

Tapping Into the Emerging Green Economy

Green Economic Development Strategies for
Community & Brownfield Redevelopment
09/15/2009



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Community Economic Development Division





Preparing Brownfields For **Green** Business

- What is a Brownfield?

- IC 13-11-2-19.3

"Brownfield"

Sec. 19.3. "Brownfield" means a parcel of real estate:

(1) that:

(A) is abandoned or inactive; or

(B) may not be operated at its appropriate use; and

(2) on which expansion, redevelopment, or reuse is complicated;

because of the presence or potential presence of a hazardous substance, a contaminant, petroleum, or a petroleum product that poses a risk to human health and the environment.

As added by P.L.59-1997, SEC.3. Amended by P.L.203-2003, SEC.1.



Preparing Brownfields For Green Business



- Project Examples in Indy Context
 - Former Ertel Site Redevelopment Project
 - Titan Industries Travesty – 2 Abandoned Plating Facilities Dumped on City (Greener Demo = Better Project)
 - Neighborhood Brownfield Initiative 2009
 - The Project School - \$20,000 / \$10,000 LISC
 - Phytoremediation Pilot Project – Keystone Enterprise Park
 - 2444 N. Winthrop Ave.
 - KIBI HQ – Look around us!





Preparing Brownfields For **Green** Business

- Former Ertel Manufacturing Corp. Redevelopment
 - Monster Project – Brownfields at the Speed of Business
 - Greener Demolition / Waste Audit Process Created
 - Reuse of Foundry Sand as Good, FREE, Compactable Fill



Preparing Brownfields For **Green** Business

- Former Ertel Manufacturing Corp. Redevelopment
 - Foundry Sand Reuse – One Neighborhoods Nightmare becomes green reuse boon for reuse in another neighborhood!



Preparing Brownfields For **Green** Business

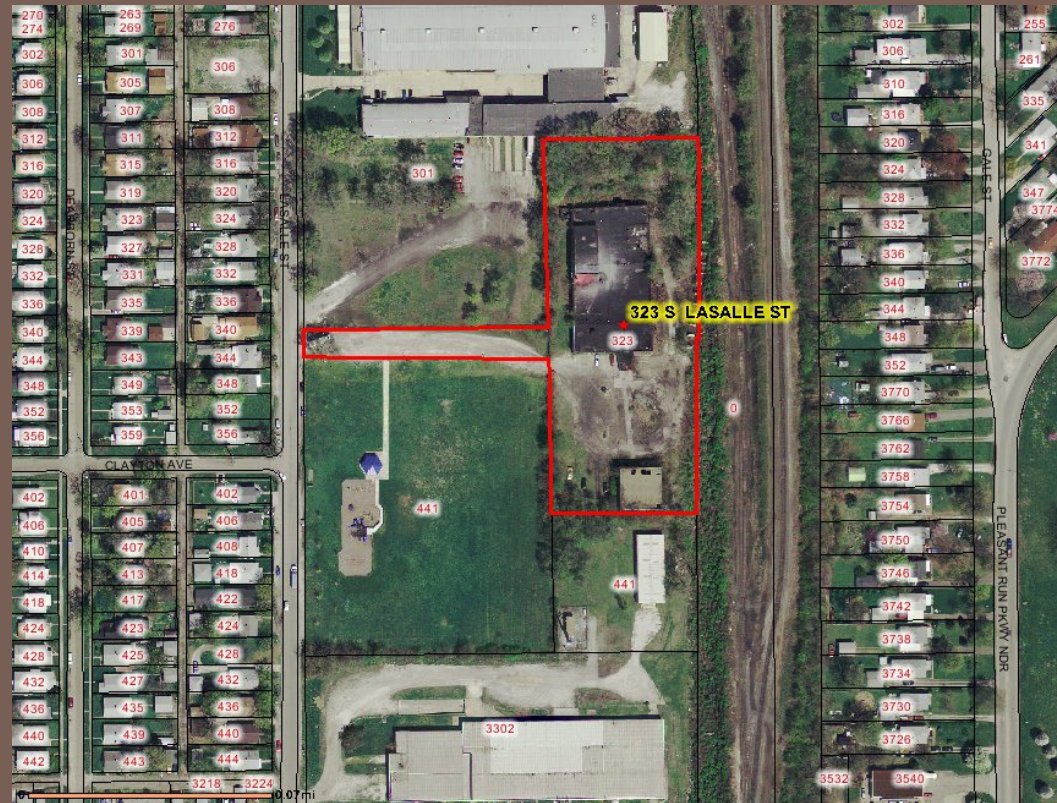
- Former Ertel Manufacturing Corp. Redevelopment
 - Foundry Sand Reuse – One Neighborhoods Nightmare becomes green reuse boon for reuse in another neighborhood!



Legacy of Abandoned Plating Facilities

323 South LaSalle Street Assessment

- Former Titan Industries, Inc. abandoned plating facility



Legacy of Abandoned Plating Facilities The Titan Travesty!

- 323 South LaSalle Street Assessment
 - Former Titan Industries, Inc. abandoned plating facility



Legacy of Abandoned Plating Facilities

- DEMOLITION 323 South LaSalle Street Assessment
 - Former Titan Industries, Inc. abandoned plating facility





Legacy of Abandoned Plating Facilities & the Link to Greener Demolition Practices

- DEMOLITION 323 South LaSalle Street Assessment
 - Demolition Environmental Oversight & Waste Audit
- Original Demolition Bids \$150,000 to \$300,000
- After: \$66,800 to \$115,000
- Completed with additional required removal for
- \$83,000 Total



Titan Tragedy Part II: Yandes Street Legacy of Abandoned Plating Facilities

- Former Titan Industries, Inc. Plating Facility #2
 - 2422/2430 Yandes Street
 - Slated for Demolition late summer or Fall 2009
 - Demolition Bids Received & Project Awarded
 - Second IFA Brownfields Assessment Grant \$21,000 Remains



Legacy of Abandoned Plating Facilities & Prior Industrial Activity

- IDNR Urban Forestry Grant / HUD CDBG Phytoremediation Pilot Project – Keystone Enterprise Park
 - 53 Hybrid Poplar Trees Planted Nov. 2007
 - GW Monitoring



Preparing Brownfields For Green Business

- ▣ Neighborhood Brownfield Initiative (\$50,000)
 - The Project School – Edible Schoolyard / Playgrounds



Preparing Brownfields For **Green** Business

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Preparing Brownfields For Green Business

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Preparing Brownfields For **Green** Business

- ▣ IDNR Urban Forestry Grant / HUD CDBG
Phytoremediation Pilot Project – Keystone Enterprise
Park



Preparing Brownfields For **Green** Business

- ▣ IDNR Urban Forestry Grant / HUD CDBG
Phytoremediation Pilot Project – Keystone Enterprise
Park



Preparing Brownfields For **Green** Business

- ▣ 2400 Block of N. Winthrop Avenue – Colonial Bakery
 - Fantastic Community Event – Tire Amnesty Day Started this Project off in 2007!
 - \$100,000 IFA Brownfields Assessment Remediation Grant
 - KPADC



Preparing Brownfields For **Green** Business

- ▣ 2400 Block of N. Winthrop Avenue – Colonial Bakery
 - Fantastic Community Event – Tire Amnesty Day Started this Project off in 2007!



Preparing Brownfields For **Green** Business

- ▣ 2400 Block of N. Winthrop Avenue – Colonial Bakery
 - Then State PRG \$132,000 UST Removal and Cleanup Grant



Preparing Brownfields For **Green** Business

- 2110 Columbia Avenue – Former Junkyard to **GREEN** Affordable Housing
 - \$60,000 IFA Brownfields Assessment Grant (Complete!)
 - Tax Credit Project with Developer



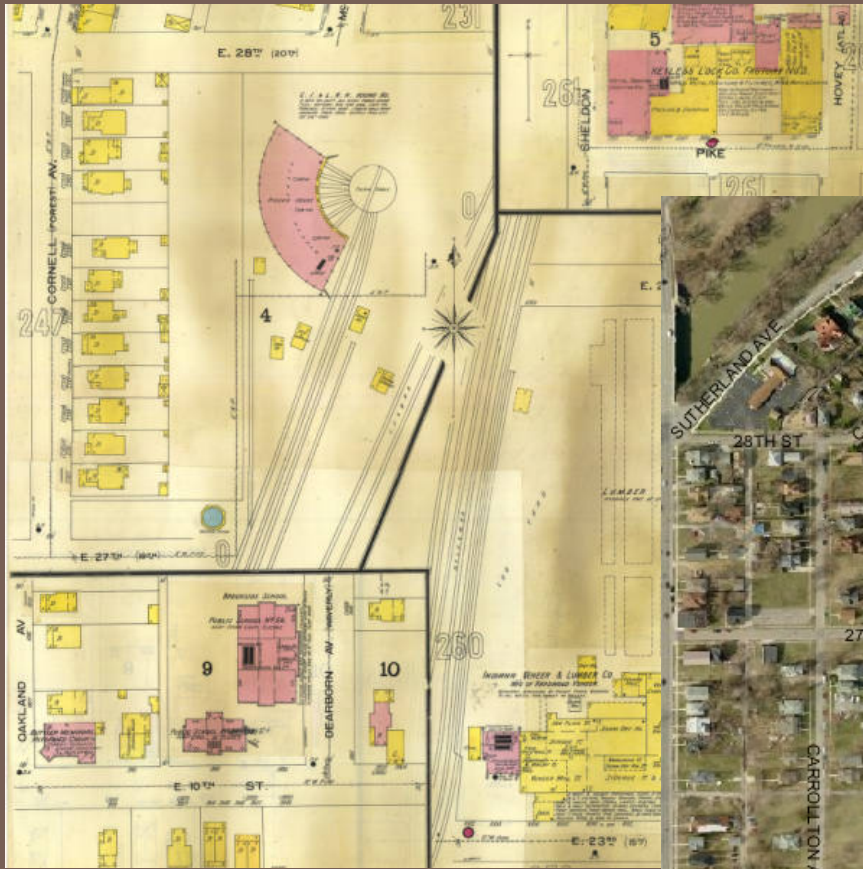


Preparing Brownfields For **Green** Business

- Urban Farming Inquiries Exploding for Brownfield Sites and Urban Infill Lots (Mayor Noted this Recently!)
 - Safe Soils Issue is Paramount – Establishing Interdisciplinary Effort to Create Country’s First Standardized Protocols
 - US EPA
 - ATSDR
 - IDEM / IFA Brownfields Program
 - Marion County Health & Hospital Corp.
 - IUPUI – Medical School Research Community
 - City of Indianapolis Brownfield Redevelopment Program
 - BrownLots2GreenPlots Plan for vacant parcels



Preparing Brownfields For Green Business



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Preparing Brownfields For Green Business



Preparing Brownfields For Green Business



Preparing Brownfields For **Green** Business



CONCEPT PLAN

INDIANAPOLIS, INDIANA **MONON ACRES**



Preparing Brownfields For Green Business – EPA CARE Grant

- Martindale Brightwood Environmental Justice Collaborative (MBEJC) & Improving Kids' Environment (IKE) – EPA CARE GRANT \$98,000
 - Additional \$50,000 EPA Targeted Brownfield Assessment Grant
 - 1960/1964 Hillside Avenue Former Smith's Diesel Service Station



Preparing Brownfields For Green Business – EPA CARE Grant

- 1960/1964 Hillside Avenue Former Smith's Diesel Service Station – Felege Hiwyot Center Urban Farming Youth Education



Preparing Brownfields For **Green** Business – Sharing the Word

- First Brownfield Bicycle Tour! May 14, 2009
 - IUPUI Campus Compact & Peace Institute – University students & Environmental Leadership Retreat





Preparing Brownfields For **Green** Business

- IDENTIFICATION, PRIORITIZATION, then CHARACTERIZATION
 - These steps are required to identify ripe sites for redevelopment as well as opportunities to improve the environment including ground water impacts linked to additional concerns (Vapor Intrusion, etc. that halt redevelopment and cause threat to public health).
- Comprehensive Brownfield Inventory Project as an advanced means to Identify & Prioritize





Overview of INVENTORY

How?

We: First Consulted with Office of Corporation Counsel to address potential liability considerations.

- Rumored State of Texas “takings” case just that... a rumor.
- Recognized the benefits of malleable database outweigh falsehoods and rumors!
- Recognize that you cannot manage that which you cannot Measure. 2 steps / 1 step or ???
- Competitively Bid – 10 Respondents



Overview of a Brownfield Inventory



What?

- Outcome of MDC Res. 09-E01 02/04/2009
- **Totally Grant funded** Brownfield Inventory Project (EPA and HUD CDBG) available to public on WEB
- Examination of 353,000 Parcels in Marion County
- Examine all previous data
 - 2004 Center Township SPEA Capstone
 - 2007 Phase I ESA Area Survey
 - Irvington DC & NNDC Inventories
- Generate NEW DATA

EPA Brownfields Grantee Reporting Requirements

Section 128(a) of Small Business Liability Relief and Brownfields Revitalization Act: State and Tribal grant recipients are required to take reasonable steps to develop and/or maintain a system or process that can provided an reasonable estimate of brownfield sites
EPA 510-R-09-002





Overview

Why?

Goal: Empirical data to support and guide efforts including:

- Identifying sites that are “Redevelopment Ready”
 - ▣ Assisting with marketing of sites and removing stigma
- Prioritizing sites for grant funding purposes/identifying conditions that avail each site to particular funding mechanisms
- Presenting the case to EPA and IFA Brownfields Program
 - ▣ Meeting EPA requirements
- Tracking progress
 - ▣ Success Measurement
 - ▣ Rate of new challenges developing
- Increasing awareness and public information/education
- Promoting infill redevelopment/achieving sustainability goals and efforts of SustainIndy





Overview

How?

Others: some good

- Pennsylvania also grants up to \$50,000 to cities and development authorities that carryout brownfields inventories and list these properties in the states PaSiteFinder, a web-based brownfield inventory system. Localities and development authorities receive a \$1,000 credit for each site listed (Bartsch et al., 2001; DEP, 2000)
- Elkhart County, INDIANA (inspiration with Ground Water Management)
- **MOST: IGNORE** the Issue, or don't take comprehensive approach, leaving development ready sites languishing because lack of data





Overview

How?

We: Recognize that

DATA is king.

- ▣ DATA is good.
- ▣ DATA develops
 - Ideas / Plans
 - Which identify threats to GW resources
 - Which develop Properties
 - Which benefit neighborhoods
 - Which develops Tax Base & City





Project Update

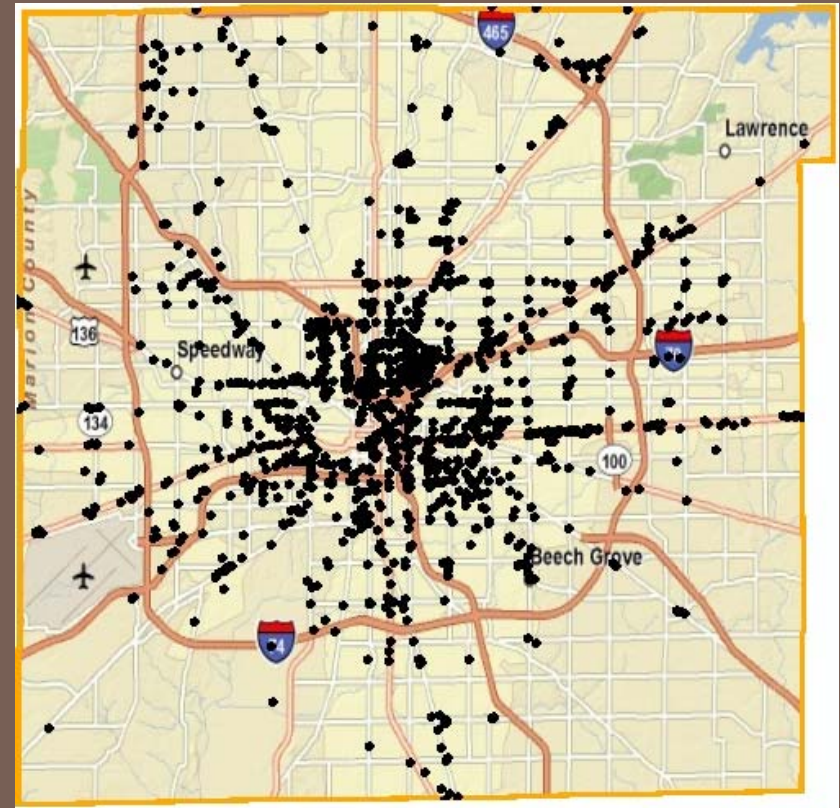
- Marion County Site Inventory
 - Desktop Study
 - USPS Database Integration
 - Community Development Corporation Input
 - Windshield Survey
 - Site Status Evaluation
- 1960 City Directory Mapping Pilot Project
- Historical Sanborn Fire Insurance Mapping
- Web-Based GIS Application Development
- Document Management System



Site Inventory-Desktop Study

Created GIS-based inventory of 1,682 sites using 16 different data sources

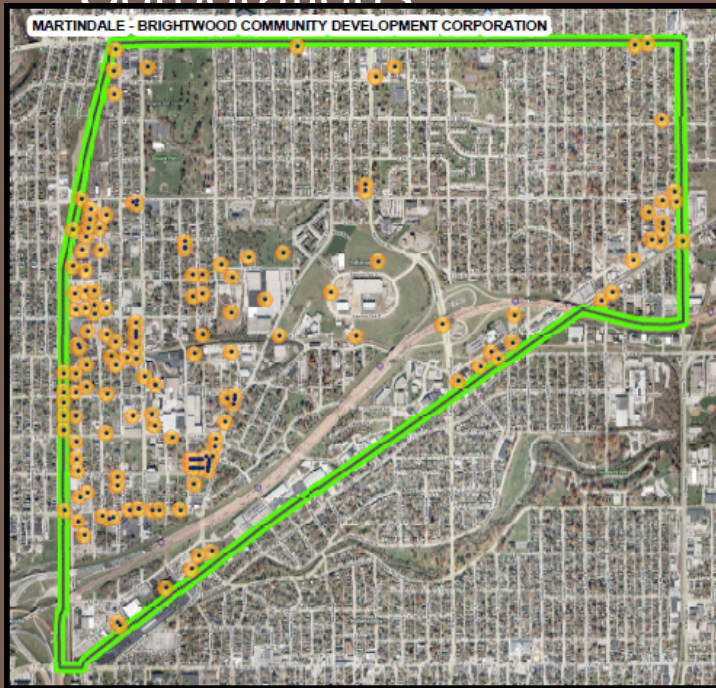
1. Brownfield Inventory 07/01/2007
2. IDEM Brownfields
3. FRS database - EPA ACRES sites
4. Brownfield Inventory-IUPUI Graduate Study-1995
5. Gas Station Inventory – 1998
6. Brownfield Evaluation Neighborhood Corridor - 2004
7. Martindale-Brightwood Phase I ESA Area Survey – 2006
8. Mobile Hard Drive - County Owned Sites and Hard Drive Private Owned Sites
9. United States Postal Service Vacant Property Address List in FRS Database
10. United States Postal Service Vacant Property Address List with Commercial/Industrial Zoning
11. Near North Development Corp Area Wide Environmental Survey – 2008
12. Irvington Development Organization Phase I ESA Area Wide Survey – 2007
13. CDC Area Input
14. Field data from three field crews that visited sites and collected additional information and sites.
15. Indy Brownfields input
16. State of Indiana Brownfields Program Database (ULCERS)



Marion County, In
Site Inventory

Site Inventory-Community Development Corporation Input

Provided opportunity for input from Community Development Corporations



Site Address	PARCEL_ID	TOWNSHIP	ZIPCODE	Data Source(s)	CDC AREA
1321 25TH ST	1045916	CENTER	46205	Martindale-Brightwood Phase I ESA Area Survey, 2006	MARTINDALE - BRIGHTWOOD COMMUNITY DEVELOPMENT CORPORATION
1165 30TH ST	1011688	CENTER	46205	Indy Brownfields Inventory 2007	MARTINDALE - BRIGHTWOOD COMMUNITY DEVELOPMENT CORPORATION
3665 30TH ST	1083689	CENTER	46218	Indy Brownfields Inventory 2007	MARTINDALE - BRIGHTWOOD COMMUNITY DEVELOPMENT CORPORATION
2005 30TH ST	1088174	CENTER	46218	USPSVB not in FRS with Zoning	MARTINDALE - BRIGHTWOOD COMMUNITY DEVELOPMENT CORPORATION
3609 30TH ST	1028018	CENTER	46218	USPSVB not in FRS with Zoning	MARTINDALE - BRIGHTWOOD COMMUNITY DEVELOPMENT CORPORATION
2040 ALVORD ST	1055028	CENTER	46202	Indy Brownfields Inventory 2007	MARTINDALE - BRIGHTWOOD COMMUNITY DEVELOPMENT CORPORATION
1720 ALVORD ST	1011436	CENTER	46202	EPA FRS Database; BI_95; MBPI_06	MARTINDALE - BRIGHTWOOD COMMUNITY DEVELOPMENT CORPORATION
1902 ALVORD ST	1014271	CENTER	46202	EPA FRS Database; MBPI_06	MARTINDALE - BRIGHTWOOD COMMUNITY DEVELOPMENT CORPORATION
2002 ALVORD ST	1063037	CENTER	46202	EPA FRS Database; MBPI_06	MARTINDALE - BRIGHTWOOD COMMUNITY DEVELOPMENT CORPORATION
2017 ALVORD ST	1066594	CENTER	46202	Brownfields Inventory 1995	MARTINDALE - BRIGHTWOOD COMMUNITY DEVELOPMENT CORPORATION
2232 ALVORD ST	1039668	CENTER	46205	Martindale-Brightwood Phase I ESA Area Survey, 2006	MARTINDALE - BRIGHTWOOD COMMUNITY DEVELOPMENT CORPORATION
1720 ALVORD ST	1090153	CENTER	46202	Martindale-Brightwood Phase I ESA Area Survey, 2006; HDCO/PO	MARTINDALE - BRIGHTWOOD COMMUNITY DEVELOPMENT CORPORATION

Martindale-Brightwood
CDC Site Inventory Report

Site Inventory-Windshield Survey

Performed 647 windshield surveys of suspected Brownfield sites

Documented Site Status

Date Inspected	3/19/2009
Facility Type	Manufacturing Plant
Vacancy	VACANT
Light in Building	NO
Employees or Visitors	NO
Parking Lot	YES-NO CARS
For Sale Sign	NO
Broken Windows	YES
Boarded Windows	YES
Overgrown Vegetation	YES
Structural Damage	NO
Fire Damage	NO
GW Monitoring	UNKNOWN
Chemical Hazard Signs	NO
AST	NO
UST	UNKNOWN
Drums	NO
Field Notes	Large building and storage area with abandoned equipment



Site Inventory-Site Status Evaluation

Evaluated Site Inventory for Brownfield Status

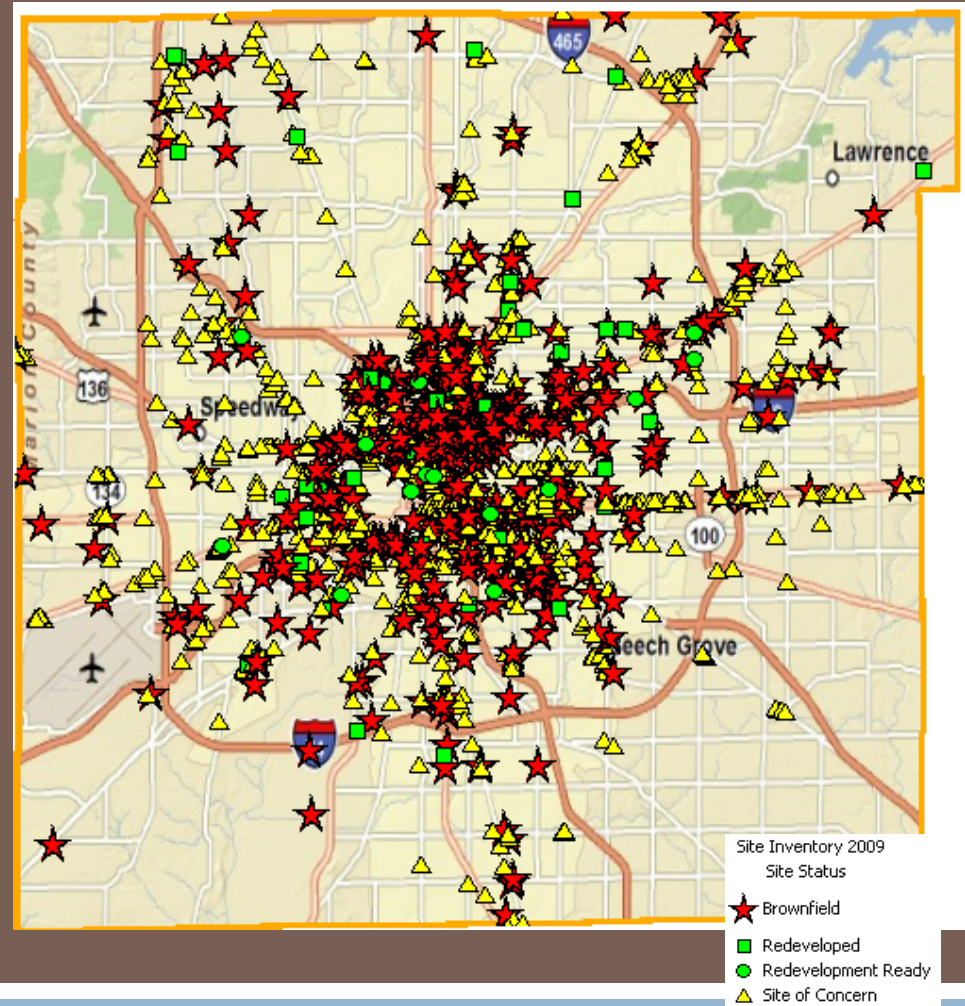
Summary

Brownfield: **519**

Redeveloped: **49**

Redevelopment Ready: **16**

Site of Concern: **1098**





Site Inventory

Joined Inventory with other data resources

- Parcel and Address Info
- Unique Identifier
- Site Status
- Data Source
- Links to EPA or IDEM Websites

- Zoning
- CDC Area
- X,Y Coordinates
- Field Inspection Information
- Link to Digital Photo
- Street View Link
- EPA Funding Class
- Site Name
- Census Tract
- Census Block Group



Site Inventory Street View

1960 City Directory Pilot Project

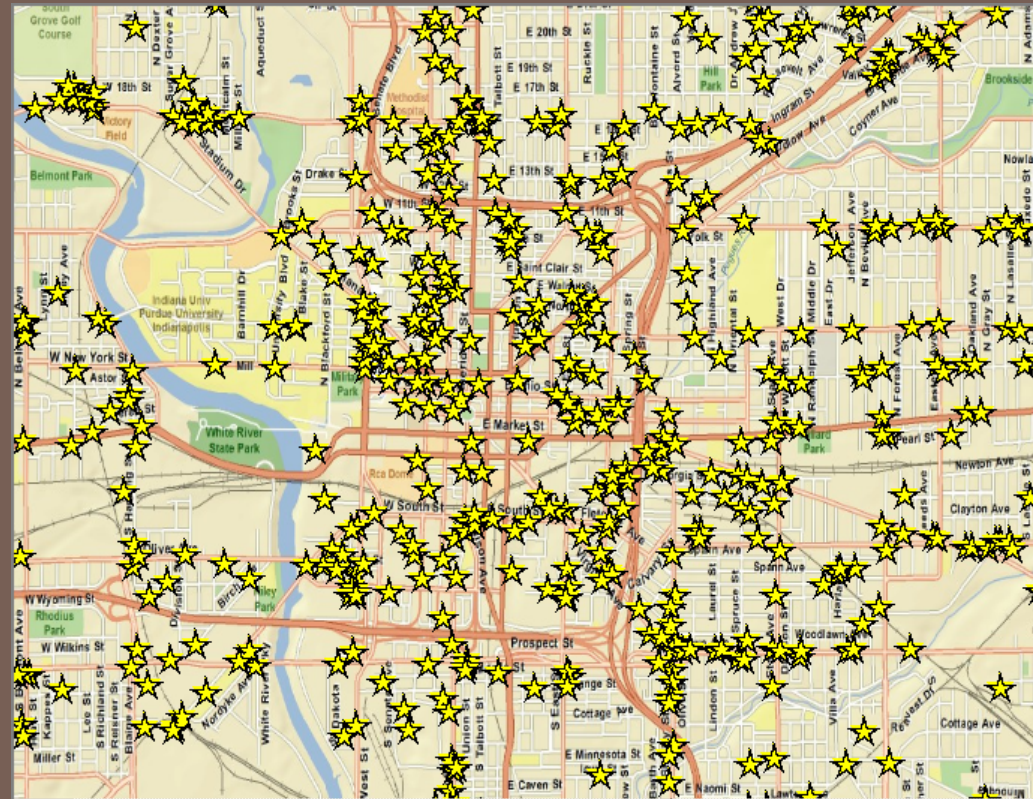
Performed Data Gap Analysis using 1960 City Directory listings to evaluate potential sites not identified in existing databases using business with a high likelihood of historic Hazardous Substance or Petroleum use

Summary

Total businesses mapped: 1,105

Businesses found in existing site inventory: 178

Therefore an additional 927 sites could be at minimum defined as a “Site of Concern”



Historical Sanborn Fire Insurance Mapping

IMAGIS Geo-referenced the
1956 Sanborn Maps for
use in GIS System

Summary

Rectified

595 Map Sheets

5 Key Maps

\$16,000 Value-Added





Web-Based GIS Application Development

A Public available Web-Based GIS Application is currently being developed.

Implementation is expected to occur in late August.

INDY Brownfields
Interactive Site Inventory GIS Viewer

Help | Indy Brownfields Home

Print | Find Address | Search Brownfields | Search City Directory

Results

Map Contents

- IndyMap
 - Environmental
 - Brownfields
 - City Directory (1960)
 - Underground Storage
- Base Map
 - Marion County Bounda
 - Road
 - CDC Areas
 - Parcel
 - Imagery
- Street Map

2502 N COLLEGE AVE (Brownfields)

Parcel ID	1026699
Facility Type	Unknown
Site Status	Brownfield
Vacancy	VACANT
Link to Documents	
Zoning	D8
CDC Area	KING PARK AREA DEVELOPMENT CORPORATION

IndyMap > Brownfields
[Add to Results](#)



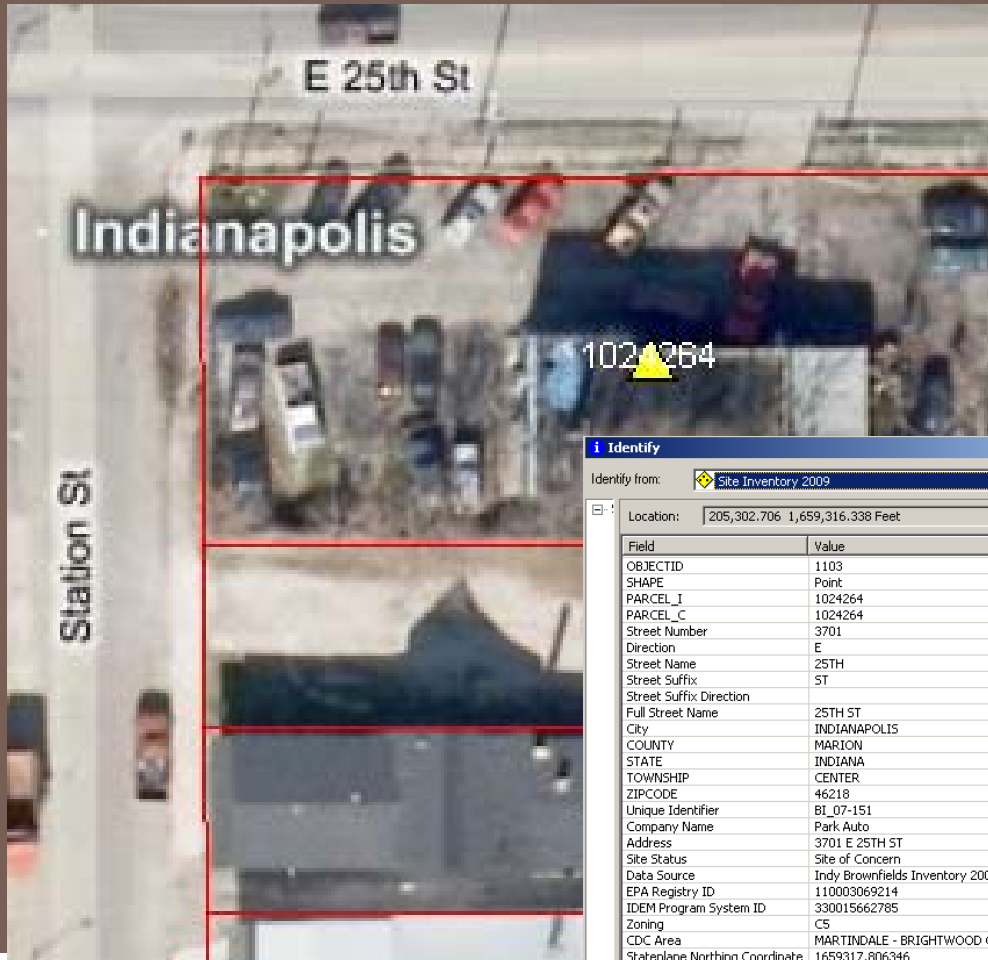
Document Management System

Goals:

1. Scan, Index, and link related hard copy records to features in the site inventory
2. Select appropriate software to manage digital records
3. Make available to public via the web-based GIS application



MB Care Grant/MBEJC & IKE Area Investigation



Identify

Identify from: Site Inventory 2009

Location: 205,302.706 1,659,316.338 Feet

Field	Value
OBJECTID	1103
SHAPE	Point
PARCEL_I	1024264
PARCEL_C	1024264
Street Number	3701
Direction	E
Street Name	25TH
Street Suffix	ST
Street Suffix Direction	
Full Street Name	25TH ST
City	INDIANAPOLIS
COUNTY	MARION
STATE	INDIANA
TOWNSHIP	CENTER
ZIPCODE	46218
Unique Identifier	BI_07-151
Company Name	Park Auto
Address	3701 E 25TH ST
Site Status	Site of Concern
Data Source	Indy Brownfields Inventory 2007
EPA Registry ID	110003069214
IDEM Program System ID	330015662785
Zoning	C5
CDC Area	MARTINDALE - BRIGHTWOOD COMMUNITY DEVELOPMEN
Stateplane Northing Coordinate	1659317.806346
Stateplane Easting Coordinate	205302.799196
Latitude WGS84	39.803223

Identified 1 feature



East 16th Street (Meridian Street to Sheldon Street) Corridor



East 16th Street (Meridian Street to Sheldon Street) Corridor





Proposed Next Steps-Additional Funding Required (Funds from 2009 HUD CDBG Grant Budget)

- City Directory
 - Create comprehensive database of Historical City Directory based facilities (1920-2000) (10 year increments)
 - Update Site Inventory with City Directory Listings
 - Additional Windshield Surveys (confirmation of all listed as “brownfields”)
- Update Sanborn Collection
 - Geo-reference color Sanborn Maps to be provided by IUPUI University Library
 - 1887
 - 1898
 - 1915
- Data Management System
 - Scanning, Indexing
 - Software Selection
 - Implementation

