

RED FIELDS TO  
*green fields*

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*Parks Revitalize &  
Connect Communities*

Greenway Connections, Environmental Health,  
and Urban Transformation









## Introduction

The American financial crisis in the fall of 2008 triggered a global economic collapse. Almost \$7 trillion in stock market value was lost, millions of Americans lost their jobs, millions of families lost their homes, and once profitable businesses shut down. The toll from this collapse was devastating on the City of Detroit given our prior failing economy. Over the last six decades, Detroit has experienced a steep decline in population creating a strain on the City's tax revenue. Additionally, housing values continue to decline across the U.S. The biggest single source of wealth for many people, their home equity, has fallen almost 50 percent from its peak in 2006 according to Federal Reserve statistics. When homeowners are unable to make their mortgage payments, businesses suffer. The loss of manufacturing base has caused a multitude of problems for the City including population decline, problems in tax revenue, and residential, commercial, and industrial abandonment.

In his April 2011 address, Mayor Dave Bing highlighted the value green space can add to the City through job creation, increased property value, and reduced crime. Properties that are liabilities today can be acquired and restored, stabilizing land values, bringing liquidity to the banking system, and building community infrastructure assets that provide jobs.

Detroit is one of 11 cities across the country in a national vision called Red Fields to Green Fields, a vision and plan to revitalize our cities by using public-private partnerships to create green space, parks and conservation land while putting Americans back to work. A local team has worked with the City Parks Alliance and Georgia Tech Research Institute to examine how the Redfields to Greenfields concept can help Detroit uniquely address some of its most serious challenges.

### *What is a Red Field?*

A "Red Field" property can be physically or financially distressed, or both, and has negative value -- civically, environmentally and economically. Red Fields can be brownfields -- sites impacted by environmental concerns, such as asbestos containing materials, underground storage tanks, or contaminated soil or water.

“Now is the chance to build on our strengths. Out of crisis comes opportunity. The value of our real estate is at an all time low. There's nowhere to go but up.”

Dave Bing, Mayor of Detroit  
April 20, 2011, Bloomberg.com





*Problem #1:*  
Population Decline



# Population Decline

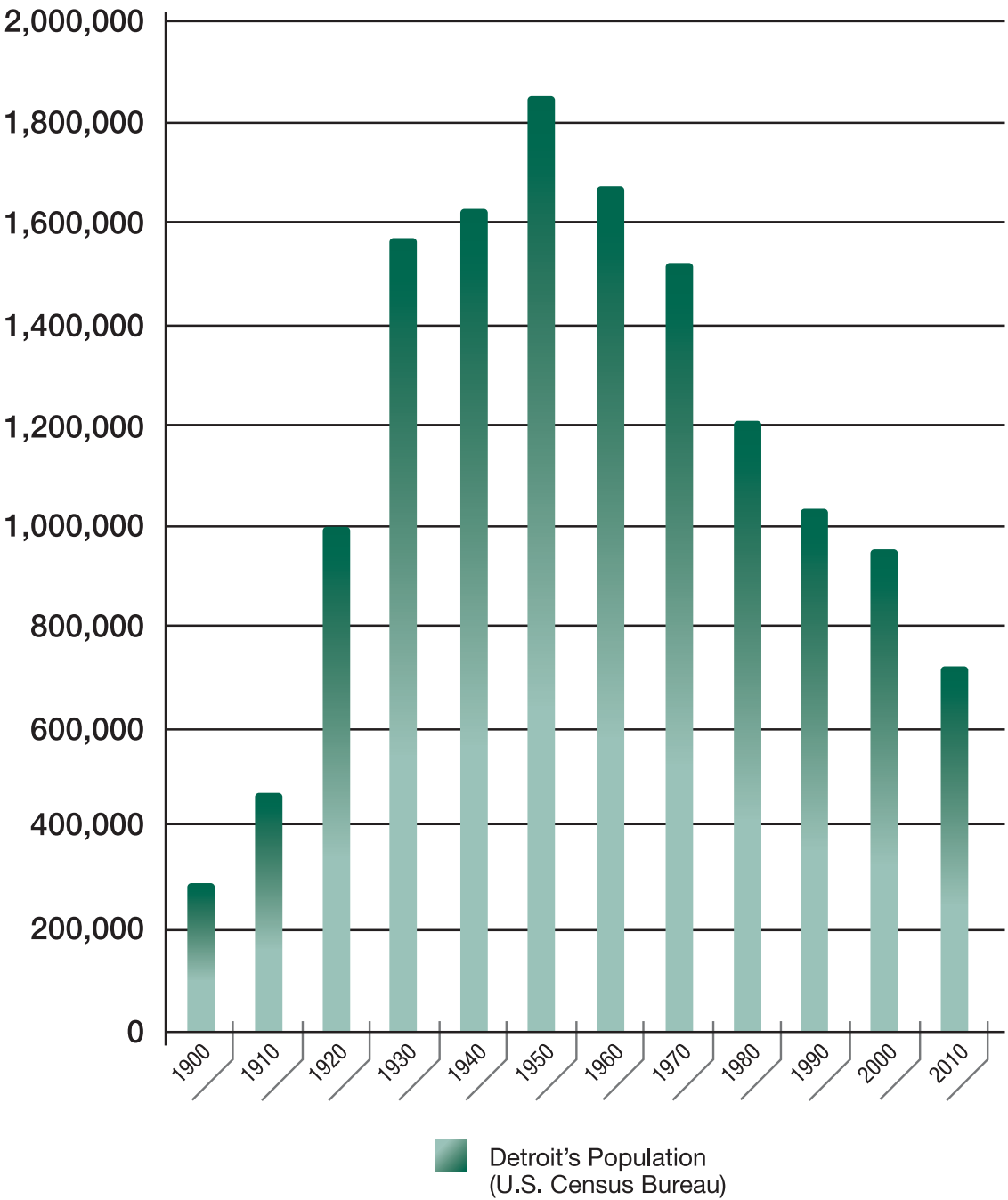
- Detroit is on an unsustainable path; the existing population can not support the infrastructure.
- Detroit’s population decreased 25 percent in the decade between 2000 and 2010.

» -57%

Detroit population change over 1,000,000 in the last 50 years.

### How Detroit Compares:

Pittsburgh	-51%
Cleveland	-48%
Minneapolis	-27%
Chicago	-20%
Milwaukee	-6%



## Population Decline

125,017 residential parcels are unoccupied



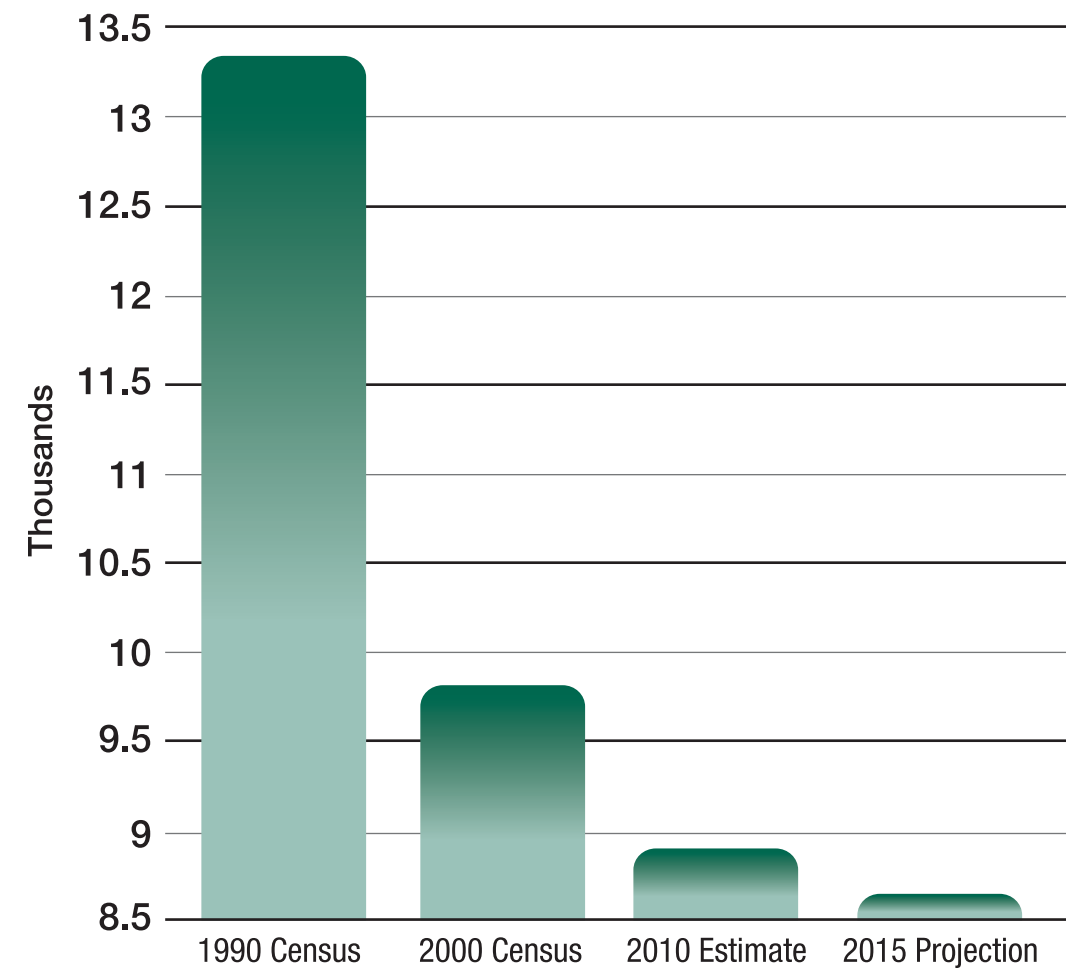
Historic Density:  
Nearly 185 homes



Current Density:  
Nearly 40 homes

Detroit Works Project

## Population Within 1 Mile of Detroit City Limits





LOG OFF '08  
LOVED SIG





*Problem #2:*  
Environmental and Nutritional Health



## Environmental Health

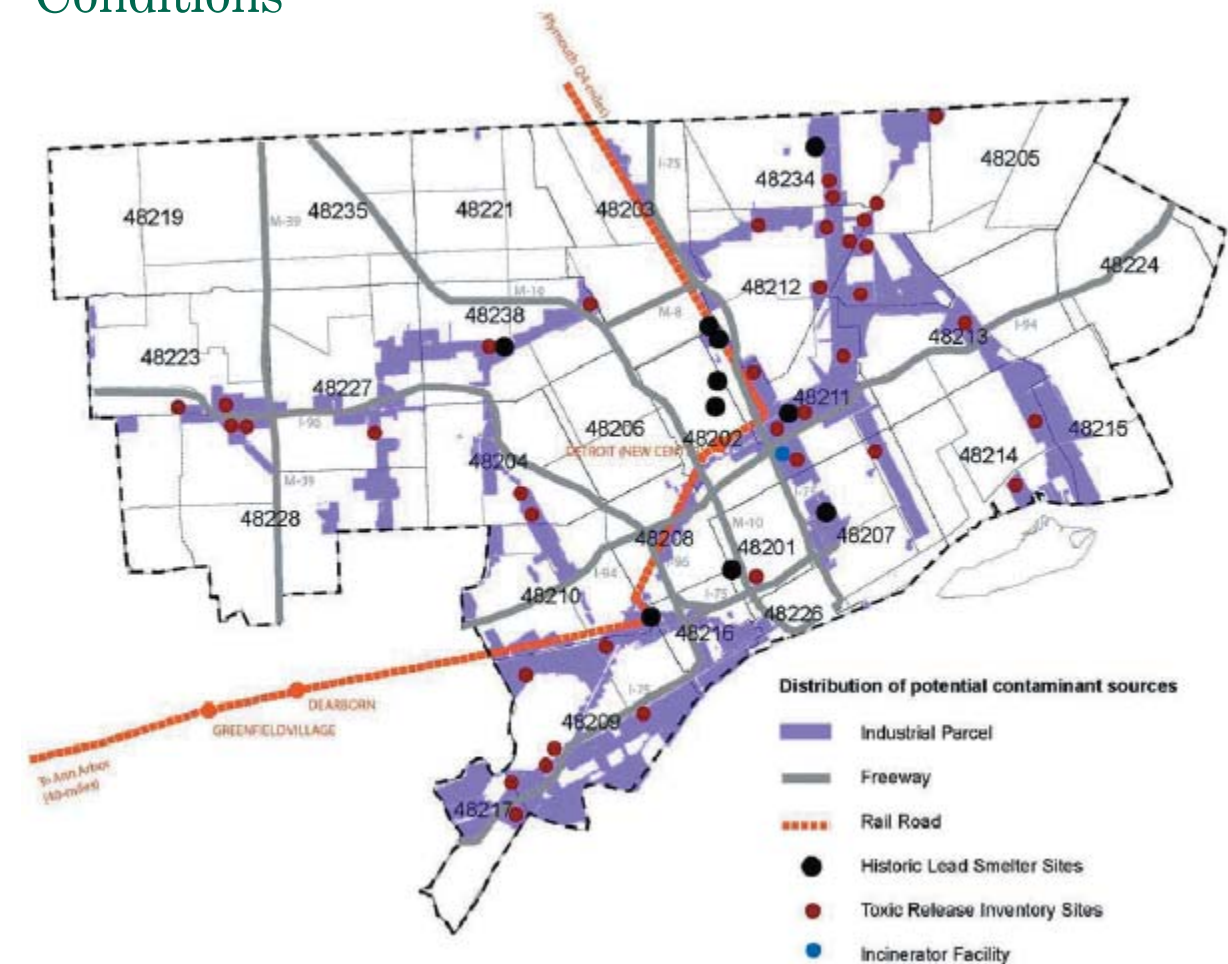
Historically, the City of Detroit has a higher rate of residents with heart disease, cancer, asthma, and diabetes than the state of Michigan.

- Poor air quality is associated with many adverse health outcomes including asthma, chronic lung disease, respiratory problems and cardiovascular disease.
- Detroit has the highest rate of asthma, particularly among children, in the state.
- The state of Michigan spends nearly \$31.71 million annually due to medical costs associated with asthma.
- The city has high levels of toxic air pollutants such as lead, manganese, sulfuric acid, nickel, hydrochloric acid, and diisocyanates.
  - Previous research has found a relationship between cancer rates and level of toxic air pollutants.
- Vacant and dilapidated infrastructure are potential sources of lead poisoning in the city.

(Statistics from DWP Environmental Remediation and Health Audit Report)

- Studies have found a potential casual relationship between air and soil quality and health in the city of Detroit.

## Spatial Relationship Between Adverse Health Outcomes and Soil/Air Quality Conditions



Detroit Works Project

Parks and greenspace are vital elements of economic prosperity and health for a community.



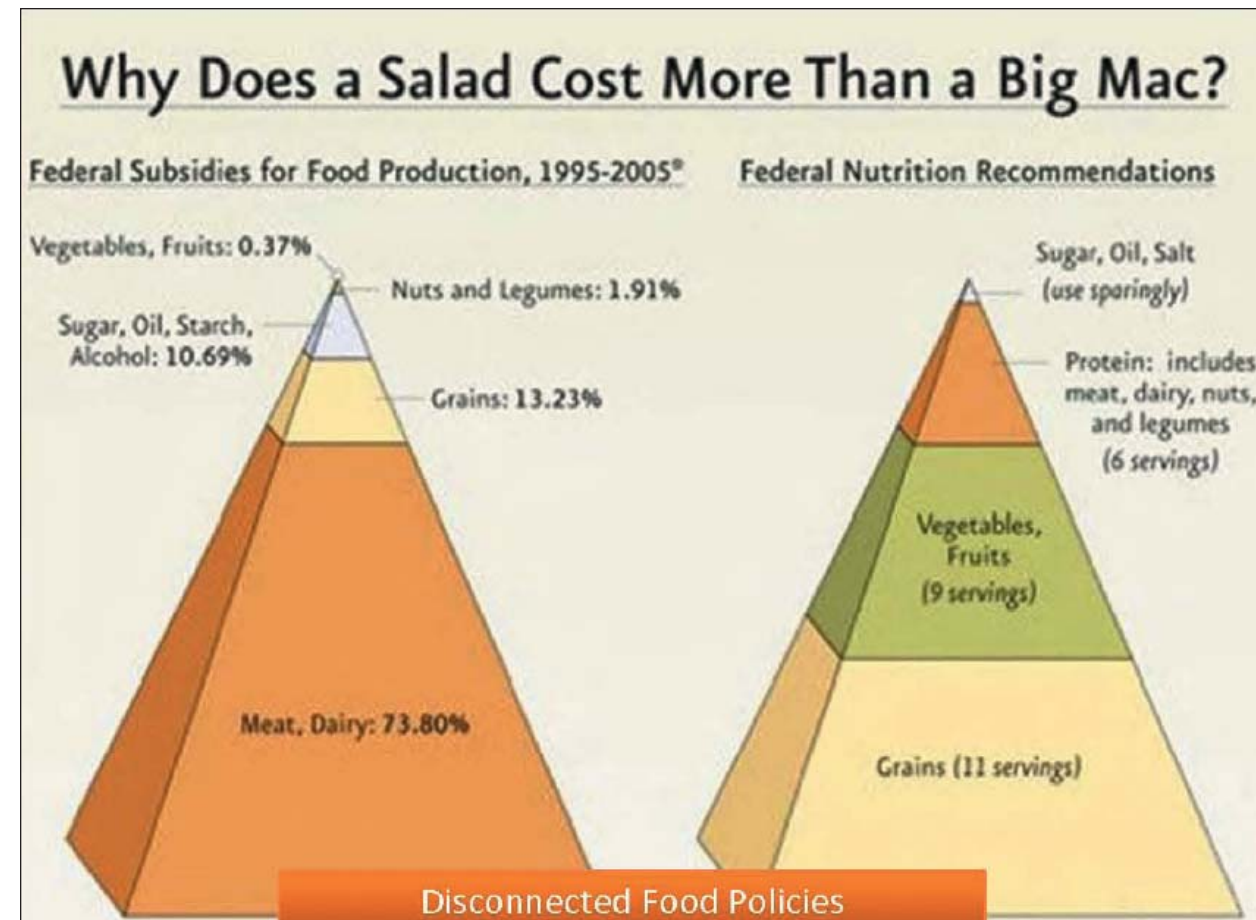
# Nutritional Health

- Poor health is concentrated in areas where the convenience store is the primary food source.
- “Within the Metro Detroit area, the City of Detroit suffers most. Roughly 550,000 Detroit residents – over half the city’s total population – live in areas that are far out-of-balance in terms of day-to-day food availability. They are statistically more likely to suffer or die prematurely from a diet-related disease, holding other key factors constant.”

Mari Gallagher, *Examining the Impact of Food Deserts on Public Health in Detroit* (2007)

- “Many areas of Detroit have been designated “food deserts,” areas with no or distant grocery stores and limited access to nutritious food options. Similarly, public health officials and community advocates have also been alarmed by the growing prevalence of diet-related diseases in Detroit, such as obesity and diabetes.”

Robert Grossinger, Senior Vice President, Community & Sustainable Development, LaSalle Bank





Food Deserts



[commentarybyval.blogspot.com](http://commentarybyval.blogspot.com)

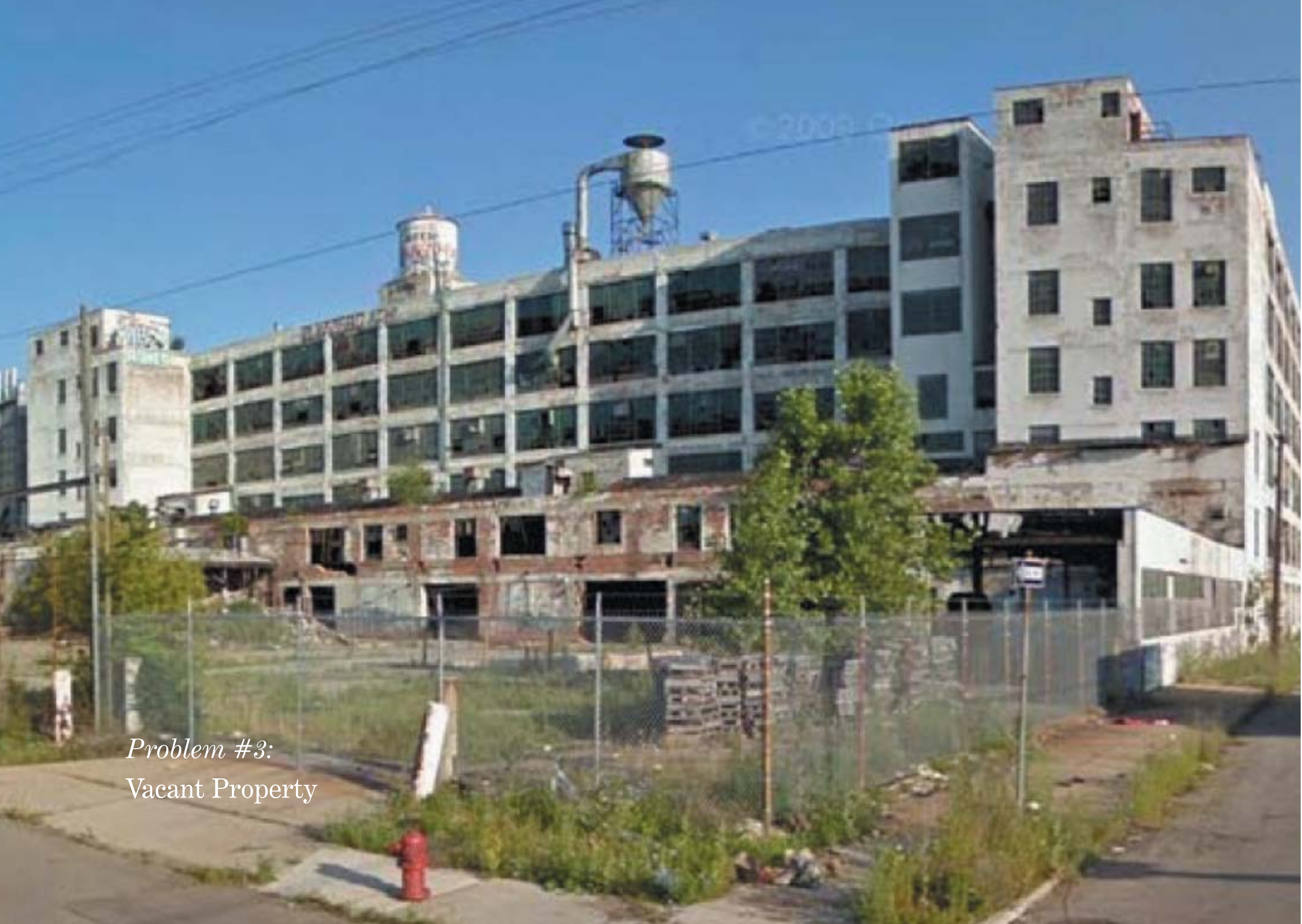


Detroiters Working for Environment Justice (DWEJ)



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





*Problem #3:*  
Vacant Property



# Vacant Properties

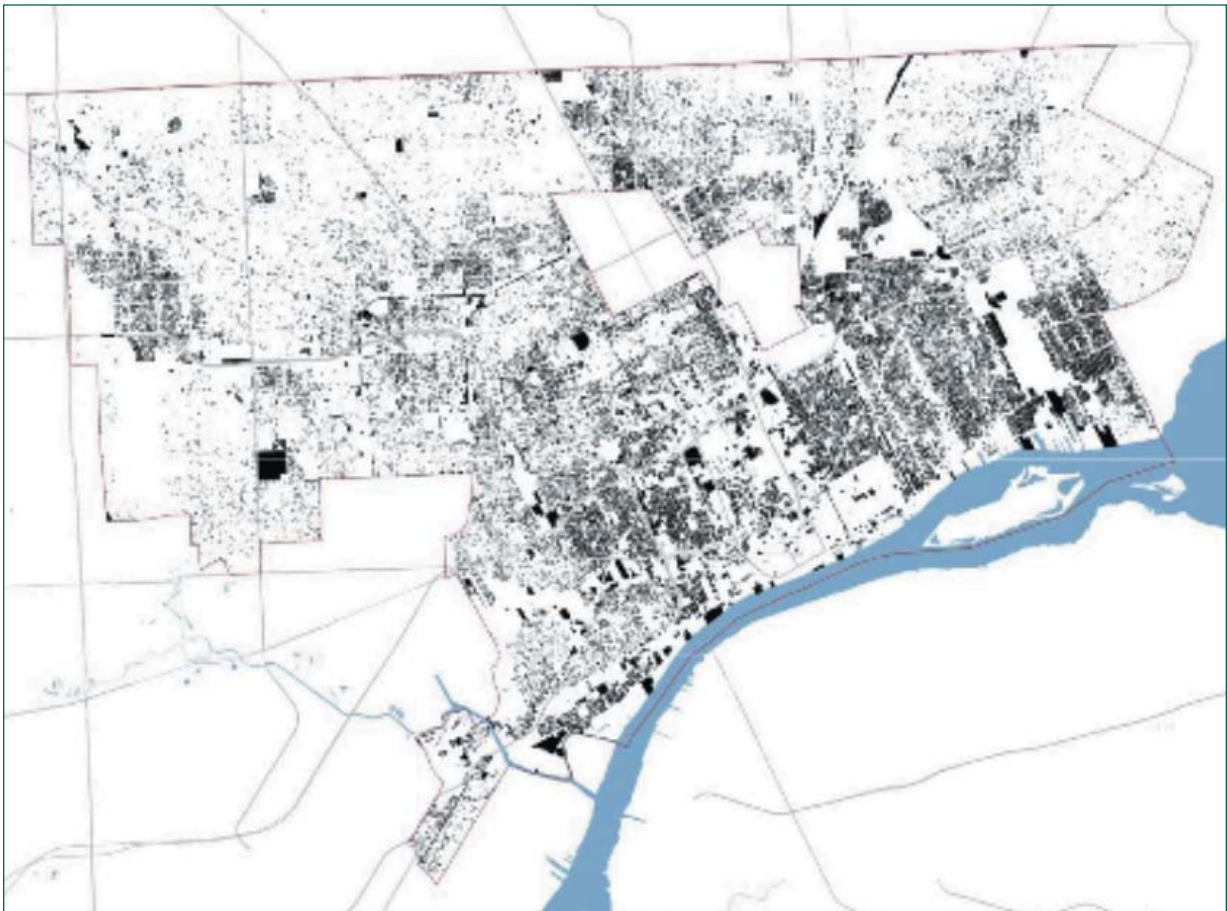
- There is a total of 100,719 vacant land parcels (public & private) or 10,950 acres of vacant land throughout the City (12.3% of the city area).
- Publicly owned parcels represent 42% of this citywide vacancy and amount to 5,900 acres (55% of total vacant acres and 6.6% of city area).

## Publicly Owned Vacant Land

Land Use	Number of Parcels (of 45,970)	Percent of Total
Residential	37,960	83%
Commercial, Office, Retail	3,299	7%
Mixed Use	517	1%
Industrial	2,974	6%
Parking	18	0%
Public/Institutional Planned Development	17	0%
District	714	2%
Parks/Open Space	52	0%

Source: Detroit Planning and Developing Department (DP&DD), SEMCOG

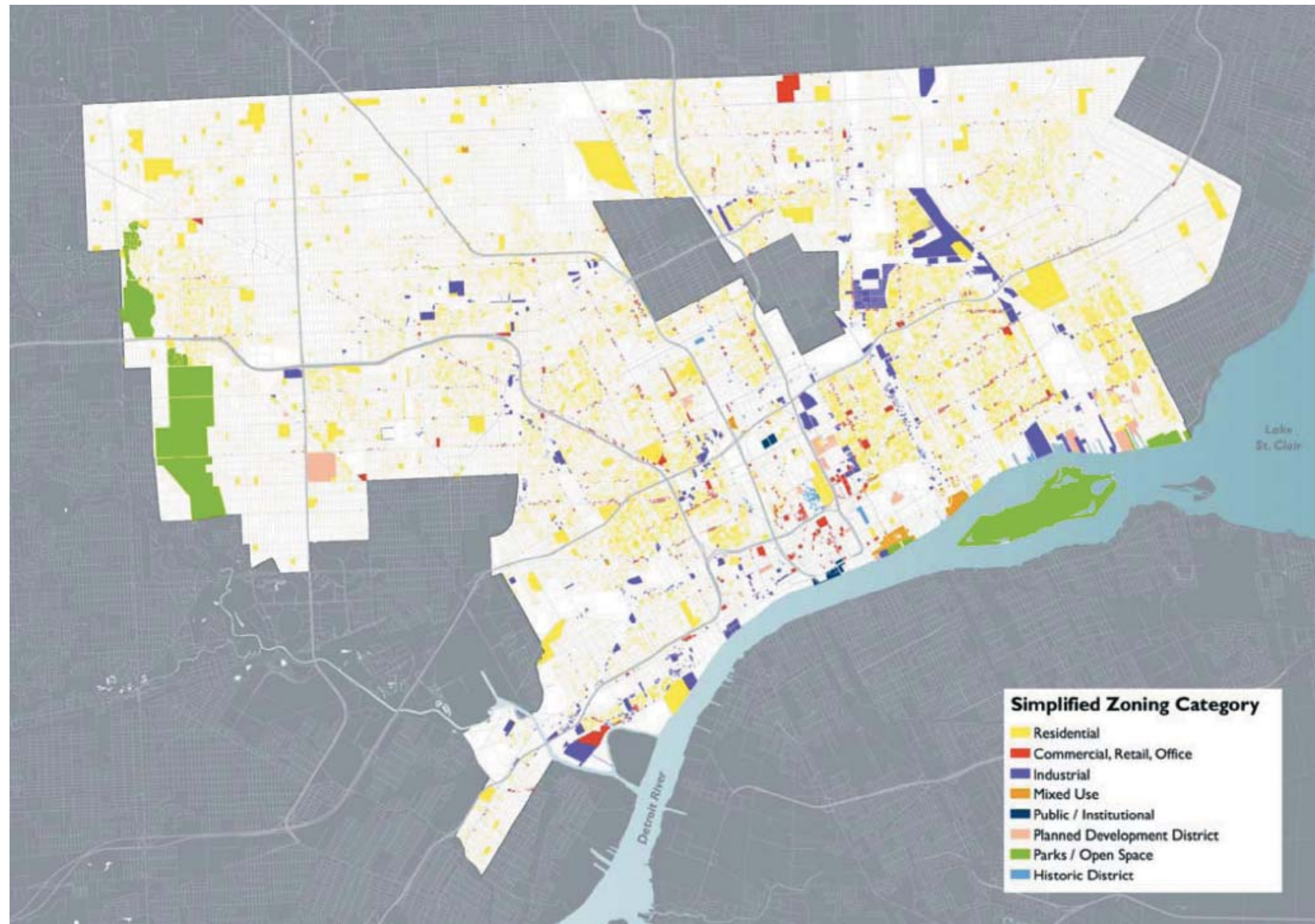
# Public and Private Vacant Parcels of Land



Source: Detroit Planning and Developing Department (DP&DD), SEMCOG



## Vacant Parcels: Residential



Surplus Public Land Data compiled by HR&A through interviews and data collection from Detroit P&DD, DEGC, the Detroit Land Bank Authority, Detroit Public Schools, Wayne County Land Bank, Michigan Land Bank Fast Track Authority, and Detroit property assessment data. (Data compiled in October and November 2010). Land Use data from P&DD.

125,017 residential parcels are unoccupied and account for \$173 million in lost property tax revenue.









*Problem #4:*  
Unemployment, Economy & Foreclosures



# Unemployment, Economy & Foreclosures

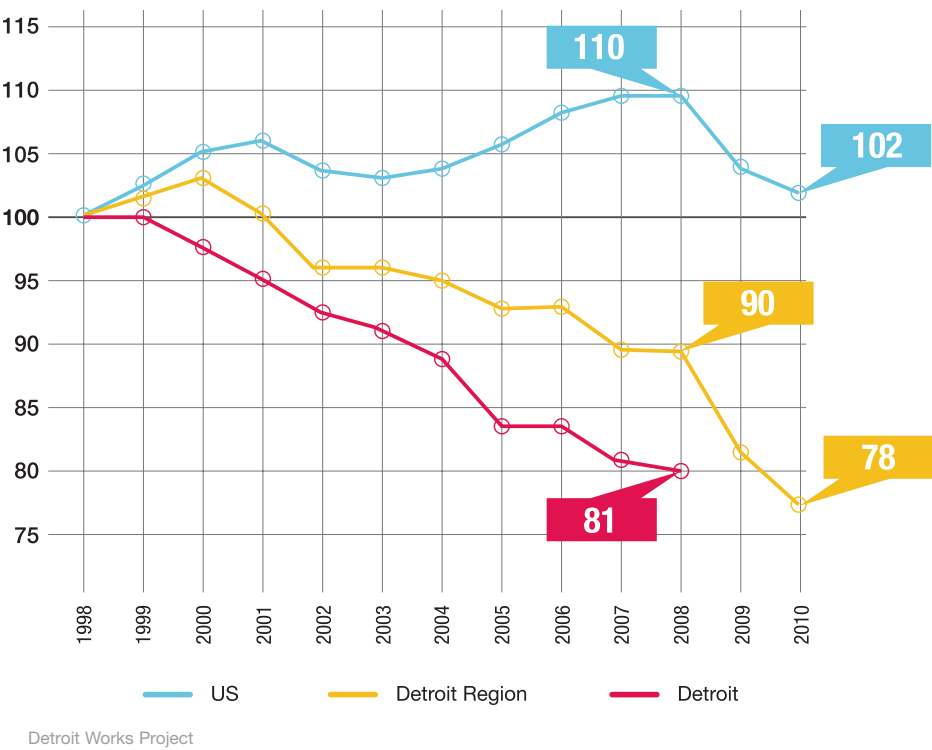
- Detroit ranked 98th in private sector job loss (out of 100) when compared to other major metropolitan cities.
- In August 2010, unemployment rates for Detroit, the Detroit region, and the US were 24.3%, 14.4% and 9.5%.

## Total Employment Growth Cumulative Growth In Jobs Over the Past 5 Years

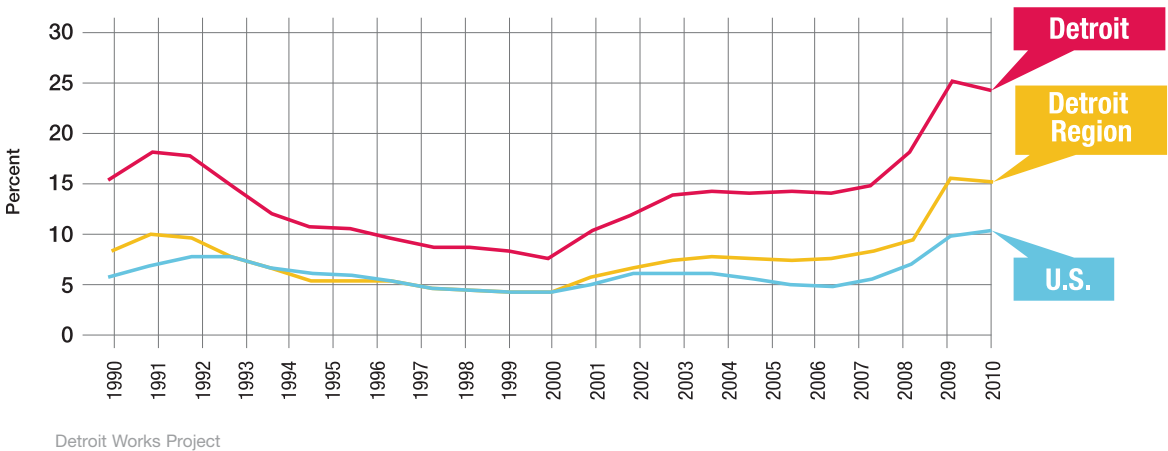
Market	Employment Growth	Inventory Growth	Difference
Atlanta	-5.30%	7.20%	-12.50%
Chicago	-3.70%	5.40%	-9.10%
Dallas/Ft. Worth	2.90%	8.50%	-5.60%
Denver	-1.20%	4.10%	-5.30%
Detroit	-14.10%	1.20%	-15.30%
Houston	3.80%	7.50%	-3.70%
Inland Empire (California)	-7.90%	22.00%	-29.90%
Los Angeles	-7.00%	1.90%	-8.90%
Northern New Jersey	-3.00%	2.80%	-5.80%
Pittsburgh	-3.00%	2.10%	-5.10%

Source: Department of Labor, Bureau of Labor Statistics

## Indexed Employment Growth (1998-2010)



## Percent Unemployed (1990-2010)

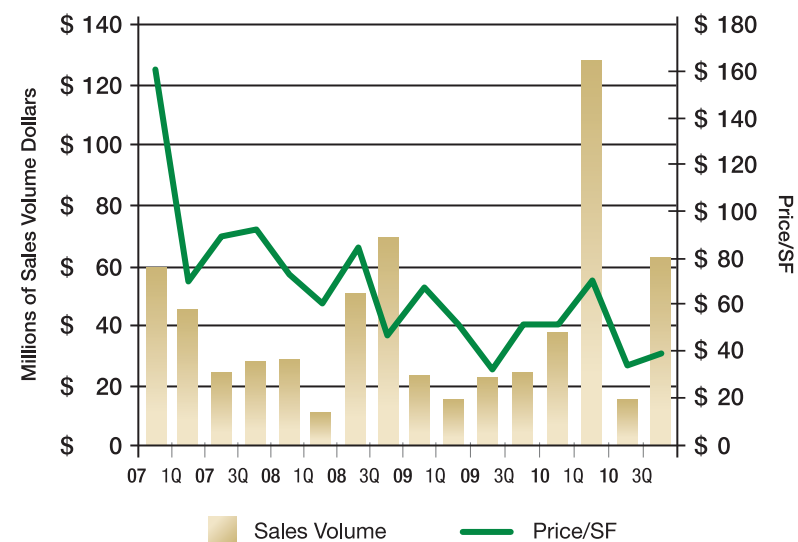




# Detroit Unemployment, Economy & Foreclosures

## Sales Volume & Price

Based on Retail Building Sales of 15,000 SF & Larger



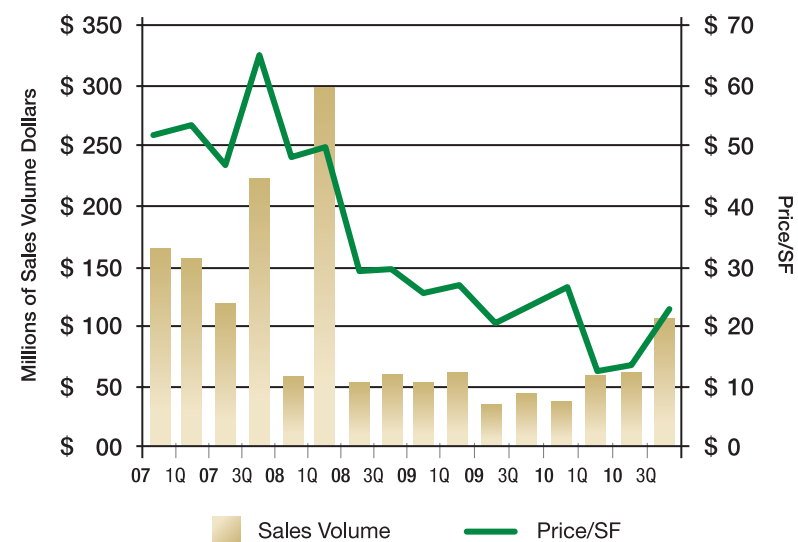
Source: CoStar COMPS®

## For Sale Property Along Proposed Inner Circle Greenway



## Sales Volume & Price

Based on Industrial Building Sales of 15,000 SF & Larger



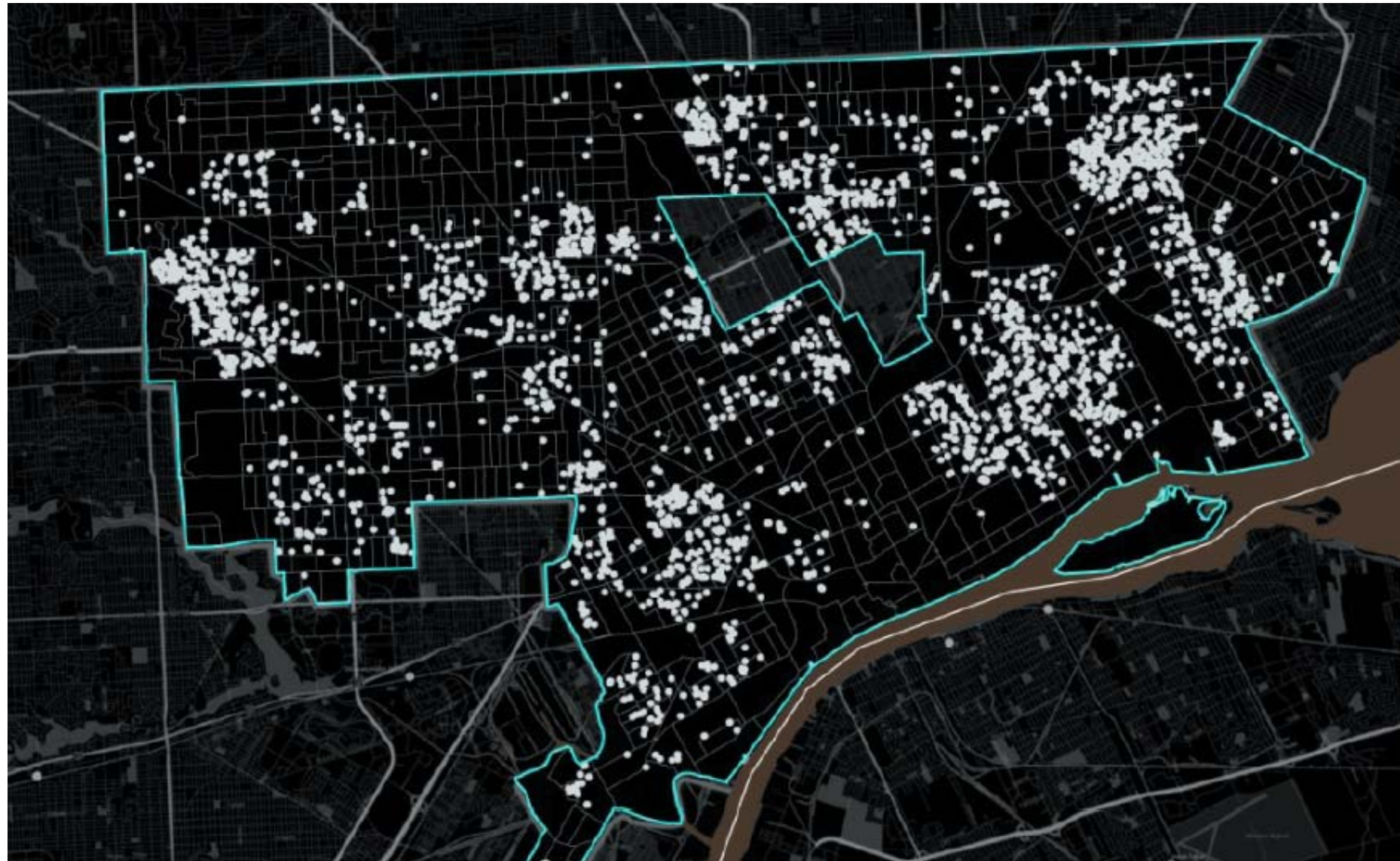
Source: CoStar COMPS®





## A Brighter Future:

Removal of 10,000 blighted and abandoned houses  
and stabilizing neighborhoods



Building Safety Engineering & Environment Department for the City of Detroit (BSEE)







A young boy with brown hair, wearing a black polo shirt and light blue pants, is running towards the camera on a grassy field. He is smiling broadly and has his arms outstretched. In the background, there are several large, mature trees with green foliage. The scene is brightly lit, suggesting a sunny day.

What if we invested  
\$4 billion in Detroit to  
convert Red Fields  
to Green Fields?







We could reduce blight, activate development, stabilize neighborhoods, improve environmental health and create jobs.



# Vision

High-identity gateway crossings at the intersections of greenways and arterial roads. A beautiful public plaza park that can catalyze surrounding development.





## Land Use Along the Inner Circle Greenway

Industrial and commercial properties intersect at radial corridors and rail line crossways creating large, unattractive commercial/industrial clusters. These crossways are often surrounded by some of Detroit's most distressed residential neighborhoods. Red Fields to Green Fields can help convert these commercial/industrial intersections into greenways helping to stabilize the surrounding areas and help keep blight from creeping further into residential neighborhoods.



### LEGEND

- YELLOW: Residential
- RED: Commercial
- PURPLE: Industrial
- BLUE: Industrial
- BLACK: No Structure
- GREEN: Park
- PINK: Utilities
- GRAY: Transportation-Related
- ORANGE EXCLAMATION MARK: Identified as brownfield





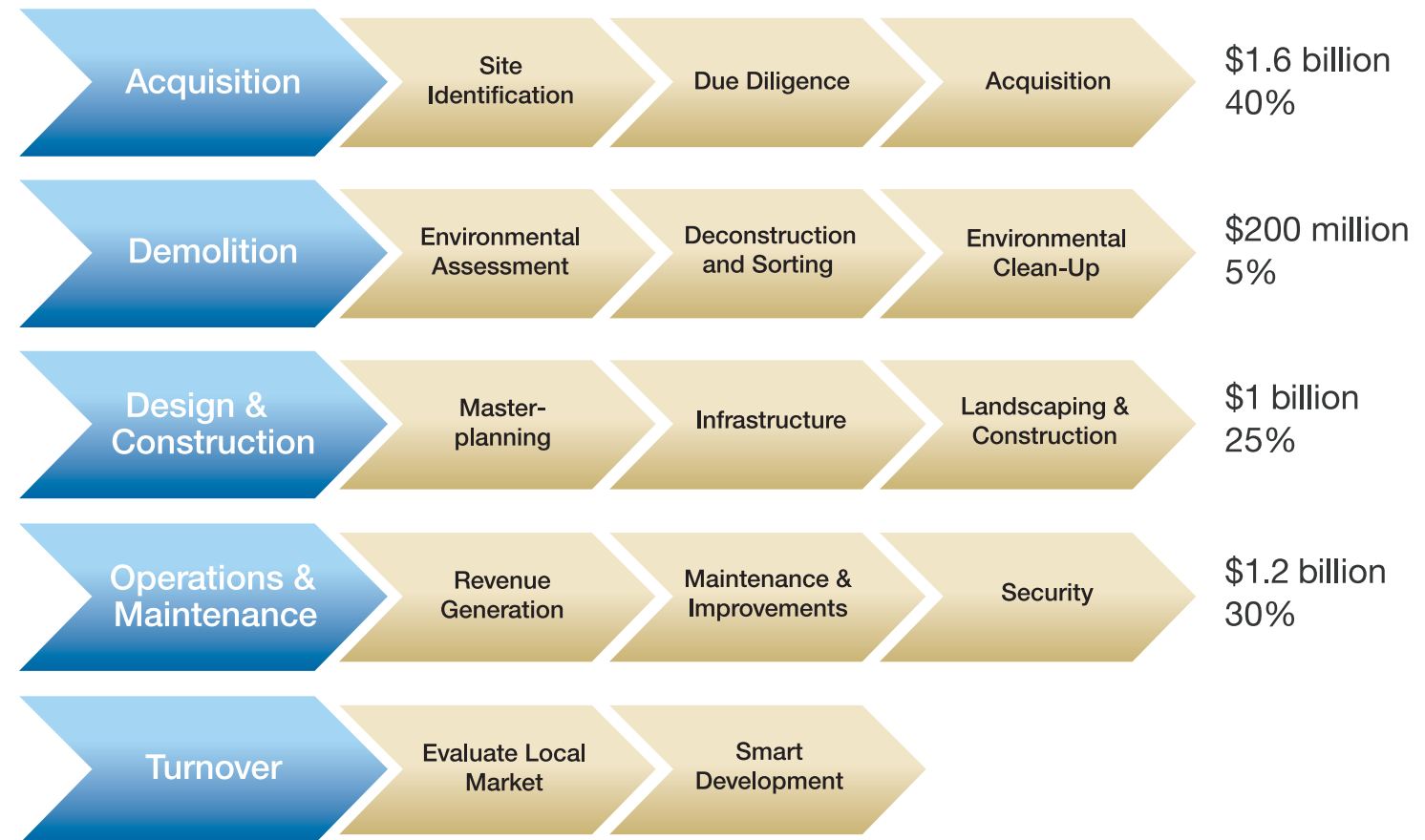
# How will Detroit Implement This Vision?

If \$1.65 billion of the \$4.0 billion is allocated for property acquisition, we could purchase 3,010 acres of properties along the Inner Circle Greenway at the 2000-2010 median price of \$548,000. At the recent 2010 price of \$263,000 per acre, 6,250 acres along the Inner Circle Greenway could be acquired.



## Process

A budget was developed to estimate all costs associated with implementing our vision, including: acquisition, demolition, design, construction, operations and maintenance. The budget is meant to be a broad estimate to gauge the magnitude of potential costs and to estimate job creation and other economic benefits. A significant portion of the costs was designated to operations and maintenance to support the City's ability to maintain and operate its existing parks since parks maintenance has been dramatically reduced due to the City's budget crisis.

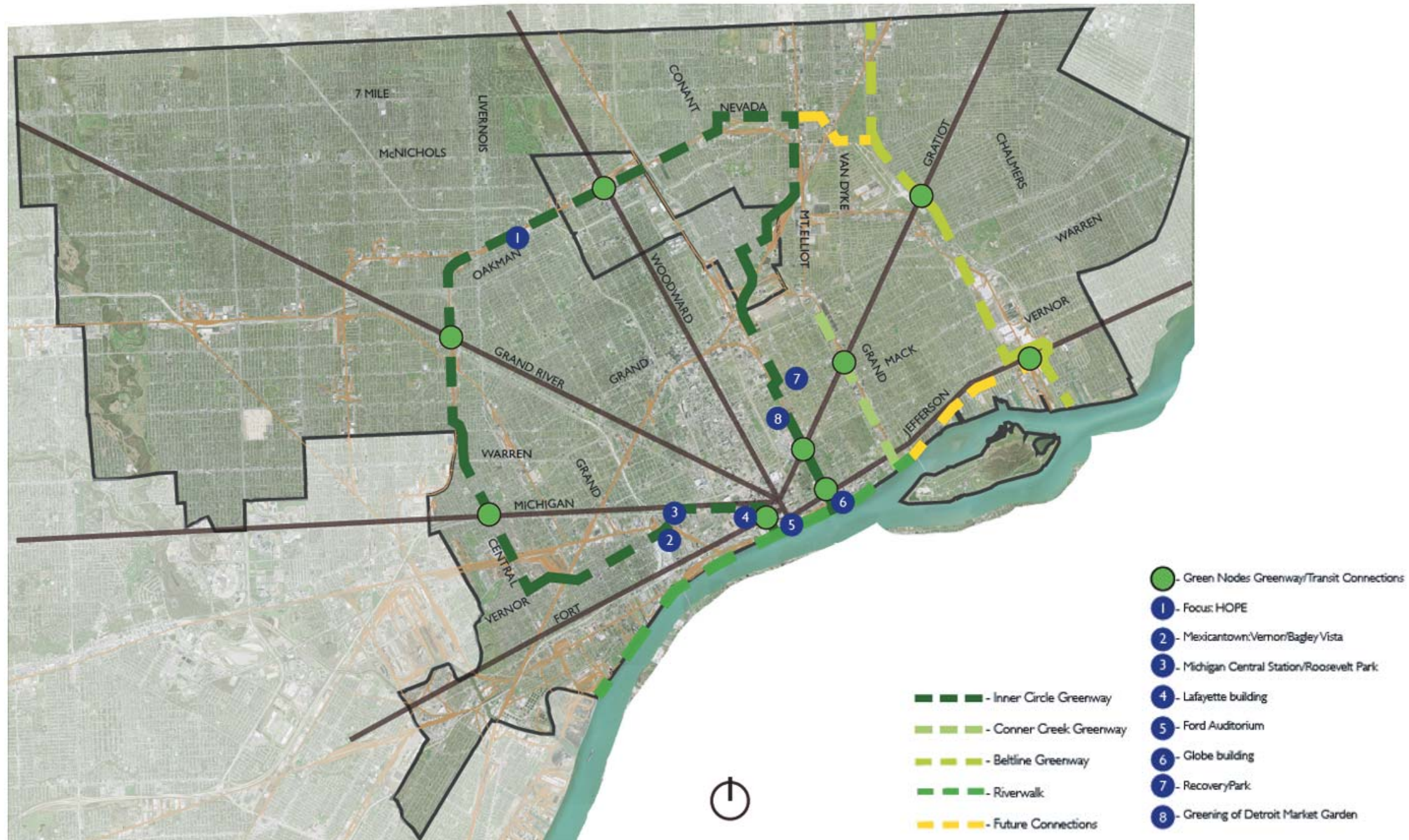


Across the U.S., access to parks and open spaces has become a measure of community wealth – a tool for attracting businesses and residents by guaranteeing quality of life and economic health.



# Acquisition

## Redfields to Greenfields Priority Projects Map





# Acquisition

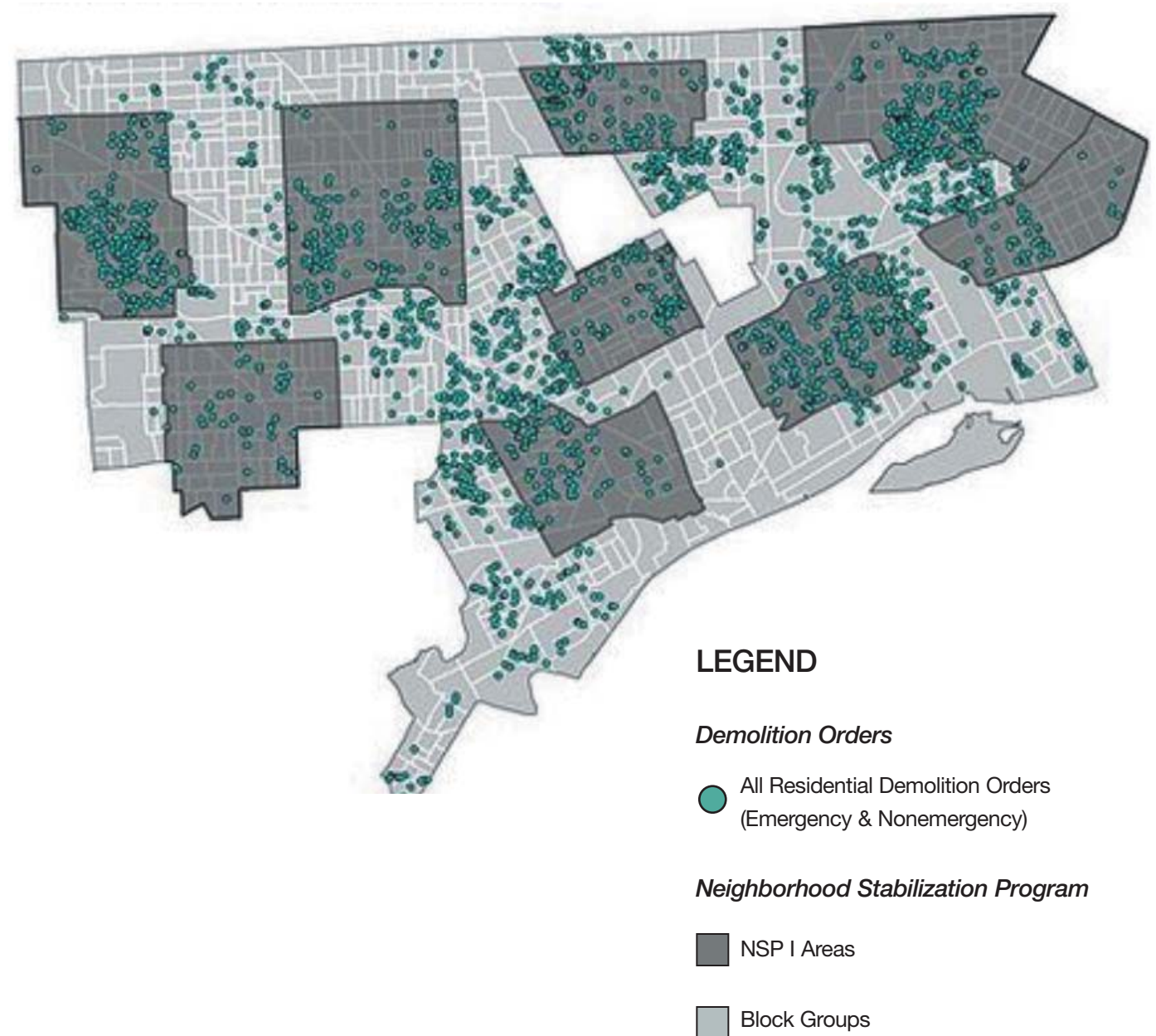
## Creative Financing Mechanisms

- Conservation Easement Tax Credits
  - Offers a property tax refund to landowners whose land is restricted by a conservation easement, provided that the easement was donated to a public or private conservation agency.
- Finance Mechanisms for Park Development Operations and Maintenance
  - Funds generated through tourism, impact fees, mitigation fees, tax revenue, CIP's, volunteer/donations, grants, etc.
- New Market Tax Credits
  - Enables investors to reduce their federal tax liability by 39% of the amount they invest in low income communities.
- Tax Increment Reinvestment Zone Reimbursement Agreements
  - Provides financing for public improvements within a defined area.

## Demolition

- “The amount of vacant land currently in Detroit, nearly 40-square miles, is roughly the equivalent of Miami Beach.”  
Detroit Works Project website
- Strategic deconstruction of commercial and industrial buildings: prioritize buildings that are damaged beyond repair, preserve historic architecture, create safe open spaces.

# All Residential Demolition Orders & NSP I Areas





# The Process in Action

The following pages list several objectives followed by examples of on-going or future projects that will help meet these objectives.

## Objective #1: Stimulate Urban Development

### Benefits of Urban Parks

- Urban parks can be value generators
  - In Detroit, experts estimate that \$500 million of investment has flowed into the area surrounding Campus Martius since plans for the park were announced.
- Urban parks can invigorate revitalization
  - An area with history and social significance can become the focal point of the City.
- Urban parks can return focus to downtown
  - Campus Martius Park features amenities that draw continuous activity and show off the best of the city's culture.



[www.annarbornocturne.com](http://www.annarbornocturne.com)



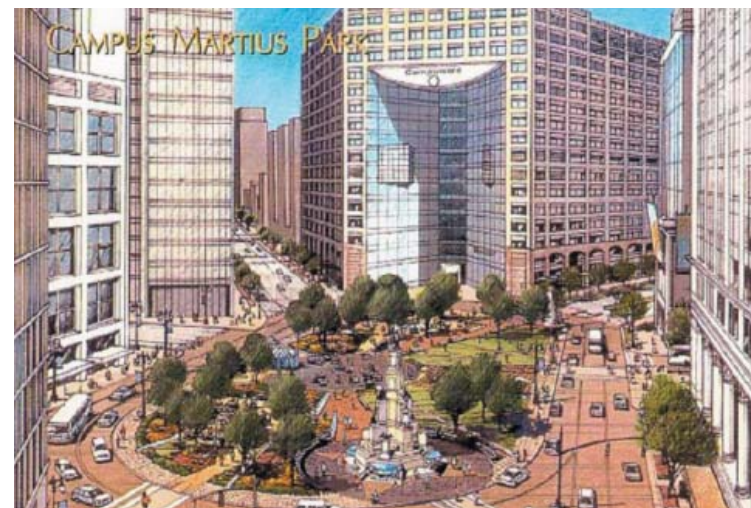
# Campus Martius Park

- Built: 2004
- 2.6 acres
- \$20 million investment
- Impact
  - Draws 1 million people annually
  - Home to the Motown Winter Blast Festival – drawing over 400,000 people each winter
  - Contains 2.24 million new or renovated square feet
  - \$454 million spent on building/renovating the surrounding buildings
  - Surrounding Tenants include: Compuware, Ernst & Young, Quicken Loans
- “Campus Martius is more than a public park – it has become an economic engine for a struggling city”

Campus Martius Park, Bill McGraw & Theodore Thoerig, Jan. 27, 2011, UrbanLand  
 (<http://urbanland.uli.org/Articles/2011/Jan/McGrawCampus>)



Before



Concept



After



# The Process in Action

## Objective #2: Improve Public Health

### Increased Physical Activity

- Access to public parks and trails has a positive impact on physical activity, especially during times of economic trouble. Parks provide residents with areas to walk and run, as well as areas for outdoor physical education classes.
- Studies have found that a one percent increase in park acres is associated with a 1.2 to 1.4 percent increase in physical activity.

*National Recreation and Parks Association, The Benefits of Physical Activity Provided by Park and Recreation Services: The Scientific Evidence, 2010*

- Decreasing the City's obesity rate can help save the City millions in health care costs. It is estimated that obesity costs the U.S. nearly \$147 billion each year.

*William Poole, Parks for Health, 2011*

### Access to Fresh Food

- Access to green space can help alleviate Detroit's food imbalance by providing space for community gardens or open space for public markets.
- Increasing the number of safe pedestrian/bicyclists paths will allow more people access to healthy food options.

### Reduce Crime

- Anti-gang initiatives, such as the Summer Night Lights (SNL) in Los Angeles, can be used to help reduce the amount of violence in the City.
- SNL works by empowering communities and targeting the traditionally most violent summer months. SNL has become a national model for violence reduction.
  - Shots fired: decreased by 55%
  - Gang related homicide: decreased by 57%
  - Victims shot: decreased by 45%

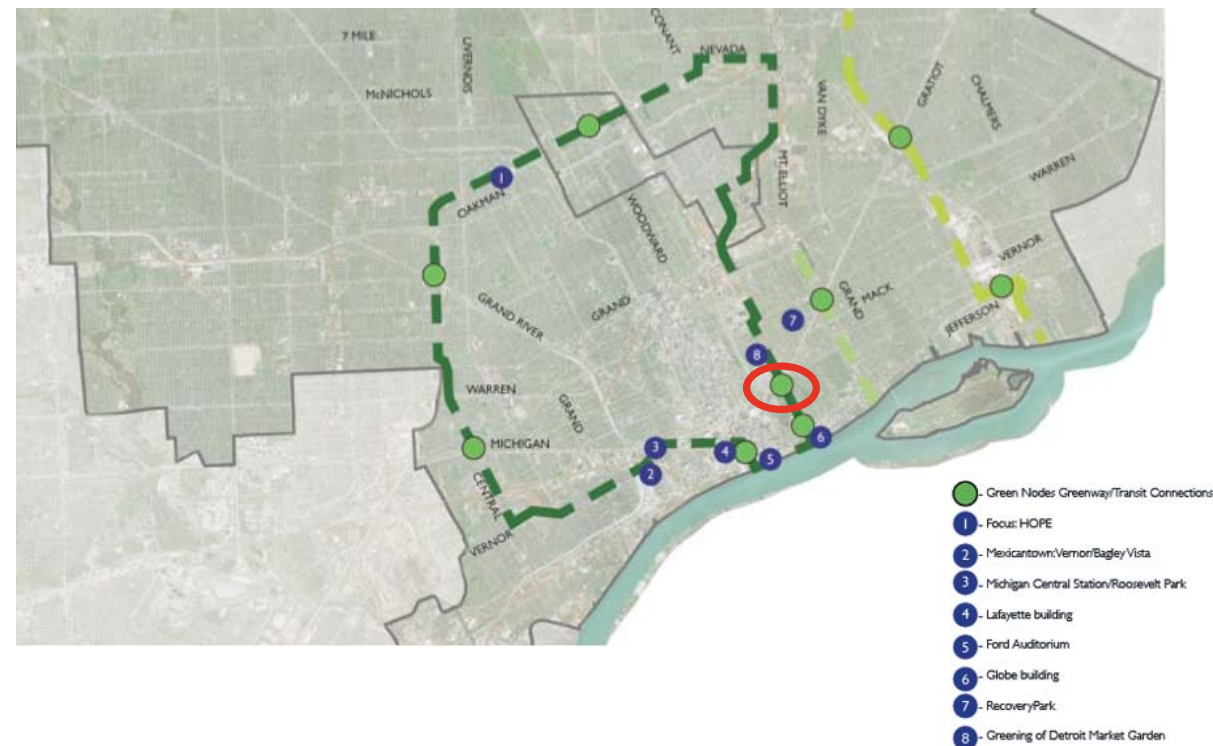




# The Dequindre Cut

- Project initiated in 2009
- 2 mile greenway
- Cost: \$4.3 million
- Impact
  - 20 foot-wide double-lane paved path
  - Provides pedestrians/bicyclists with a safe pathway from the Eastern Market, Hamtramck and Midtown Greenway to the Detroit Riverwalk allowing for increased physical activity
  - Refurbished Grand Trunk Railroad corridor
  - Displays community artwork along the path

## Location of Dequindre Cut



## Before



## After





# Detroit Market Garden

- Historic Eastern Market District
- 2.4 acres
- Cost: \$1.3 million
- Impact
  - Year round community garden
  - Will provide residents with healthy food options such as fresh vegetables and produce
  - Education opportunities for youth
  - Incorporates green technology such as solar greenhouses



Source: The Greening of Detroit



Source: The Greening of Detroit







# The Process in Action

## Objective #3: Activate Vacant Properties

### Demolition

Mayors in many American industrial cities are embracing urban revitalization through ‘rightsizing’, or shrinking their cities’ infrastructure to match shrinking populations. Buffalo, Cleveland, Detroit, and Youngstown lost half their population over the past 50 years and continue to lose residents. The cities’ built environment – buildings, streets, and utilities – far exceeds the needs of the current or projected population.

The vision of the mayors of these and other shrinking cities is to replace vacant properties with green space. Wide areas of derelict buildings would be demolished and converted to open space that could be used for parks, urban agriculture, community gardens, and renewable energy facilities. These vast green spaces would be connected by a network of pedestrian- and bicycle-friendly paths to dense, functional neighborhoods.

“American cities seek to discover their right size”. Tony Favro. April 5, 2010.  
(<http://www.citymayors.com/development/us-rightsizing-cities.html>)

### Revitalization

Vacant properties present ideal opportunities for promoting many essential smart growth principles and policies. Fast-growing cities would derive the most obvious benefits from rehabilitating older housing stock. However, cities with serious problems of abandonment (such as Detroit) and steady declines in population can generate smart growth benefits through strategic infill projects that stress neighborhood parks, community gardens, and other temporary public uses of vacant lots.

- Available land: Revitalizing vacant properties can present expanding communities with much needed assets to accommodate projected increases in population and growth. Most of these sites already have the necessary infrastructure and have access to key municipal services (e.g., fire, trash, water).
- Infill development and revitalization of existing communities: Vacant property revitalization could help attract people to move back into the city, whether in downtown neighborhoods or in older inner-ring suburbs.
- New community design and mixed-use: Principles of new community design call for mixed-use neighborhoods that are walkable and pedestrian friendly. The reuse of vacant lots and abandoned buildings could provide cities with excellent opportunities to test these new community design principles.
- Affordable housing: Both fast-growing and declining cities often face serious shortages of affordable housing (both for rental and homeownership) and have dozens of vacant lots and abandoned buildings. Transferring these properties into the hands of willing and able owners, especially community development corporations (CDCs), could help these communities meet their affordable housing challenges.
- Livability and public safety: People will not return to live in cities unless they feel safe. The abatement of abandoned buildings and the associated blight and crime can serve as catalysts to make these neighborhoods more safe and livable.
- Community empowerment: Inner-city residents may view general smart growth policies and objectives (e.g., preservation of open space and suburban traffic and congestion) as irrelevant to the problems they confront. The revitalization of vacant properties could unify both inner-city residents and suburban residents in a common endeavor with benefits for both constituencies.

“The Revitalization of Vacant Properties”. J.M Schilling. July 2003. International City/County Management Association (ICMA). [http://www.usmayors.org/brownfields/library/Revitalization\\_of\\_Vacant\\_Properties.pdf](http://www.usmayors.org/brownfields/library/Revitalization_of_Vacant_Properties.pdf)



## Ford Auditorium

- Derelict property along the riverfront
- Scheduled for demolition providing the opportunity for greater public waterfront access
- Potential site for outdoor amphitheatre similar to the Hart Plaza renovation

Urban parks, gardens, and recreational open space stimulate commercial growth and promote inner-city revitalization.



Existing Conditions



Future Concept



# Roosevelt Park

- Located on Michigan Avenue in front on Michigan Central Station
- 500,000 sq ft; 14 acres

“The idea is to take one of the region’s liabilities – Michigan Central Station – and use it as a backdrop for a vibrant park, in the process turning that liability into an asset”

Sean Mann, Roosevelt Park Conservancy, Detroit  
<http://corktownhistoric.org/index.php/component/content/article/133-rooseveltpark-gets-some-tlc-from-detroit-news>





## Roosevelt Park as an Opportunity Corridor

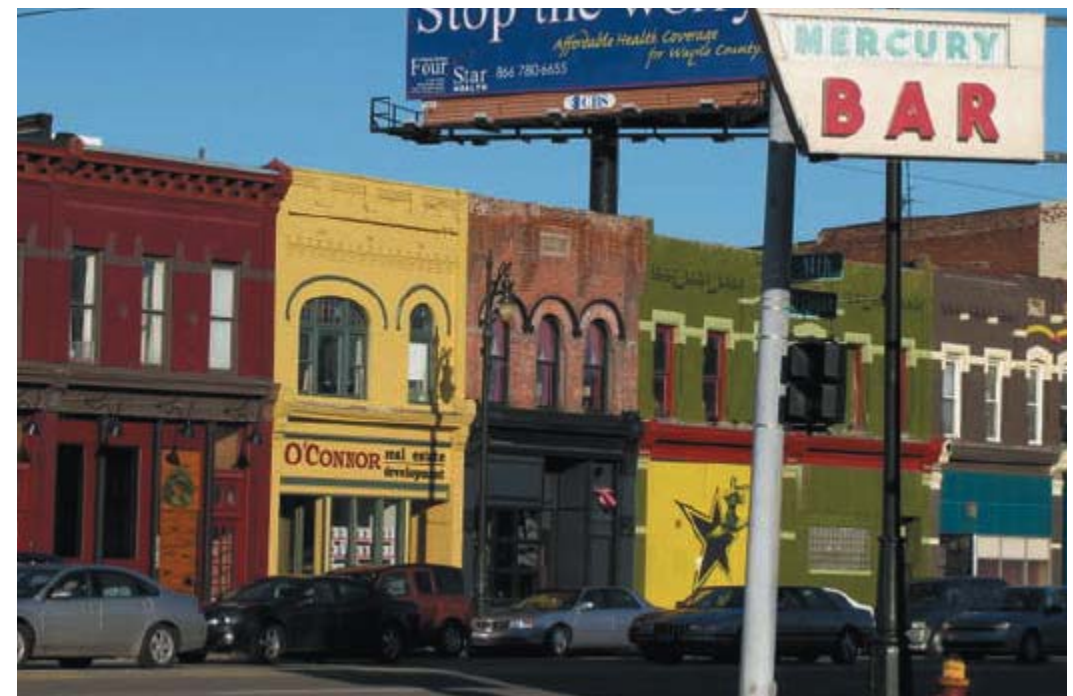
- Link job site locations with economic development zones, housing, transportation, and green space.
- Create innovation corridors with green space corridors.



Before



After





# Globe Trading Center & Milliken State Park

- Plans to open Fall 2012
- 407 East Fort Street
- Cost: \$35 million
- Impact
  - 60,000 sq. ft vacant warehouse
  - Plans to reconstruct into a nature education center
  - A part of Milliken State Park and Harbor across from the Detroit River
  - Will create numerous jobs and increase tourism/economic values of the city



## Location of Globe Trading Center



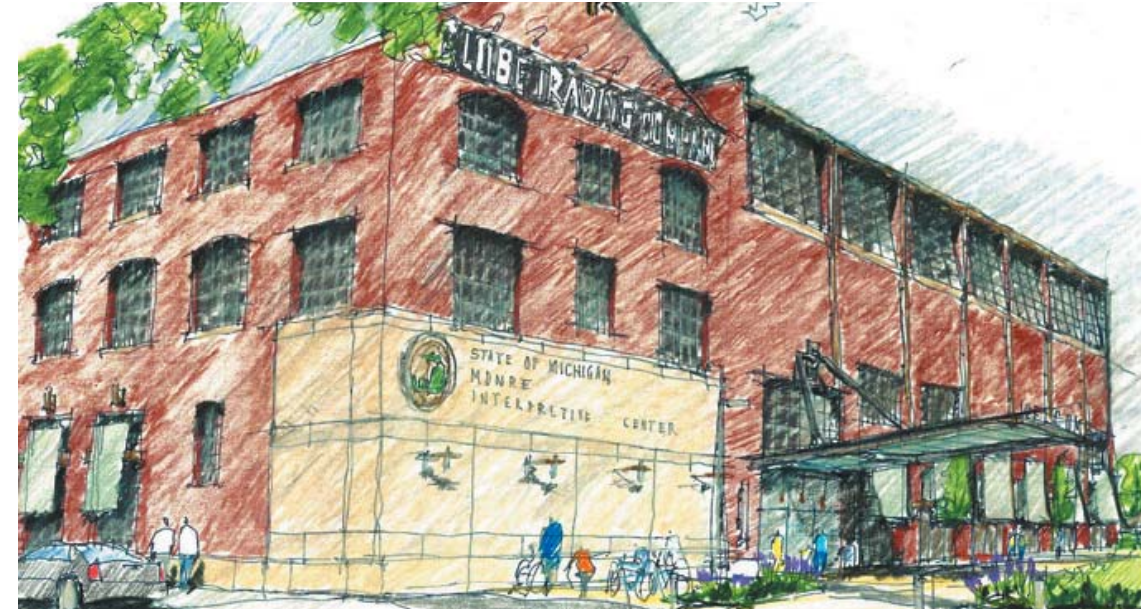


# Globe Trading Center & Milliken State Park

Before



After





# The Process in Action

## Objective #4: Increase Connectivity

A number of projects are underway to restore neglected properties and railway lines into greenways throughout Detroit.

Paved greenways not only provide ease of transportation, they also serve a number of other valuable functions.

Examples of such functions:

- Improved pedestrian safety
- Increased community pride with public art works
- Increased physical activity
- Increased economic value
- Job creation





# Inner Circle Greenway

The Inner Circle Greenway will consist of an integrated network of urban greenspace, linked together by an easily accessible Inner Circle Greenway mixed-use trail. The 20-mile loop uses Detroit Terminal Railroad’s abandoned right-of-way. Portions of the trail have been completed and others will be part of future work.

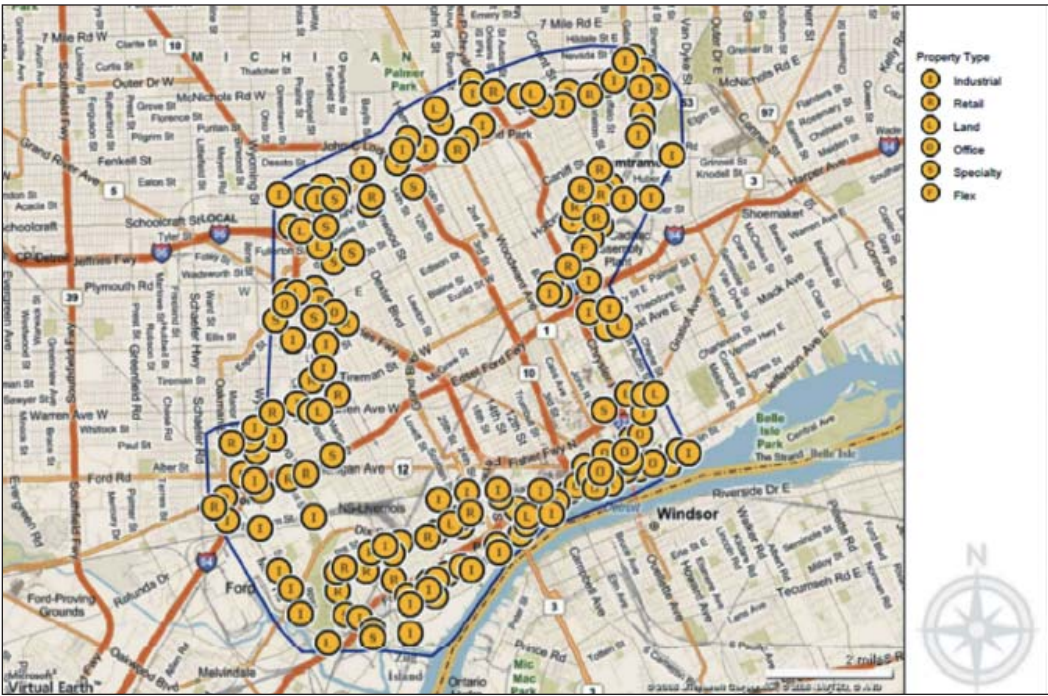
Median price per acre:

- 79 total acres
- Properties sold since 2000: \$548,246
- Properties sold since 2010: \$263,932

Period	Dollar Volume	Median Price Per Acre
2010	\$78,087,314	\$263,932
2009	\$56,429,569	\$282,198
2008	\$50,078,269	\$338,882
2007	\$59,601,000	\$444,444
2006	\$56,932,467	\$1,585,366
2005	\$101,510,800	\$718,391
2004	\$62,745,272	\$631,579
2003	\$174,652,658	\$1,164,222
2002	\$125,845,886	\$697,674
2001	\$57,206,134	\$1,010,204
2000	\$34,661,526	\$672,444



Properties Sold Since 2000  
(Industrial, Retail, Land, Office, Specialty, and Flex)





# Beltline Greenway

Plans are underway to construct a greenway along the abandoned Bellevue rail line connecting Detroit RiverWalk to Gratiot Avenue.





# Additional Brownfield Opportunities

## Packard Plant

- 3.5 million square feet
- 47 buildings on 38 acres
- Vacant since 1957
- \$25 million just for demo & environmental remediation



## Former Uniroyal Site

- 40 acres
- Prime waterfront property
- Vacant since 1981
- \$15-20 million just for cleanup





# Restoration of Historic Stream

## Benefits of Daylight & Waste Water Management

- Relieve choke points and flooding problems caused by undercapacity culverts;
- Increase hydraulic capacity over that provided by a culvert, by recreating a floodplain;
- Reduce runoff velocities, thus helping prevent erosion, as a result of a natural channel meandering and the roughness of the stream bottom and banks;
- Replace deteriorating culverts with an open drainage system that can be more easily monitored and repaired;
- Cost less, or only marginally more, than replacing a culvert;
- Divert urban runoff from combined sewer systems before it mixes with sewage, reducing combined sewer overflows and burdens on treatment plants;
- Improve water quality by exposing water to air, sunlight, vegetation and soil, all of which help transform, bind up, or otherwise neutralize pollutants;
- Recreate aquatic habitat and improve fish passage;
- Recreate valuable riparian habitat and corridors for wildlife movement;
- Beautify neighborhoods, perhaps serving as a focal point of a new park or neighborhood revitalization project;
- Reconnect people to nature through the look, feel, and smell of open water and riparian vegetation.

# Waste Water Master Plan





# Urban Stream Restoration

## Goals

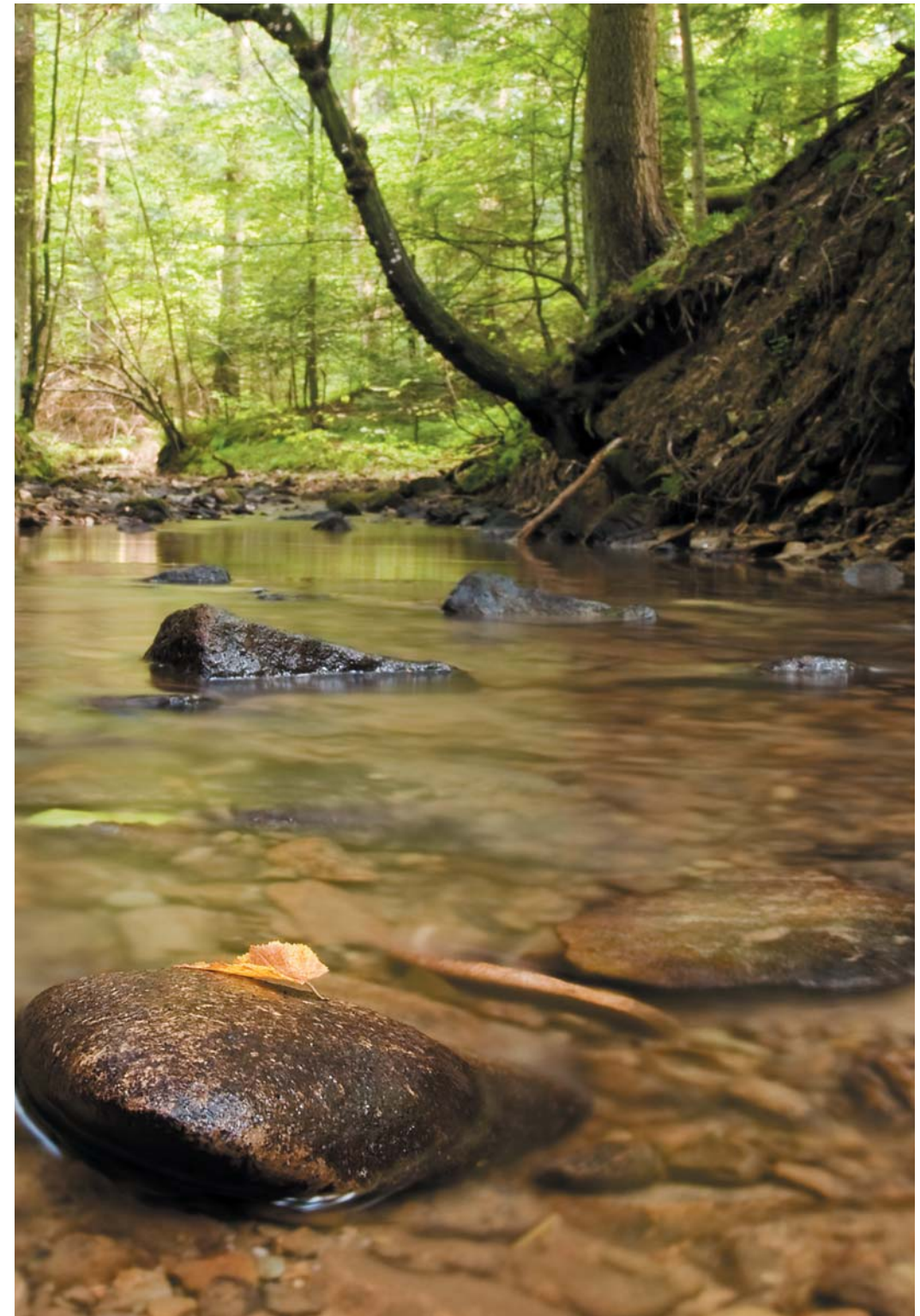
1. Replace deteriorated culverts
2. Divert urban runoff and reduce wastewater flows
3. Increase recreational opportunities
4. Provide education about the area, history, stream
5. Promote development and increase property values

“Urban stream restoration is worth considering when culverts and storm sewers need replacement, when redevelopment is being planned and where additional recreational and education opportunities exist. Urban stream restoration could add a positive benefit to the city by promoting development and increasing property values. Also, it can increase tax revenues, as has happened in Kalamazoo. It could also remove dry and wet weather flows to the Detroit sewerage system.”

Detroit Water and Sewerage Department, Urban Stream Restoration, City of Detroit

## Regional Projects

- Kalamazoo Project
  - Approximately 1,600 feet of new channel built
  - Cost \$7.5 million
  - Financed through bonds based on tax increment financing
- Jackson Project
  - Uncovered approximately 300 feet of 3,500 feet of the Grand River channel that had been enclosed in a concrete box culvert
  - Cost \$2 million
  - Funding sources include public and private grants and funds











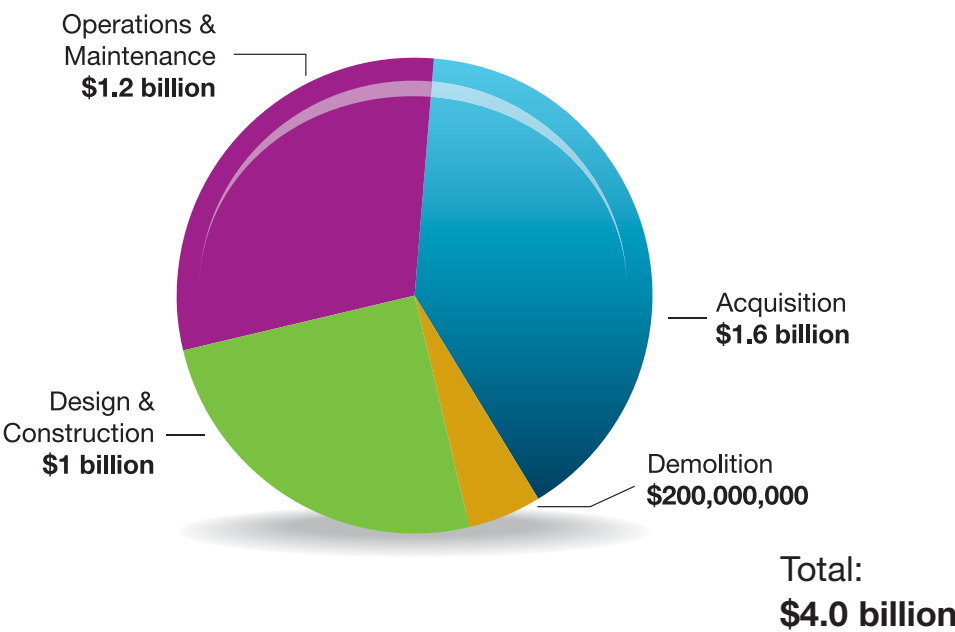
# Summary

Through Red Fields to Green Fields it is possible to help stabilize the economy of Detroit. Vacant and underutilized land can be transformed into a vast network of interconnected greenways leading to increased property values, improved public health and numerous employment opportunities.

If \$4 billion were invested into Detroit, we could reduce BLIGHT, stabilize land values, turn liabilities into future assets, and create THOUSANDS OF jobs.

Over 9,000 acres along the Inner Circle Greenway could be repositioned for future economic development.

## Total Budget





# Acknowledgements

We would like to acknowledge the Speedwell Foundation for their generous support.



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