education Statistics
- Bureau of Labor Statistics
- CFPB Consumer Financial Protection Bureau

DATA DRIVEN DETROIT... A Michigan Nonprofit Association Affiliate
Existing Data Sources - State

- Longitudinal Employer-Household Dynamics
- American Community Survey Population Estimates
- Michigan State Police
- IRS
- United States Environmental Protection Agency
- Bureau of Labor Statistics
- Consumer Financial Protection Bureau
- Michigan.gov
- Bureau of Economic Analysis
- National Center for Education Statistics
- National Center for Charitable Statistics
Existing Data Sources - State

- Census Bureau
- Michigan State Police
- HUD USER
- IRS
- MI School Data
- United States Environmental Protection Agency
- Department of Community Health
- Bureau of Labor Statistics
- Michigan Office of Attorney General
- Michigan Attorney General's Office
- Michigan Department of Licensing and Regulatory Affairs
- Bureau of Economic Analysis
- National Center for Education Statistics
- National Center for Healthcare Statistics
- U.S. Department of Commerce
Existing Data Sources - State

- United States Census Bureau
- American Community Survey Population Explorer
- Michigan State Police
- U.S. Department of Commerce Bureau of Economic Analysis
- Department of Human Services
- NCCS National Center for Charitable Statistics
- MI School Data
- United States Environmental Protection Agency
- Michigan Department of Technology, Management & Budget
- Bureau of Labor Statistics
- Consumer Financial Protection Bureau
- Michigan Department of Health & Human Services
- MDCCH Department of Community Health
- State of Michigan
- Existing Data Sources - State
Existing Data Sources - Local
Existing Data Sources - Local
Existing Data Sources - Local
Difficulties with the existing system

- Dispersed administrative sources
- There are so many of them!
- Some admin sources still locked
- Some are still on paper
- Not all data we need for community decision-making actually exist

So what do we do?
How do people get informed?
Data Smog
How do we synthesize the information in a way that’s meaningful for everyone?
Mission

Data Driven Detroit provides accessible high-quality information and analysis to drive informed decision-making.
Data...

- Collection
- Visualization
- Analysis
- Accessibility
- Data-Driven Outcomes
Developing New Data

- Physical condition of urban environment
- Detroit Residential Parcel Survey in 2009
  - Housing Type
  - Condition / Fire Damage
  - Occupancy
  - Vacant Lot Status
<table>
<thead>
<tr>
<th>Lot Number</th>
<th>Housing Structure</th>
<th>Lot is Improved</th>
<th>Lot is Unimprove</th>
<th>Vacant (Y/N)</th>
<th>VOD</th>
<th>Condition</th>
<th>Fire Damage</th>
<th>Illegal Dumping</th>
<th>Environmental Hazard</th>
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2009 – 350,000 on Paper!
2014

Detroit Blight Removal Task Force

DATA DRIVEN DETROIT... A Michigan Nonprofit Association Affiliate
The Story of Neighborhood Blight
The Story of Neighborhood Blight
The Story of Neighborhood Blight
The Story of Neighborhood Blight
Developing New Data

- Physical condition of urban environment

- Detroit Comprehensive Parcel Survey in 2014
  - Housing Type
  - Condition / Fire Damage
  - Occupancy
  - Vacant Lot Status
2014 – We Have The Technology!
Survey Questions

Step 1: Take a Photo

Questions about Structures
- Use
- Units
- Condition
- Occupancy
- Open/Boarded
- Dumping

Questions about Vacant Lots
- Use
- Park/Garden/Parking
- Improved/
  Unimproved
- Maintenance
- Dumping
Collaboration, Inclusion, and Data-Driven Decision Making
Collaboration –
The Historic Resource Survey

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## Broadening the Databases

- DTE Energy gas and electric shutoffs
- Historic district boundaries
- Fire department incidents
- Water shutoffs
- Detroit Future City current and future land use
- Fannie Mae/Freddie Mac
  - REO inventory
  - Aggregated pre-foreclosure data
- Historic Resource Survey
- Open and dangerous buildings list
- Detroit Land Bank Authority current inventory
- Valassis Direct Mailing, Inc., vacancy data
- Fire escrow fund
- Tax foreclosures
- Tax distress
- Wayne County Register of Deeds
  - Mortgages
  - Sheriff’s sales
- Building permits
- Business licenses
- Detroit Parcel Inventory
- Properties sold at tax auction
- Michigan Land Bank Fast Track Authority current inventory
Parcels Identified as Blight, Detroit, MI
According to Blight Removal Task Force Criteria

Total Scope of Blight
- Parcels Recommended for Structure Removal (40,077)
- Parcels Recommended for Further Analysis (38,429)
- Blighted Vacant Lots (6,135)

Sources: Motor City Mapping, 2014 (uncertified results); Detroit Buildings, Safety, Engineering, and Environmental Department; 2014 Historic Resource Survey; Detroit Parcel Inventory; Wayne County Register of Deeds; Wayne County Treasurer; Fannie Mae Freddie Mac; Valassis VNIF Plus Database; Data Driven Detroit.

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The MCI: A Tool for making Data Driven Decisions
What is it?

The Data Driven Framework for Maximizing Community Impact
The MCI In Action

Two goals that frame the analysis:

- Improve quality of life for the greatest number of people
- Improve the investment climate to the greatest degree possible
Beginning at a Neighborhood Level

Positive impact of intervention is greatest in the “tipping point” neighborhoods
How does it work?

- Two-tier process

- Neighborhood Dynamics Index: Identify areas that best meet objectives for intervention

- Neighborhood Threat Index: Identify “tipping point” areas within geographies highlighted by Environment Index
How does it work?

Indices are calculated sequentially:

- Neighborhood Dynamics Score
  - Highest Potential Impact
  - Higher Potential Impact
  - Lower Potential Impact
  - Lowest Potential Impact

- Neighborhood Threat Score
  - Highest Threat
  - Elevated Threat
  - Moderate Threat
  - Lowest Threat

Areas for Prioritized Interventions
# The MCI in Action

Data for the indices were assembled at the Census Block Group level.

<table>
<thead>
<tr>
<th>Neighborhood Dynamics Index</th>
<th>Neighborhood Threat Index</th>
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<tbody>
<tr>
<td>• Occupied Structures per Square Mile</td>
<td>• Foreclosures per Square Mile, 2008-2013 (sum of Sheriff’s Sales and Tax Foreclosures)</td>
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<tr>
<td>• Average Structure Condition Rating</td>
<td>• Change in residential average condition rating since 2009</td>
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<tr>
<td>• Population Under 18 per Square Mile</td>
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<tr>
<td>• Mortgage Transactions per Square Mile</td>
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</tbody>
</table>
Summary of High-Threat, High-Impact Neighborhoods

Total Population (2010): 193,384
Occupied Structures: 61,449

% of Population Under 18: 30.22%
% of Occupied Structures: 30.18%
% of Detroit’s Land Area: 15.72%
A Foundation for Ongoing Analysis

- The MCI can be periodically re-tooled to account for changing conditions, as long as the data are updated.

- Intervention areas will continually evolve as conditions change.
How is the MCI being used?

- Priority targeting recommendations in the Blight Removal Task Force report
- City of Detroit auction areas
- Promise Zone application on the East Side
- Changing boundaries for grant spending
Toward An Open Data Future
Open Data Site

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Community Engagement
Data Workshops
LocalData Mobile App

1. Select the parcel
2. Submit results
3. Map updates
Interact and Explore!

Windshield Survey

Check for new results

Filter responses
- Is there a structure on the site?
  - Yes 20315
  - No 7530
  - No response 38

Clear filter

What is the condition of the structure?
- Good 13788
There are others like us

- Check out the National Neighborhood Indicators Partnership (NNIP)
  - [www.neighborhoodindicators.org](http://www.neighborhoodindicators.org)

- And your local NNIP partner NYU’s Furman Center
  - [www.furmancenter.org](http://www.furmancenter.org)
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