Olympia Snowe: The Senator Who Holds the Key to Health Care Reform
Joe Klein on Obama's Foreign Policy Struggles
Heroes of the Environment: TIME's Green All-Star Team
TIME
SPECIAL REPORT
The Tragedy Of Detroit
How a great city fell—and how it can rise again
BY DANIEL OKRENT

Motor City Mapping:
Data-Driven Decision-Making

Diana Flora
Data Driven Detroit
January 2015

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

Collection

Visualization

Analysis

Accessibility

Data-Driven Outcomes

MOTOR CITY MAPPING

Surveyors will gather comprehensive condition information for every property in Detroit, with an emphasis on evaluating **condition** and **occupancy.**

Michigan Nonprofit Association

DATA DRIVEN DETROIT
A Michigan Nonprofit Association Affiliate

LOVELAND TECHNOLOGIES

Why: The Big Picture

- Better **understand** the scope of the challenge of blight and vacancy in the city
- **Inform** a demolition, deconstruction, rehab plan
- **Engage** residents in the process of collecting conditions data
- Generate a **dialogue** and inform policy decisions
- Provide a forum for **feedback**, allowing the community to be involved in the blight identification process and track the status of future projects

The Story of Neighborhood Change

The Story of Neighborhood Change

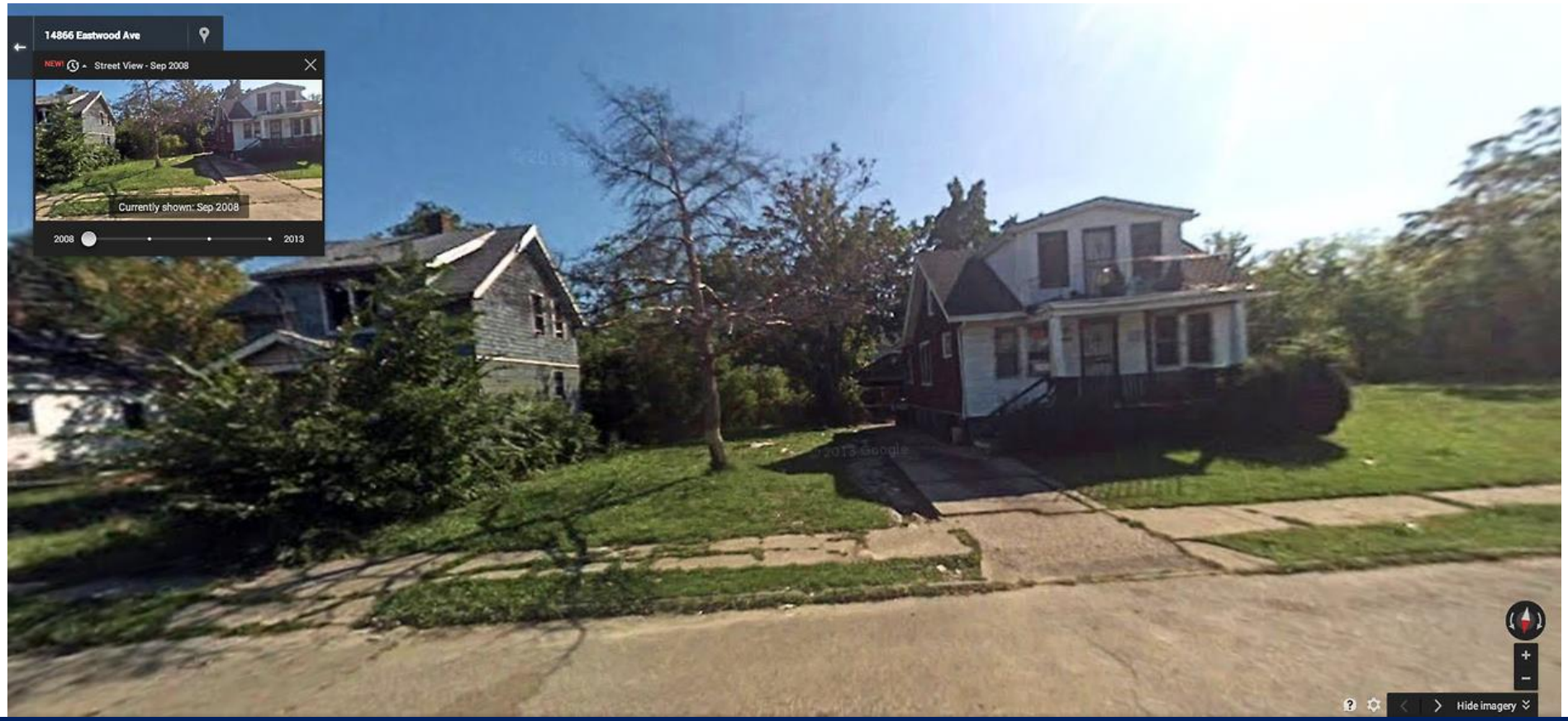
The Story of Neighborhood Change

The Story of Neighborhood Change

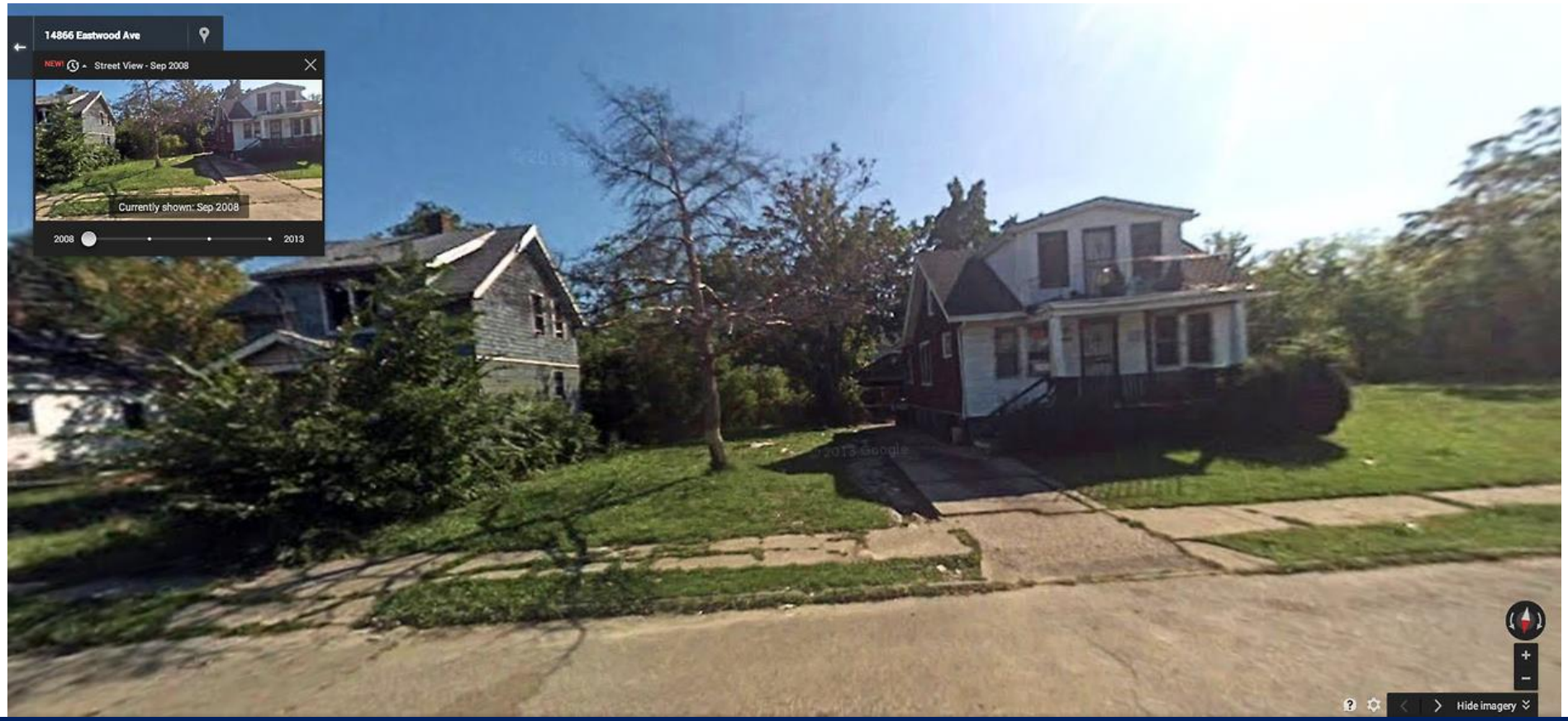
The Story of Neighborhood Change

The Story of Neighborhood Change

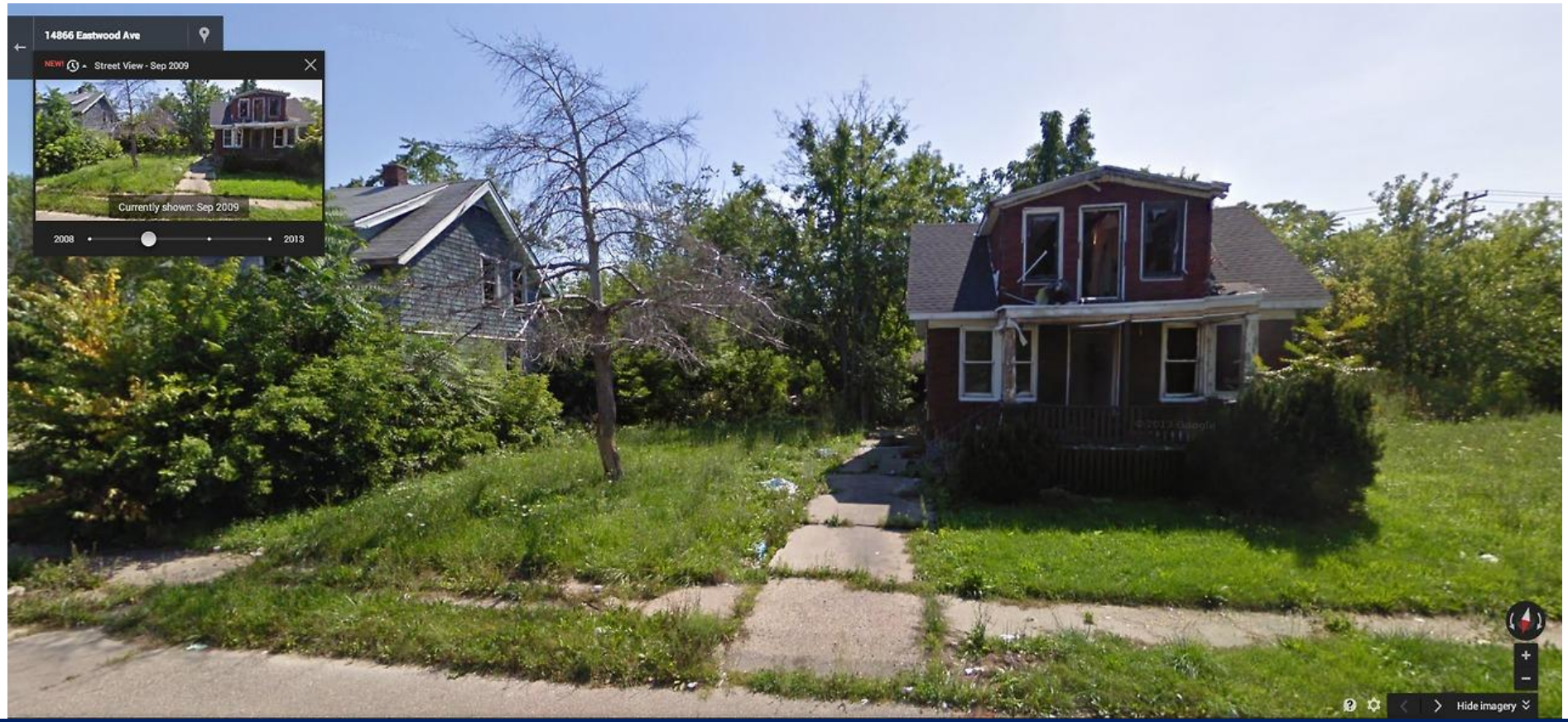
The Story of Neighborhood Change



The Story of Neighborhood Change



The Story of Neighborhood Change

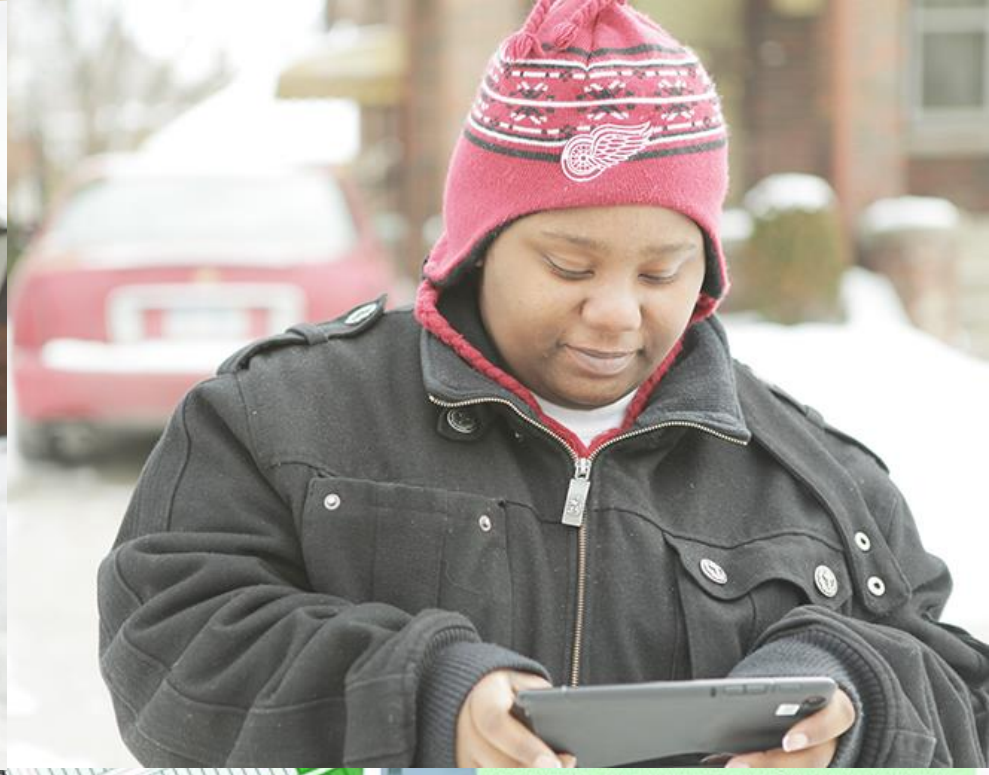


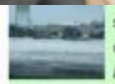
The Story of Neighborhood Change

The Story of Neighborhood Change

MOTOR CITY MAP
OFFICIAL BUSINE

1465 Chicago Blvd
Acreage: 1.6
Assessment: 0
Frontage: 0
Last Sale Date:
Last Sale Price: 0
Owner: GENERAL SERVICE ADM
Year Built: 1916
Blext Property
Get Directions
View
LOVELAND
-TECHNOLOGIES-





structure: yes, use: commercial, condition: good, occupancy: occupied, boarding: no, fire: no, dumping: no
Kimberly Williams: Dentist office
Kimberly Williams - 12:31 PM, Feb 4

10974 Wilshire
structure: yes, use: residential, condition: good, occupancy: occupied, boarding: no, fire: no, dumping: no, units: 1 unit
Kimberly Williams - 12:25 PM, Feb 4

8111 E Outer Drive
structure: yes, use: commercial, condition: good, occupancy: occupied, boarding: no, fire: no, dumping: no
Kimberly Williams - 11:04 AM, Feb 4

11180 Gratiot
structure: yes, use: commercial, condition: good, occupancy: occupied, boarding: no, fire: no, dumping: no, vacantlot: unimproved
Steven Willis - 10:55 AM, Feb 4

11288 Gratiot
structure: yes, use: commercial, condition: good, occupancy: occupied, boarding: no, fire: no, dumping: no
Jonathan Jenkins - 10:43 AM, Feb 4

Property Data

Data Driven Detroit has assembled the **clearest, cleanest, and most comprehensive** dataset for every Detroit property ever created.

Includes:

- Survey questions
- 30+ other third-party datasets

Preliminary Overview of the Data

Data From the Field

Structures

- Use
- Number of Units
- External Condition
- Occupancy
- Boarding Needs
- Fire Damage
- Dumping

Lots

- Use
- Improvement
- Maintenance
- Dumping

Preliminary Overview of the Data

Data From the Field

Structures

- Use
- Number of Units
- External Condition
- Occupancy
- Boarding Needs
- Fire Damage
- Dumping

Lots

- Use
- Improvement
- Maintenance
- Dumping

Third-Party Datasets

Both Structures & Lots

- Ownership
- Current & Future Land Use
- Tax Foreclosure Status
- Taxable Status
- Transactions
- 2009 Condition & Occupancy
- Fire

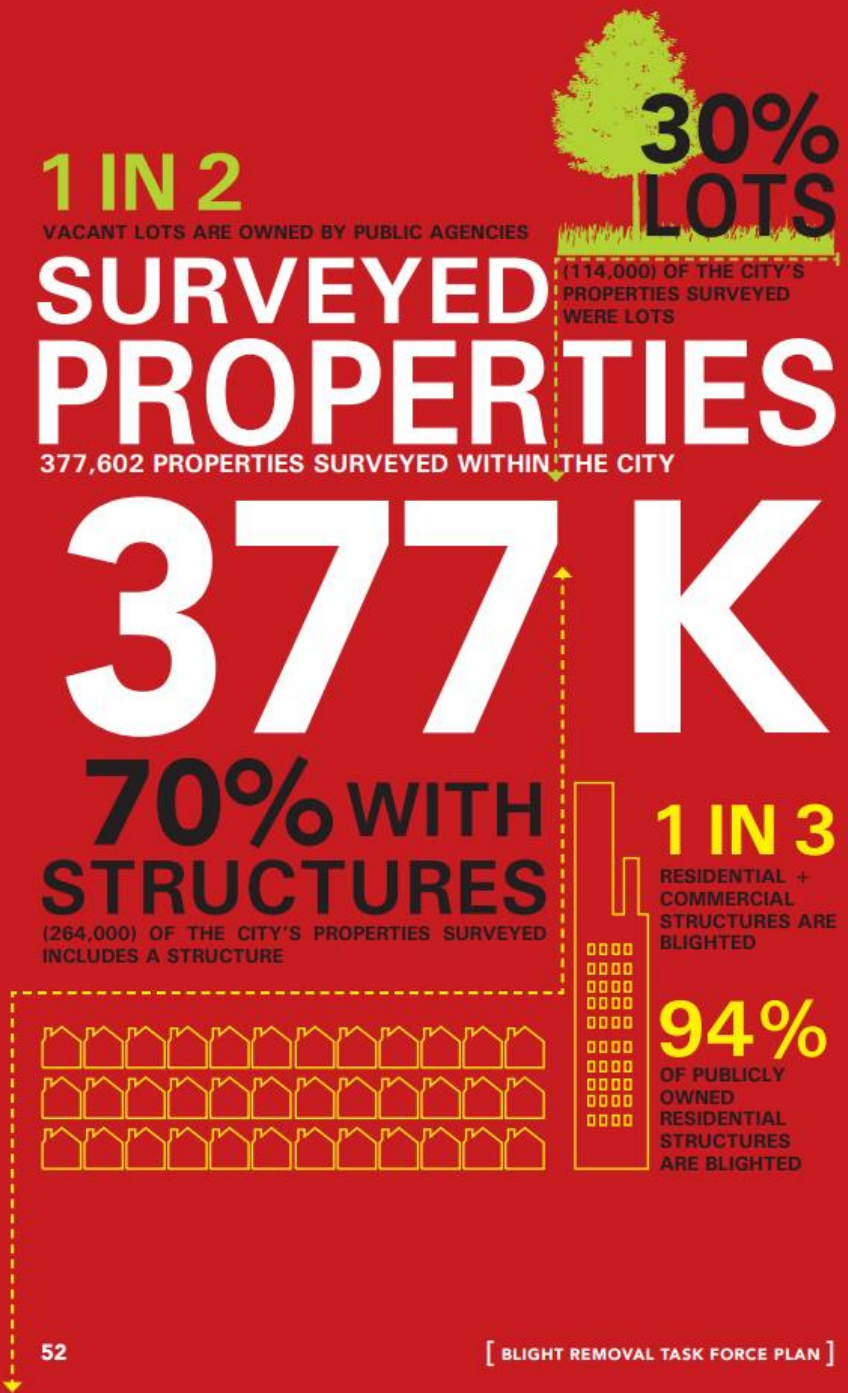
Structures

- Historic Designation & Eligibility
- Utility Shutoffs
- VOD Status
- Vacancy

r City
Lansing
Nearly 1 In
Structures
Need Inter

Every Neighborhood
Has A Future...
And It Doesn't
Include Blight

SURVEYED PROPERTIES
377,602 PROPERTIES SURVEYED WITHIN THE CITY
The Motor City Mapping successfully surveyed 378,136 of the 380,233 parcels within the 139 square miles of the city. The difference of 2,097 parcels represents those properties that could not be viewed from the street. Data Driven Detroit confirmed that data received from 377,602 surveys accurately matched third party data sets.
STRUCTURES
263,569 STRUCTURES
LOTS
114,033 LOTS
BLIGHT = 84,641 PARCELS
78,506 STRUCTURES +
6,135 LOTS REQUIRE AN INTERVENTION
STRUCTURES THAT MEET TASK FORCE DEFINITION OF BLIGHT
40,077 STRUCTURES
STRUCTURES WITH INDICATORS OF FUTURE BLIGHT
38,429 STRUCTURES
BLIGHTED VACANT LOTS
6,135 LOTS



[WHAT WE FOUND]

Of the 84,641 structures and vacant lots in need of intervention:

40,077 structures clearly meet the Task Force definition of "blight" and are recommended for immediate removal. Community engagement will be required to confirm removal or otherwise address significant remedial action for these properties.

38,429 structures have "Blight Indicators" and need further evaluation. The Strategic Assessment Triage Tool, discussed in Chapter 5, can be used to guide the evaluation process. The spectrum of interventions includes rehabilitation, removal, or securing.

At least 6,135 vacant lots showed evidence of dumping and need immediate attention. (Given the record breaking snowfall of 2014, the surveyors had difficulty getting an accurate identification of the vacant lot conditions.)

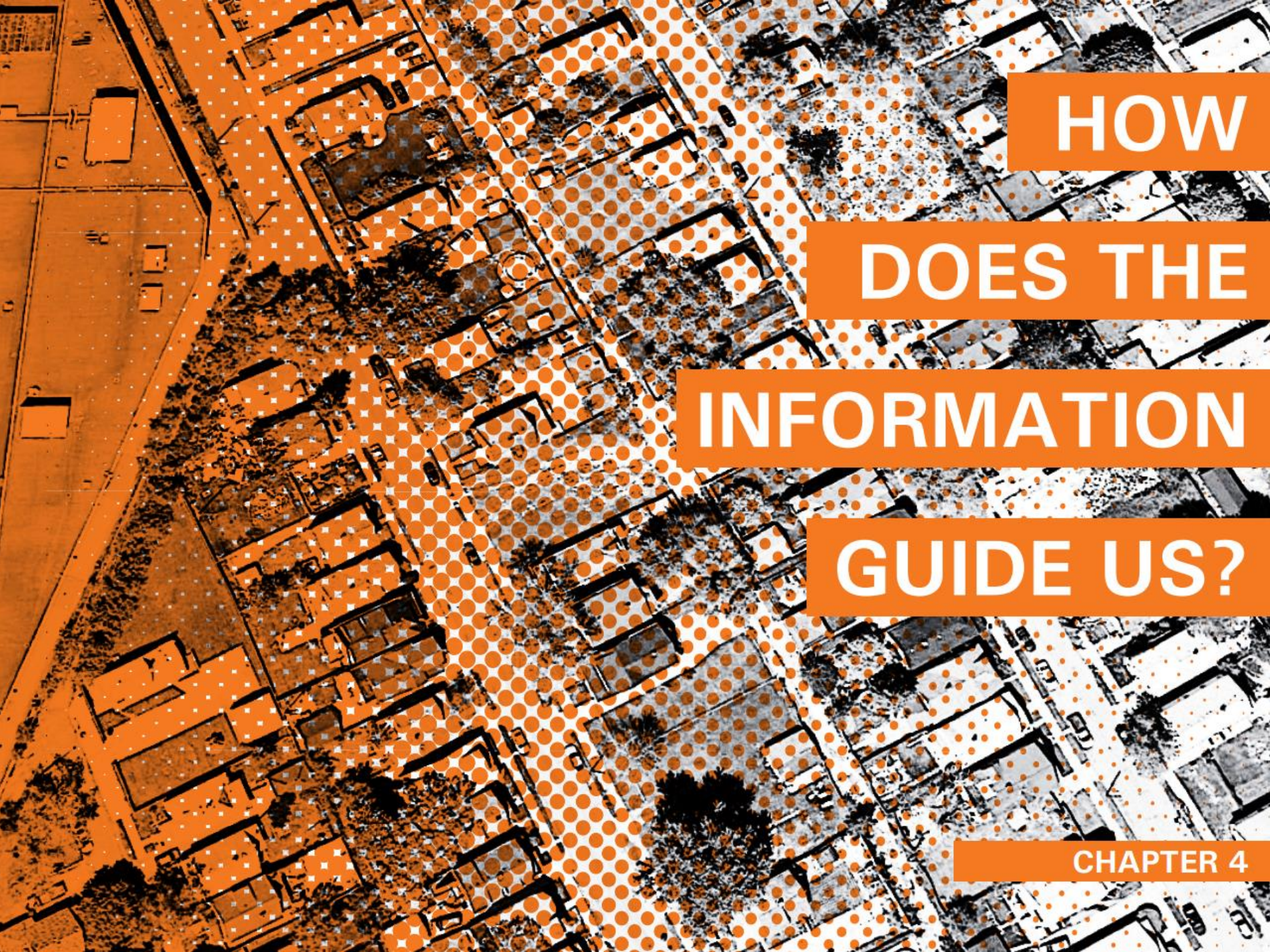
40,077
STRUCTURES THAT MEET TASK FORCE DEFINITION OF BLIGHT

+ 38,429
STRUCTURES WITH INDICATORS OF FUTURE BLIGHT

78,506
STRUCTURES WITH INDICATORS OF FUTURE BLIGHT

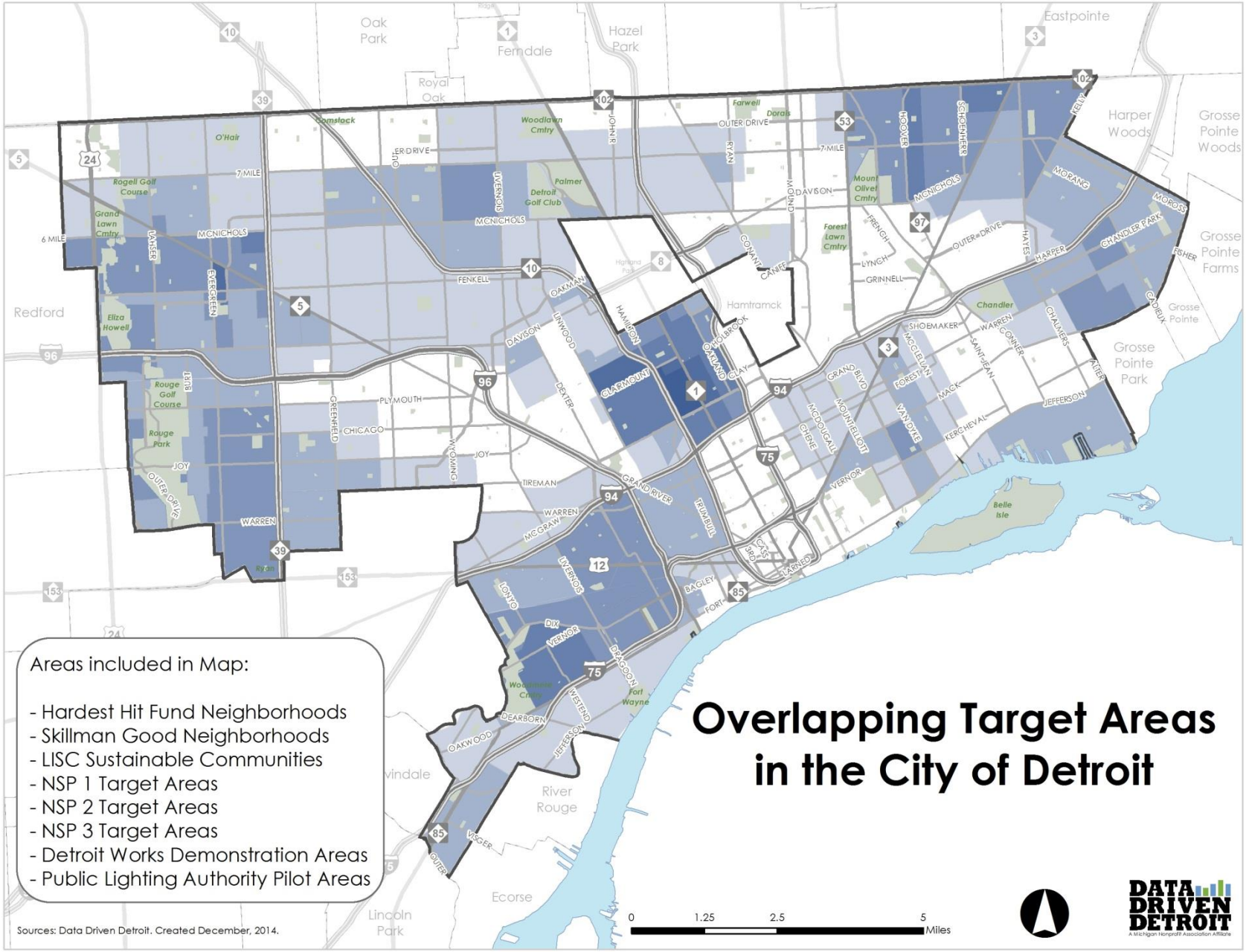
+ 6,135
BLIGHTED VACANT LOTS

84,641
TOTAL PROPERTIES MEETING THE BLIGHT TASK FORCE DEFINITION OF BLIGHT OR HAVE BLIGHT INDICATORS (INTERVENTIONS NEEDED)



HOW DOES THE INFORMATION GUIDE US?

CHAPTER 4

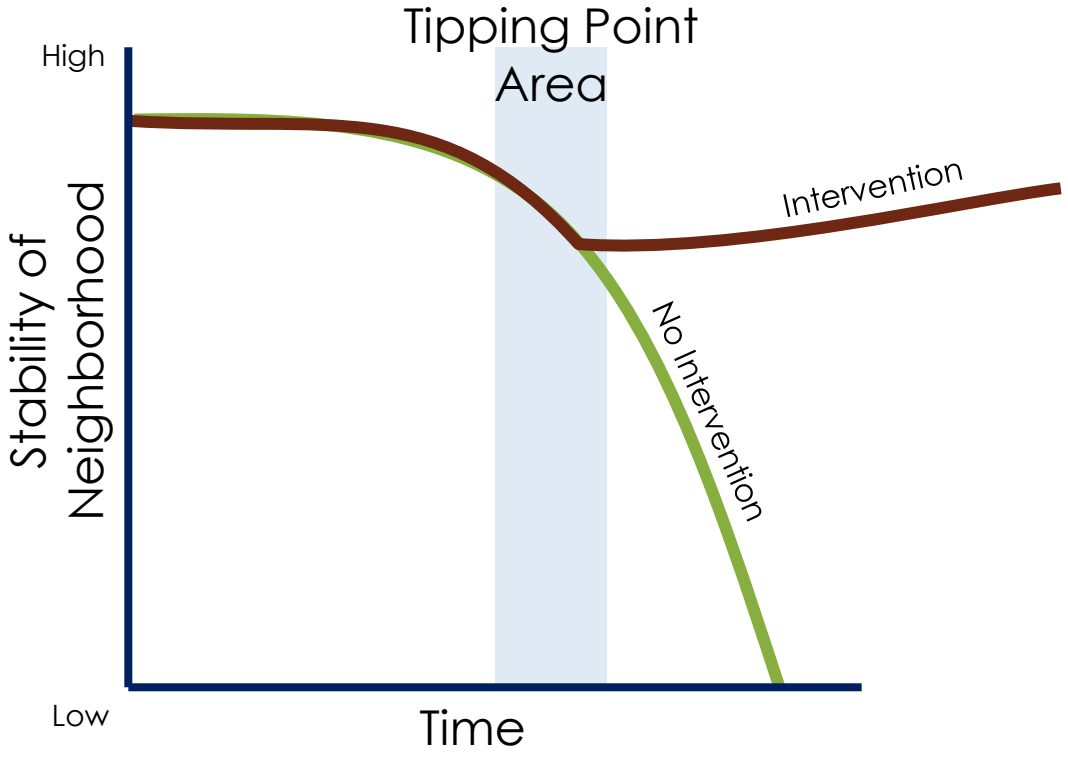

Areas included in Map:
- Hardest Hit Fund Neighborhoods
- Skillman Good Neighborhoods
- LISC Sustainable Communities
- NSP 1 Target Areas
- NSP 2 Target Areas
- NSP 3 Target Areas
- Detroit Works Demonstration Areas
- Public Lighting Authority Pilot Areas
Sources: Data Driven Detroit. Created December, 2014.
Overlapping Target Areas in the City of Detroit
0 1.25 2.5 5 Miles
DATA DRIVEN DETROIT
A Michigan Nonprofit Association Affiliate
Oak Park
Ferndale
Hazel Park
Eastpointe
Royal Oak
Harper Woods
Grosse Pointe Woods
Grosse Pointe Farms
Grosse Pointe
Grosse Pointe Park
Redford
Hamtramck
River Rouge
Ecorse
Lincoln Park
Belle Isle
Fort Wayne
Rouge Park
Rouge Golf Course
Rogell Golf Course
Grand Lawn Cmtry
Eliza Howell
O'Hair
Woodlawn Cmtry
Palmer Detroit Golf Club
Mount Olivet Cmtry
Forest Lawn Cmtry
Chandler
Comstock
Farwell
Doris
7 MILE
6 MILE
OUTER DRIVE
MCNICHOLS
DAVISON
FENKELL
PLYMOUTH
CHICAGO
JOY
WARREN
TIREMAN
GRAND RIVER
GRAND BLVD
JEFFERSON
MACK
KERCHEVAL
VERNOR
DEARBORN
OAKWOOD
WESTEND
DIX
BAGLEY
FORT
CLAY
OAKMAN
HAMILTON
CLARK
CONNER
CANFIELD
LYNCH
GRINNELL
SHOEMAKER
WARREN
HARPER
HAYES
FRENCH
MORANG
MOROSS
CHANDLER PARK
FISHER
CADIEUX
CHALMERS
ALTER
SAINT-JEAN
MCDOUGALL
MOUNIER
ELLIOTT
VANDYKE
GRATIOT
MCGRAW
LIVERNOIS
WYOMING
GREENFIELD
DEXTER
LINWOOD
EVERGREEN
LAHSER
RUTH
SCHOENHERR
HOOVER
KELLY
JOHN R
RYAN
WOODWARD
TRUMBULL
CASS
ST JOHN
DAGGETT
VIGER
OUTER
10
39
24
5
96
75
94
12
85
153
1
3
53
97
102
8

The Data Driven Framework for

Maximizing Community Impact (MCI)

Beginning at a Neighborhood Level

Positive impact of intervention is greatest in the "tipping point" neighborhoods



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

Analytical Choices

Residential

OR

Commercial

Decline

OR

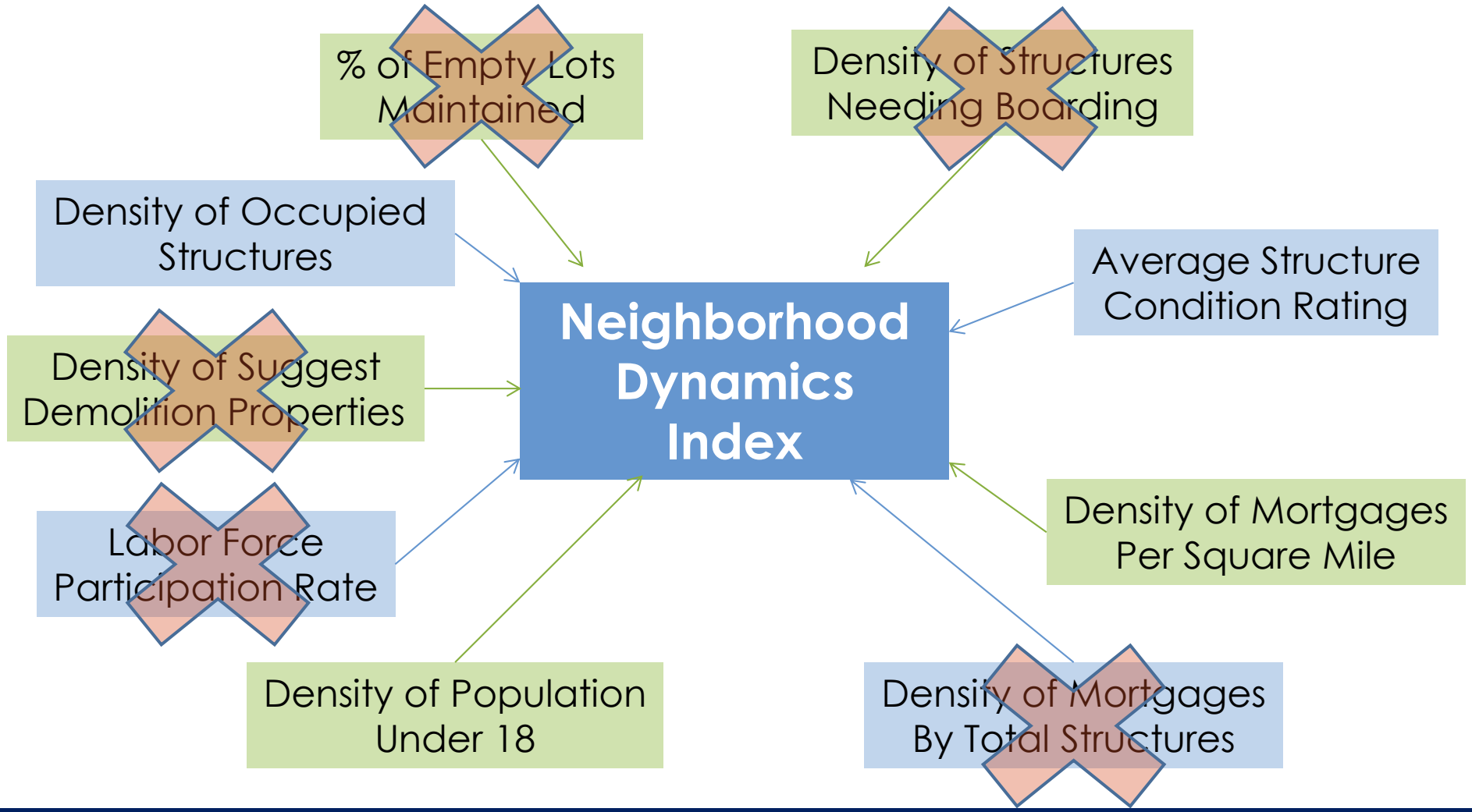
Growth

How does it work?

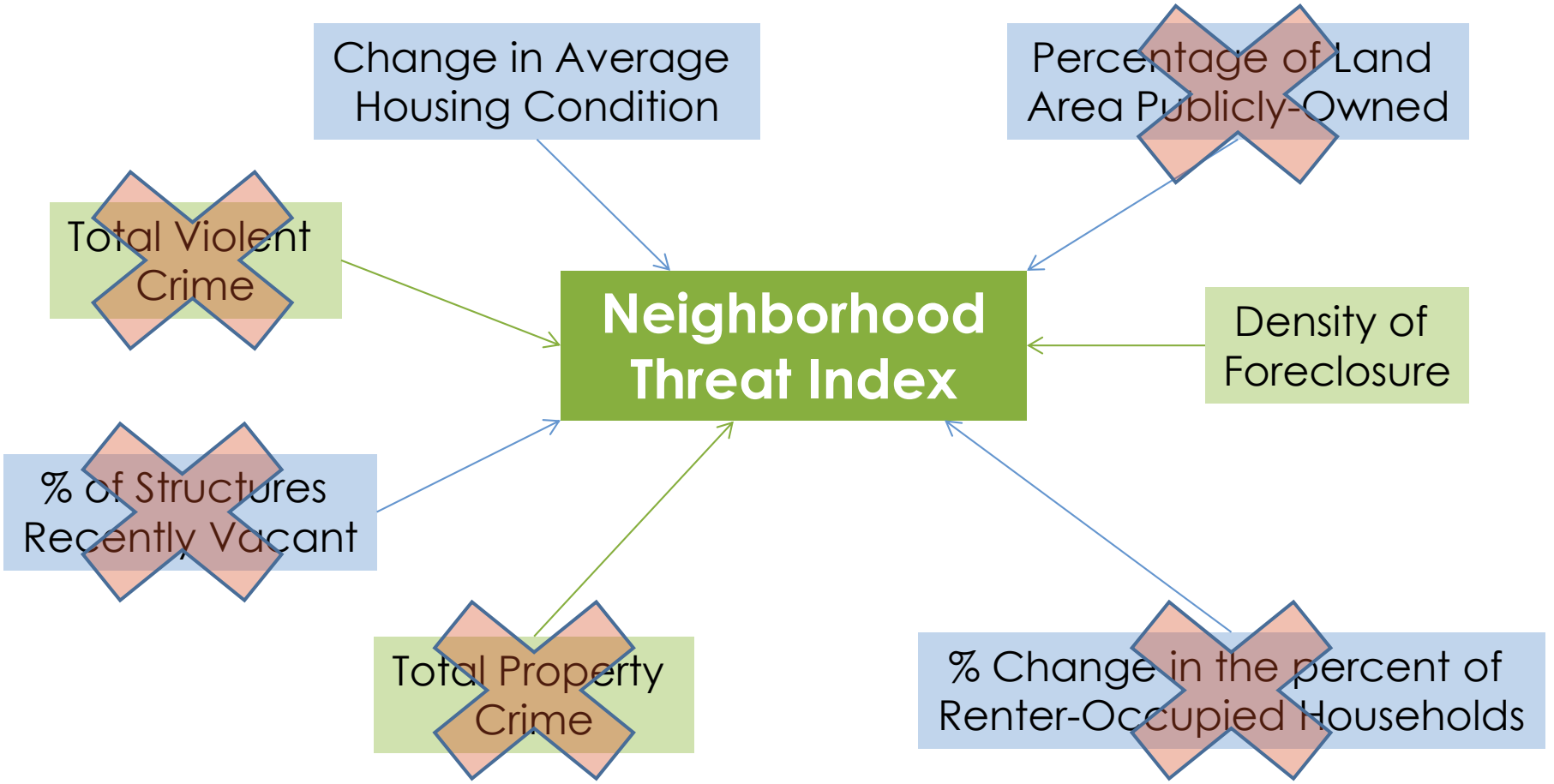
Two-tier process

- Neighborhood Dynamics Index: Identify areas that best meet objectives for intervention
- Neighborhood Threat Index: Identify "tipping point" areas within geographies highlighted by Dynamics Index

Checking for Collinearity



Checking for Collinearity



The MCI in Action

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

Neighborhood Dynamics Index

- Occupied Structures per Square Mile
- Average Structure Condition Rating
- Population Under 18 per Square Mile
- Mortgage Transactions per Square Mile

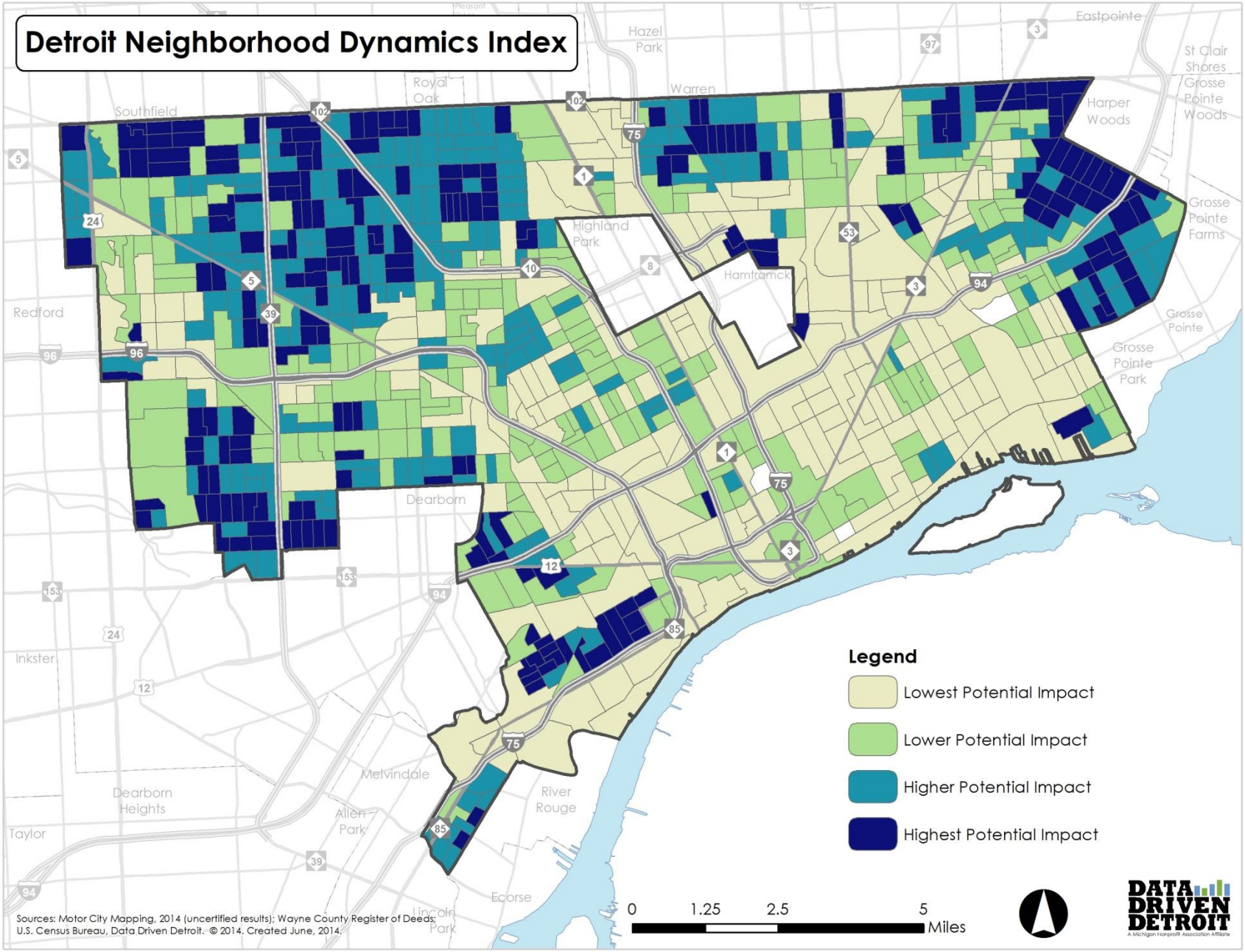
Neighborhood Threat Index

- Foreclosures per Square Mile, 2008-2013 (sum of Sheriff's Sales and Tax Foreclosures)
- Change in residential average condition rating since 2009

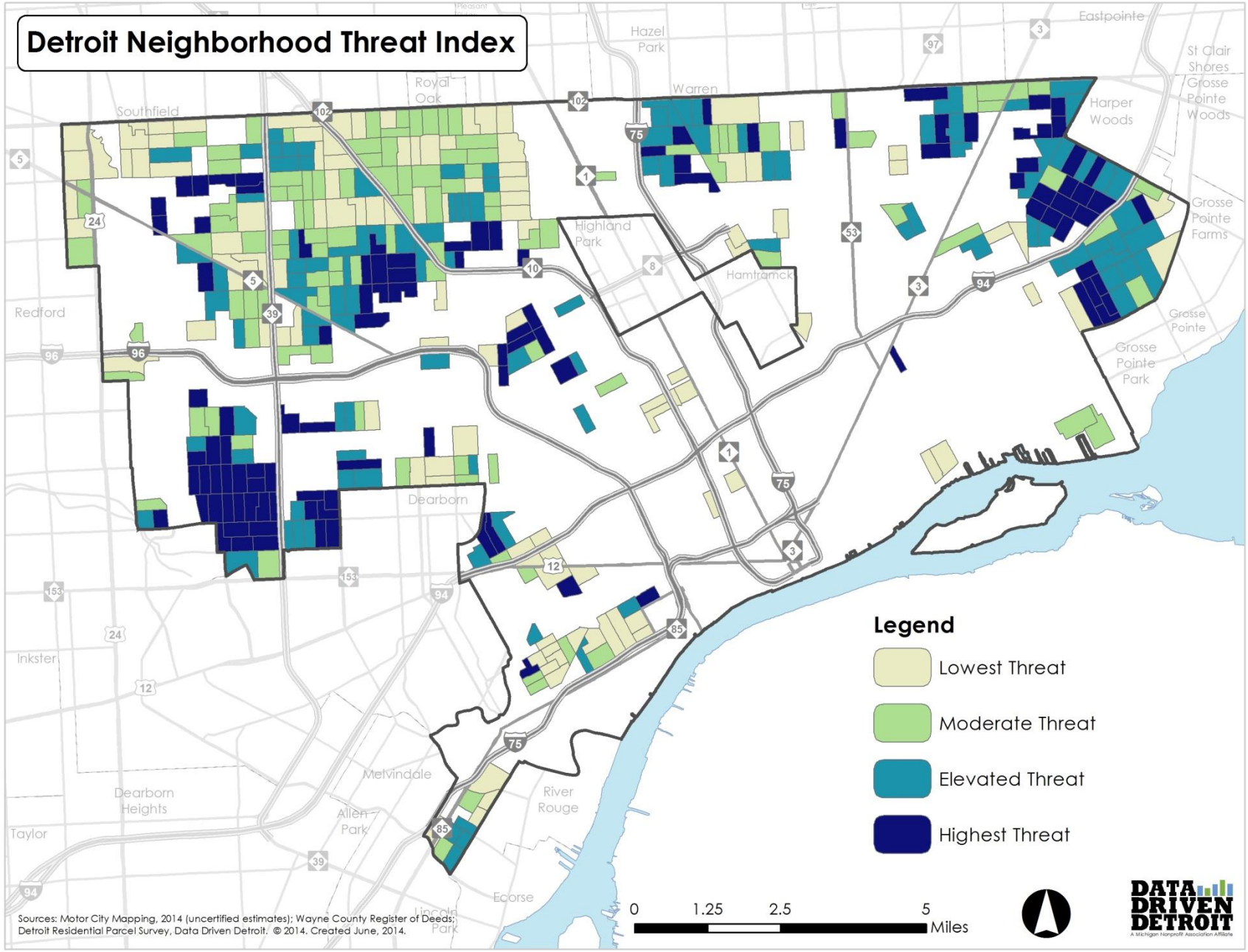
How does it work?

Indices are calculated sequentially:

Detroit Neighborhood Dynamics Index



Detroit Neighborhood Threat Index



Summary of High-Threat, High-Impact Neighborhoods

Total Population (2010): 193,384

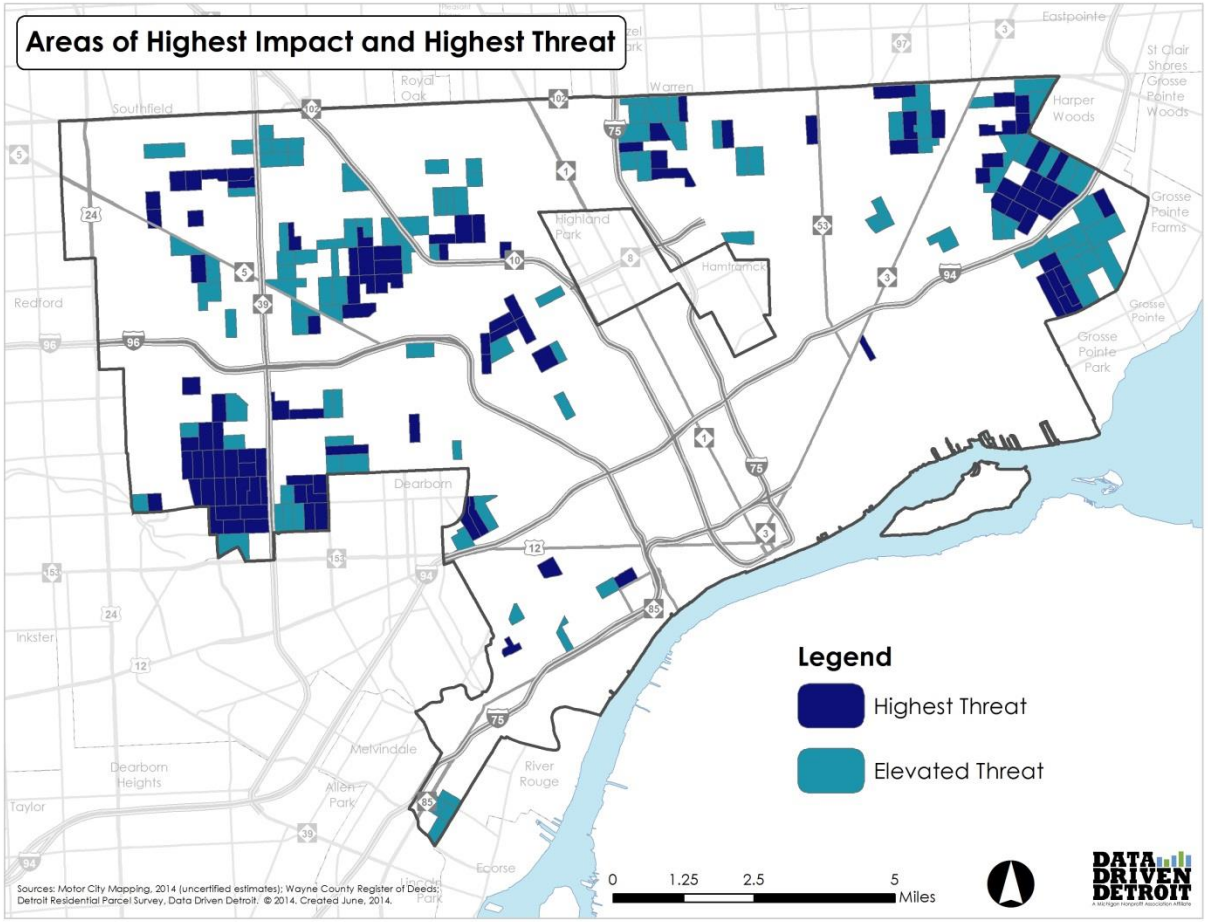
Population <18 (2010): 58,435

Occupied Structures: 61,449

% of Population Under 18: 30.22%

% of Occupied Structures: 30.18%

% of Detroit's Land Area: 15.72%



What Comes After?

Drilling down into the identified High- and Elevated-Threat areas:

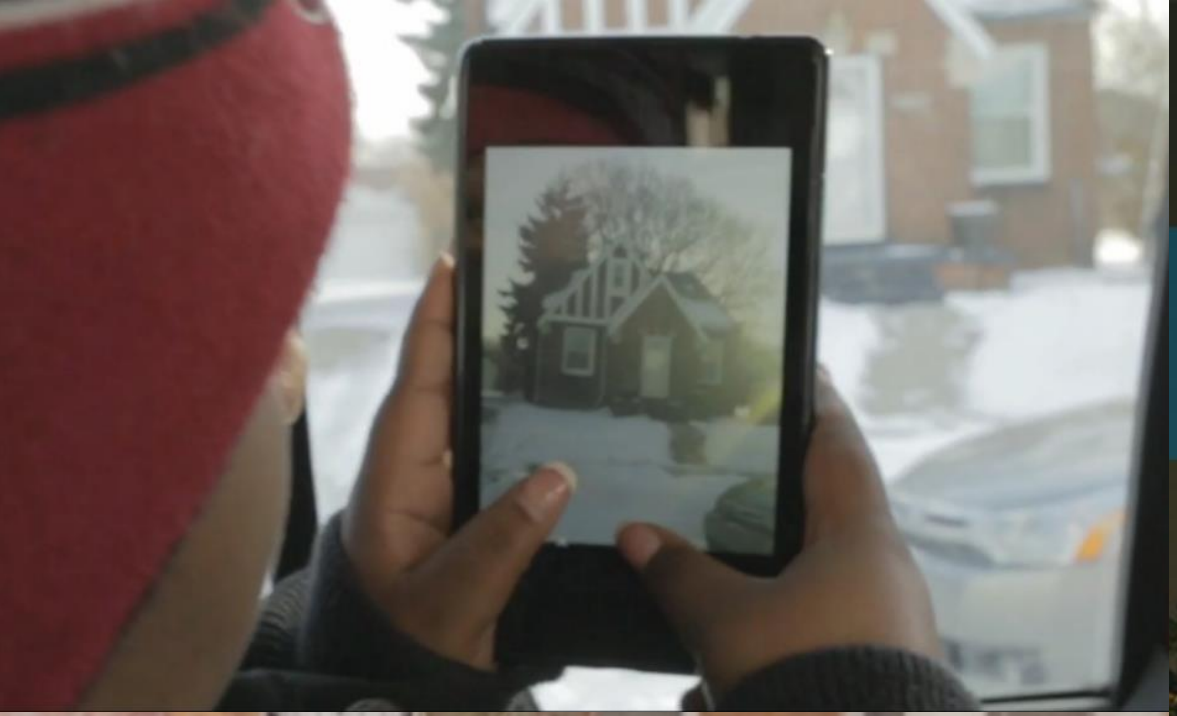
- Assess on a parcel and block level which locations are optimal for staging interventions
- Interventions could incorporate a wide range of policy options, including building removal, rehabilitation, and foreclosure prevention

A Foundation for Ongoing Analysis

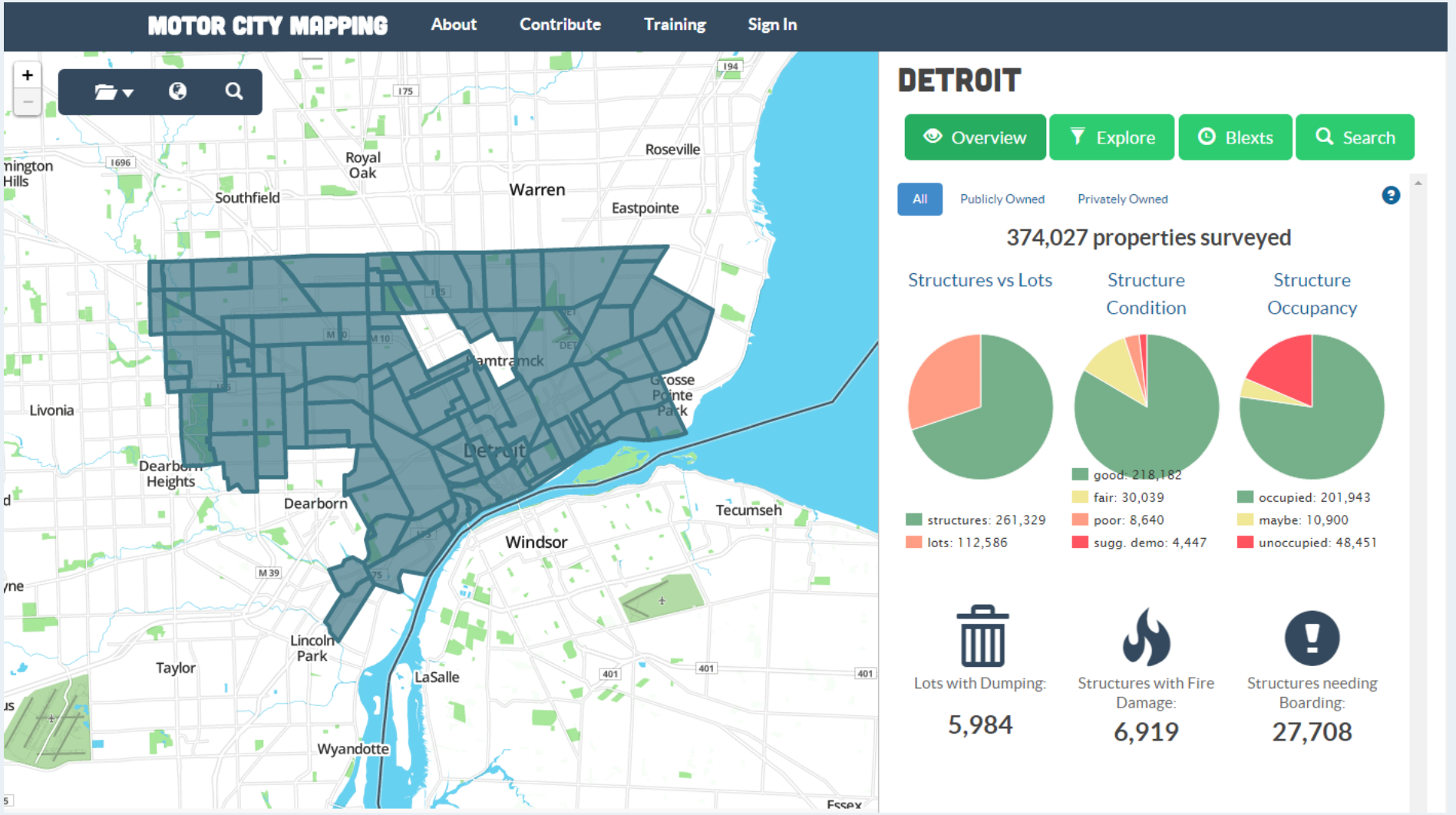
- The MCI can be periodically re-tooled to account for changing conditions, as long as the data are updated
- Intervention areas will continually evolve as conditions change

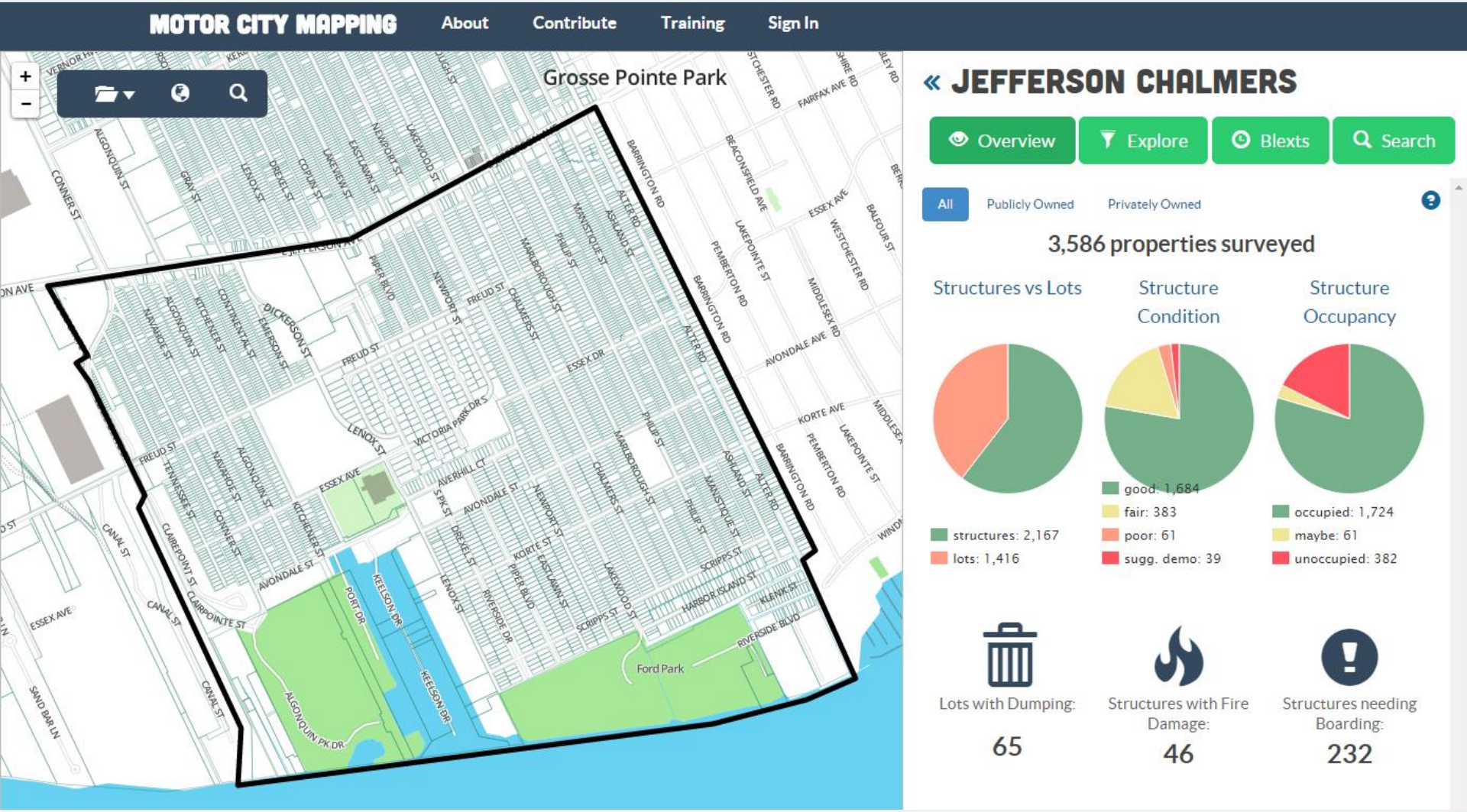
MOTOR CITY MAPPING

Continues…



BLEXTING
Survey property, report problems, and track changes in your neighborhood
Survey Detroit
LOVELAND
TECHNOLOGIES
sign up or login with a LOVELAND Passport


MOTOR CITY MAPPING
About
Contribute
Training
Sign In
Royal Oak
Southfield
Warren
Roseville
Eastpointe
Livonia
Hamtramck
Grosse Pointe Park
Detroit
Dearborn Heights
Dearborn
Tecumseh
Windsor
Lincoln Park
Taylor
LaSalle
Wyandotte
Essex
DETROIT
Overview
Explore
Blexts
Search
All
Publicly Owned
Privately Owned
374,027 properties surveyed
Structures vs Lots
structures: 261,329
lots: 112,586
Structure Condition
good: 218,182
fair: 30,039
poor: 8,640
sugg. demo: 4,447
Structure Occupancy
occupied: 201,943
maybe: 10,900
unoccupied: 48,451
Lots with Dumping:
5,984
Structures with Fire Damage:
6,919
Structures needing Boarding:
27,708


MOTOR CITY MAPPING
About
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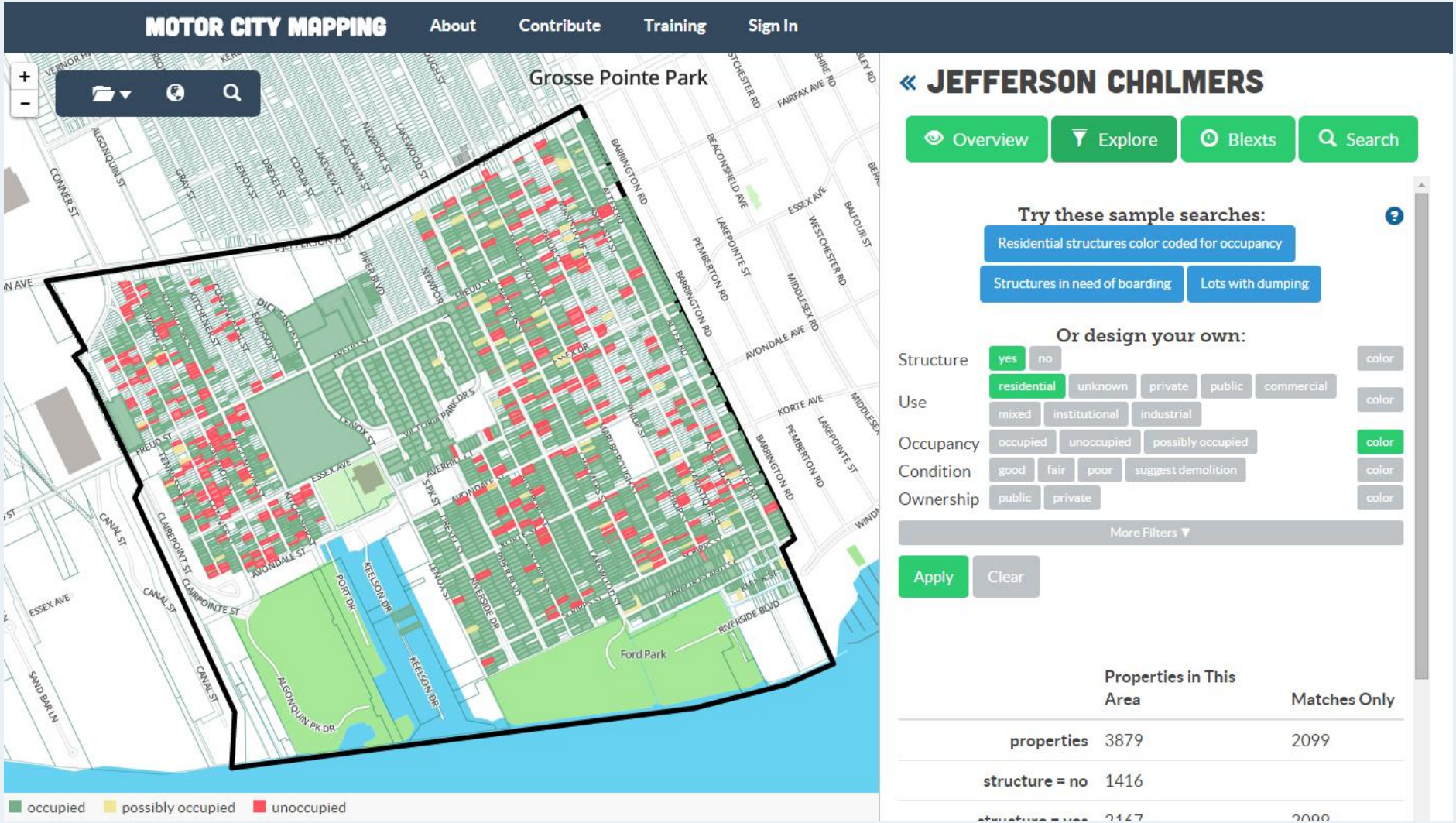
Sign In
Grosse Pointe Park
« JEFFERSON CHALMERS
Overview
Explore
Blexts
Search
All
Publicly Owned
Privately Owned
3,586 properties surveyed
Structures vs Lots
structures: 2,167
lots: 1,416
Structure Condition
good: 1,684
fair: 383
poor: 61
sugg. demo: 39
Structure Occupancy
occupied: 1,724
maybe: 61
unoccupied: 382
Lots with Dumping:
65
Structures with Fire Damage:
46
Structures needing Boarding:
232
Ford Park


MOTOR CITY MAPPING
About
Contribute
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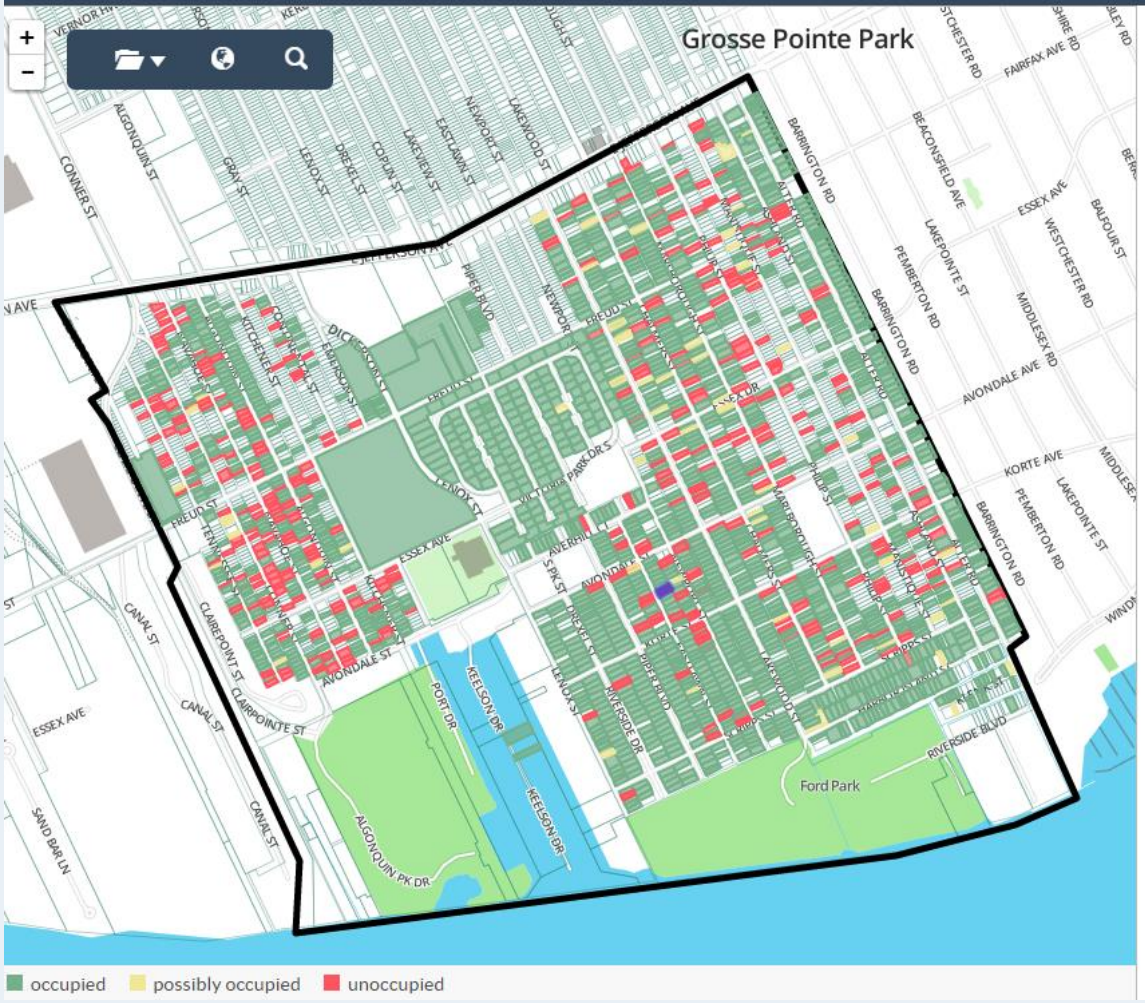
Sign In
Grosse Pointe Park
« JEFFERSON CHALMERS
Overview
Explore
Blexts
Search
Try these sample searches:
Residential structures color coded for occupancy
Structures in need of boarding
Lots with dumping
Or design your own:
Structure
yes
no
color
Use
residential
unknown
private
public
commercial
mixed
institutional
industrial
color
Occupancy
occupied
unoccupied
possibly occupied
color
Condition
good
fair
poor
suggest demolition
color
Ownership
public
private
color
More Filters ▼
Apply
Clear
Properties in This Area
Matches Only
properties
3879
2099
structure = no
1416
Ford Park
occupied
possibly occupied
unoccupied



« JEFFERSON CHALMERS

Overview Explore Blexts Search

Search for a Place Go

350 EASTLAWN

Blexted August 18, 2014

Structure: yes
Use: residential
Condition: fair
Occupancy: unoccupied

« JEFFERSON CHALMERS

Overview | Explore | Blexts | Search

Search for a Place | Go

350 EASTLAWN

Blexted August 18, 2014

Structure: yes
Use: residential
Condition: fair
Occupancy: unoccupied
Needs Boarding: yes
Fire Damage: no
Dumping: no
Units: 1 unit

« JEFFERSON CHALMERS

Overview | Explore | Blexts | Search

Search for a Place | Go

350 EASTLAWN

Blexted December 19, 2013

Structure: yes
Use: residential
Condition: fair
Occupancy: unoccupied
Needs Boarding: yes
Fire Damage: no
Dumping: no
Units: 1 unit
Ownership: private

« JEFFERSON CHALMERS

Overview | Explore | Blexts | Search

Search for a Place | Go

350 EASTLAWN

Street View (August 2013) Open in Google Maps

Building Detroit

Powered by the Detroit Land Bank Authority

4145 Cadieux

SALE DATE: 05/09/2014

1,100 FT² | 3 BED | 1 BATH

4884 Yorkshire

SALE DATE: 05/12/2014

1,600 FT² | 3 BED | 1.5 BATH

1,600 FT² | 3 BED | 1.5 BATH

5500 Kensington

SALE DATE: 05/14/2014

5266 Grayton

SALE DATE: 05/15/2014

5261 Grayton

SALE DATE: 05/16/2014

Since July:
Over 400 unique users submitting over 100,000 records

Remaining Questions

How do we remain as inclusive as possible in every step of the process?

Initiation	Execution	Ownership
✔ Met with community groups	✔ Hired residents to do the data collection	✔ Residents will contribute in an ongoing process
! Involve people in creating the questions	! Find ways to involve those not in the project	! Involve people in the synthesis of the information
? Did we collect the most meaningful data to the most people?	? Will people understand why this work is important?	? How will it impact the actual distribution of resources?

www.DataDrivenDetroit.org

Diana Flora
Diana@DataDrivenDetroit.org
@dianajflora

TechTown
440 Burroughs #330
Detroit, Michigan 48202

Extra Slides

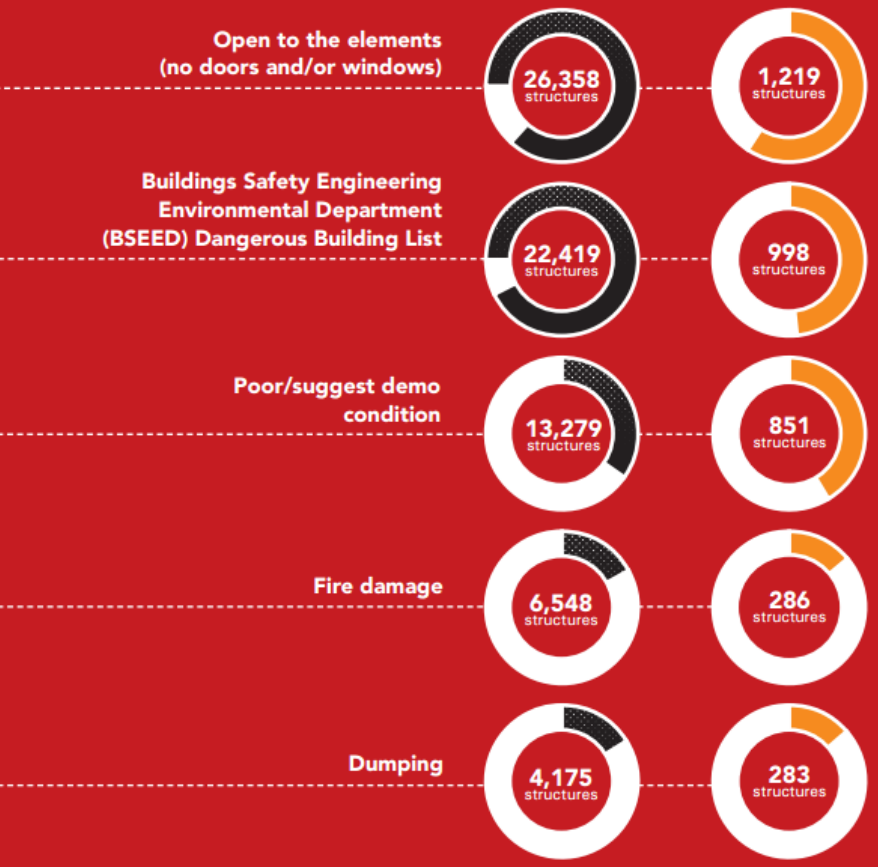
40K

40,077 structures are recommended for removal as they meet the Task Force definition of blight (Residential and non-residential structures)

RESIDENTIAL STRUCTURES (38,021)

NON-RESIDENTIAL STRUCTURES (2,056)

DATA SET CATEGORIES



NOTE: Structures fall into one of these categories but may fall into more than one. For example, a structure may be in poor/suggested demo conditions and have fire damage.

40,077 STRUCTURES MEET TASK FORCE DEFINITION OF BLIGHT

The MCM team identified 40,077 structures that meet the Task Force definition of blight and are candidates for removal. Prior to any building being brought down, it is essential to engage with residents and the community to confirm removal is the appropriate intervention. *(Specific outlines for community engagement can be found in this report in Chapter 2.)*

Structures that are candidates for removal meet any one of the following criteria:

- Reported with Poor or Suggest Demo external condition in the MCM Survey
- Fire Damaged
- Listed in the Buildings, Safety Engineering, and Environmental Department Dangerous Buildings inventory
- Open to the elements or trespass
- Significant dumping

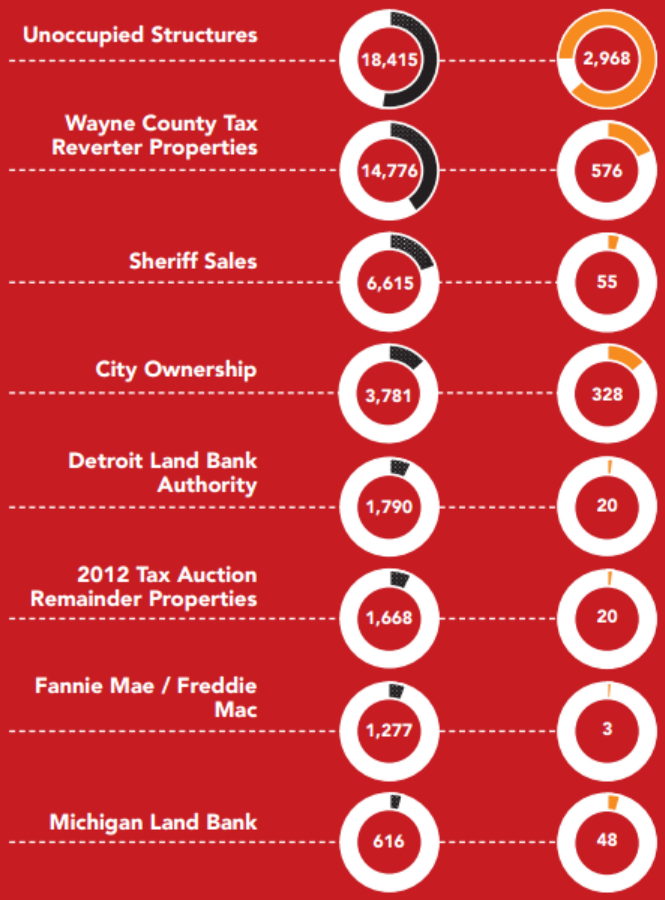
38K

38,429 structures with blight indicators and identified for further analysis (Residential and non-residential structures)

RESIDENTIAL STRUCTURES (35,014)

NON-RESIDENTIAL STRUCTURES (3,415)

DATA SET CATEGORIES



NOTE: Structures fall into one of these categories but may fall into more than one. For example, a structure may be both unoccupied and a Michigan Land Bank property.

38,429 STRUCTURES WITH INDICATORS OF FUTURE BLIGHT

Properties in this category meet criteria that are referred to as properties having Blight Indicators and will need further evaluation to identify the appropriate intervention. Structures within this category meet any one of the following criteria:

- Unoccupied and/or abandoned
- Land Bank & city ownership
- Wayne County ownership (including reverter clause)
- Sheriff's Deed
- Fannie Mae or Freddie Mac ownership

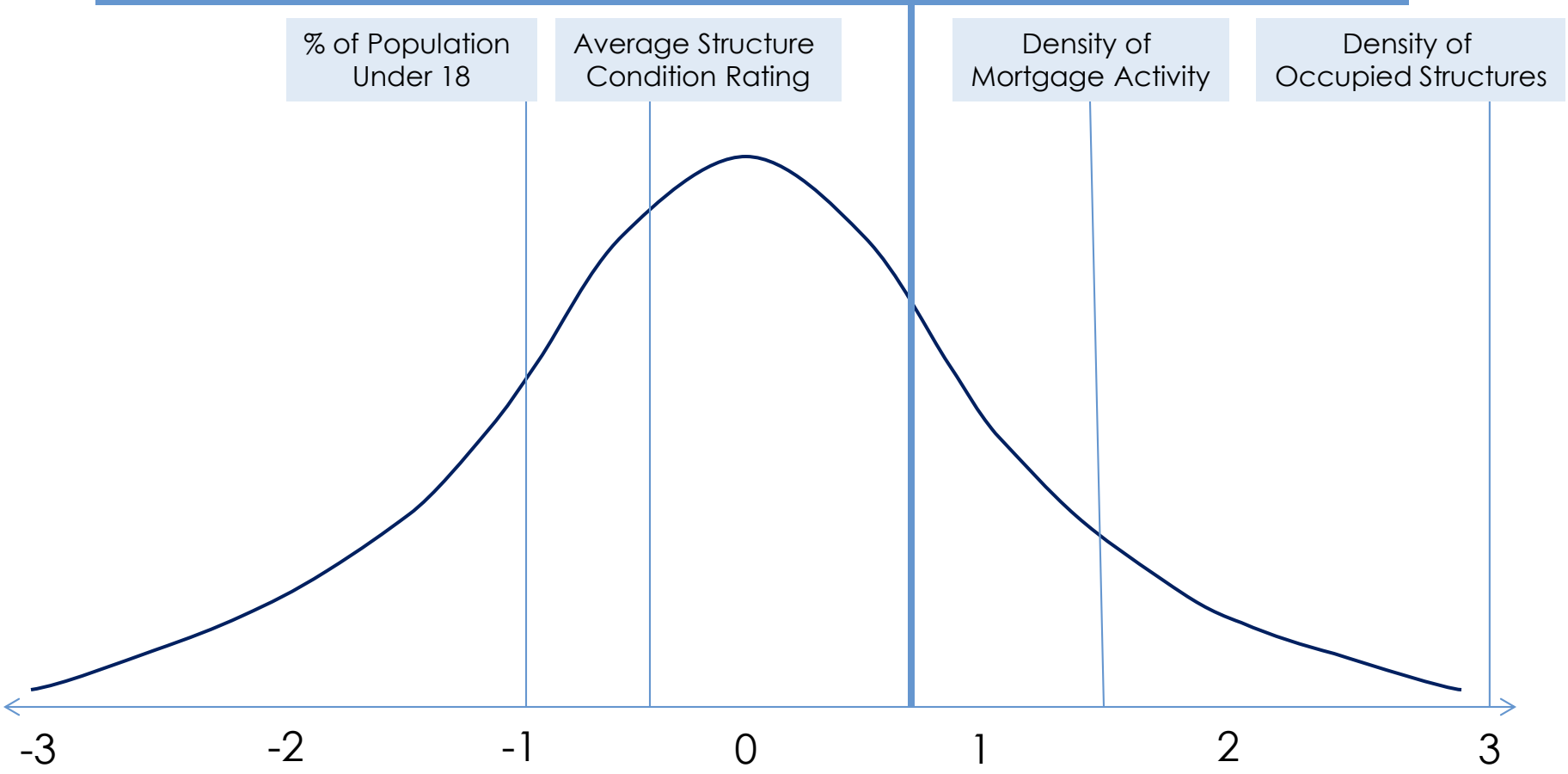
While these properties may otherwise be considered non-blight (i.e., arguably in good or fair condition) today, based on these characteristics, there is a high probability that they will devolve into Blight in the near future and need to be removed. The Task Force recommends further inspection and data gathering to confirm this intervention approach.

While MCM has collected a robust database of property information, additional factors need to be considered prior to deciding how to intervene on a these specific properties. In addition to getting direct feedback from the community, the Task Force recommends using the Strategic Assessment Triage Tool (SATT) to gather additional information. *(The SATT tool is explained in more detail in Chapter 5.)*

Properties included in the group of properties with "Blight Indicators" and in need further analysis does not mean that doing nothing is an option. For all of these structures, one of three interventions will be needed: removal, through demolition (utilizing deconstruction in some cases), restoration back to code, or, secure and maintain until a new use can be found.

During conversations with local deconstruction and demolition contractors, the Task Force learned that structures in this category have a high likelihood of resulting in candidates for removal. Primarily, contractors find that rehabilitation is cost prohibitive from a market perspective. While there are circumstances where individuals, government and developers may pay or invest more than the market value to restore a structure, such instances are rare. One example would be a home inherited from a family member which has sentimental value. Another example is when developers are trying to bolster the real estate market in a particular neighborhood. Based on the information gathered, the Task Force assumed that 80-90 percent of properties with Blight Indicators (or approximately 32,000 of the structures in this category) will need to be removed in the near future.

This would result in an anticipated blight removal candidate pool of approximately 72,000 structures (40,077 parcels that meet the definition of blight + 32,000 parcels that represent 80-90 percent of the parcels with blight indicators).

Calculating the Indices

(3 + 1.5 – 1 – 0.5)/4 = NEIGHBORHOOD DYNAMICS SCORE = 0.75