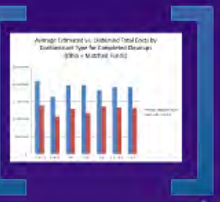
In Brownfields we remember and celebrate the good projects, try to learn something and never repeat the less successful ones. But what does a portfolio analysis tell us about choosing projects, spending money,and achieving outcomes. This is the story about a grant program in Ohio.

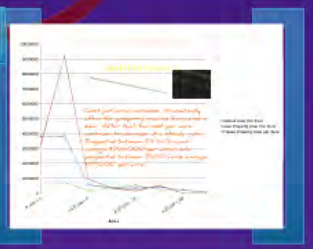
87 properties totalling $50 million in budgeted expenditures were included in the analyses

What the data says?

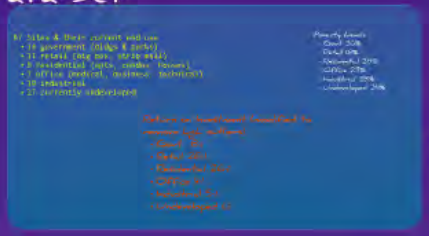
What costs more, how much more? What did the brownfield cleanup dollars actually buy?



Average Property Cleanup Cost per Acre by Containment Type and Property Size



Data Set



How can we use this data to make cleanups more cost effective?

Thank You!

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What costs more, how much more? What did the brownfield cleanup dollars actually buy?

By:Amy Alduino, Development reporting on USEPA Data Analysis Project exploring the Clean Ohio dataset

The Ohio Department of Development requested assistance from USEPA to analyze cost and remedy data from the state's Clean Ohio Fund brownfield grant program as a tool to evaluate baseline costs, types of remedial activities, and manage state resources.

Project Methodology

- Source Documents
  - Budget Spreadsheets
  - Phase II Assessment Reports
  - Remedial Action Plans (RAPs)
  - Ohio Program Tracking Spreadsheets
- Extracted and configured data for analysis
- Sufficient data for 87 properties
- Updated August 2011

87 properties totalling $150 million in budgeted expenditures were included in the analyses.

much

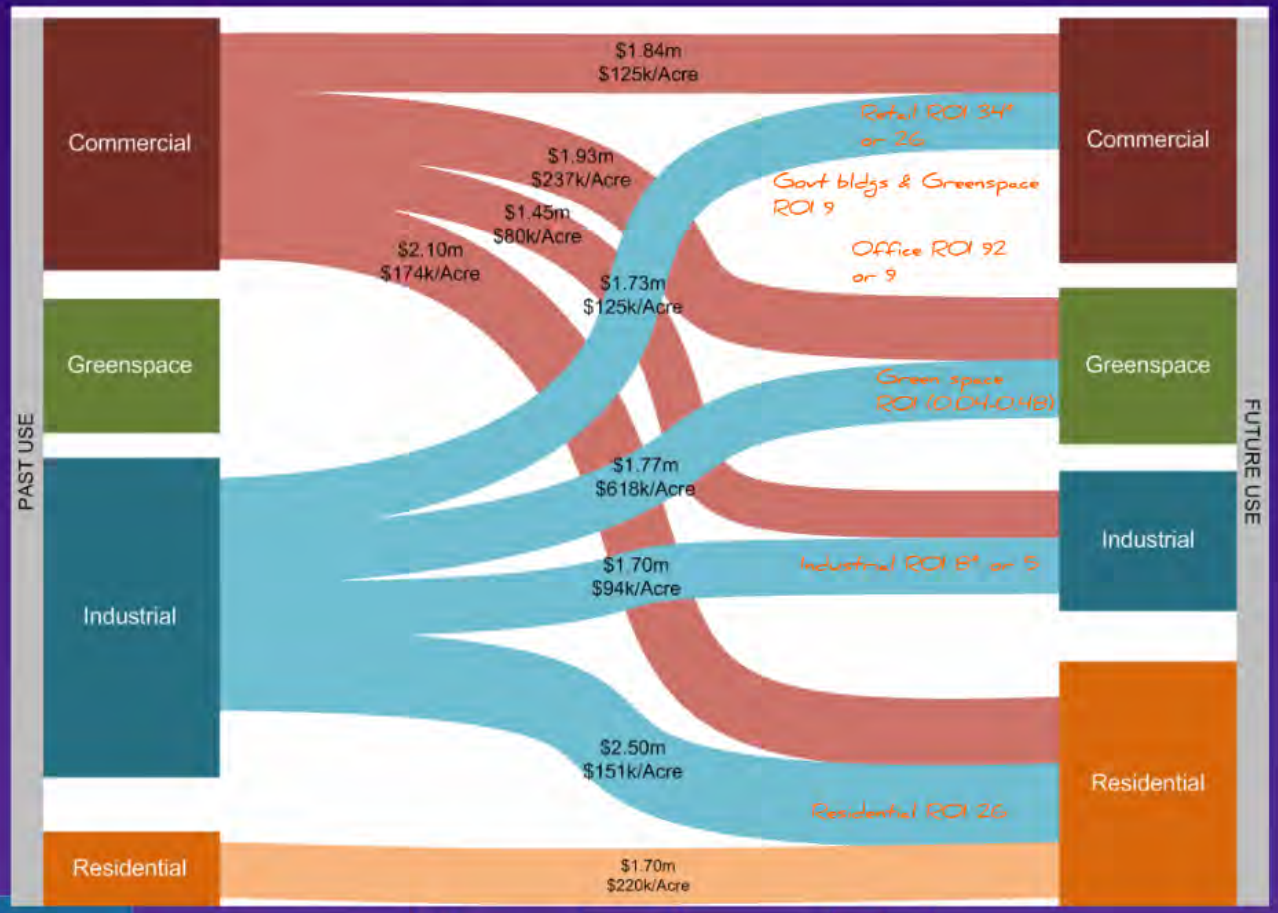
Data Set

87 Sites & their current end use
- 14 government (bldgs & parks)
- 11 retail (big box, strip mall)
- 9 residential (apts, condos, houses)
- 7 office (medical, business, technical)
- 19 industrial
- 27 currently undeveloped

Poverty Levels
- Govt 26%
- Retail 18%
- Residential 28%
- Office 23%
- Industrial 28%
- Undeveloped 24%

Return on Investment (modified to remove high outliers)
- Govt 8:1
- Retail 26:1
- Residential 26:1
- Office 9:1
- Industrial 5:1
- Undeveloped 0

Past & Future Use
Average Budgeted Cost Per Cleanup and Cost Per Acre



* Project outliers included

What did Clean Ohio pay for?

1.1% Institutional/Eng Controls

8.9% consulting

13.5 % acquisition/infrastructure

19.5% asbestos

Cuyahoga County Ameritrust

23.9% Bldg demo

Middletown Regional Hospital

33.8% active soil/gw remedy

Cincinnati Providence North

What did Clean Ohio budget funds for?

$50 million active remedy

$35 million demolition

$30 million asbestos abatement

$20 million acquisition/infrastructure

$13 million consultant fees

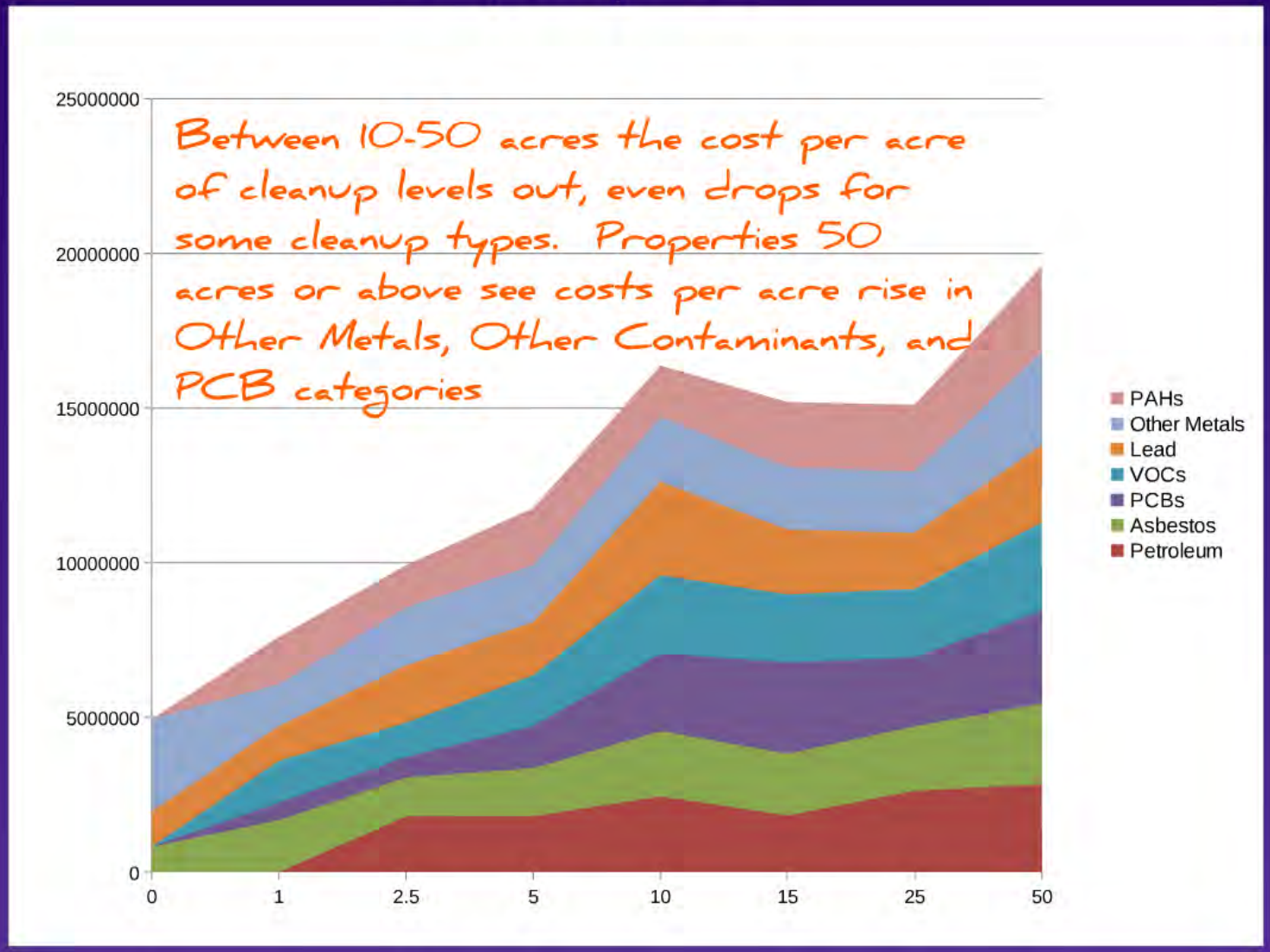
$2 million Institutional & Eng Controls

Size matters

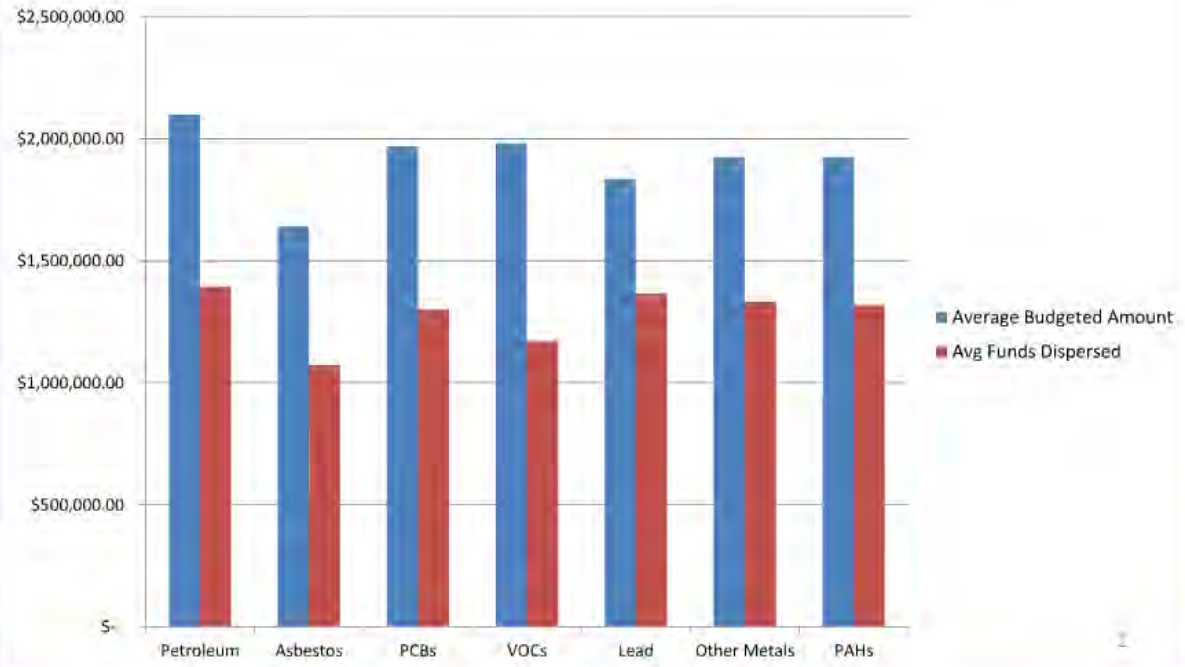
Ameritrust project

Cost per acre decreases dramatically after the property reaches five acres in size. After that the cost per acre continues to decrease at a steady rate. Properties between 2.5 to 5 acres average $556,000 per acre while properties between 25-50 acres average $177,000 per acre.

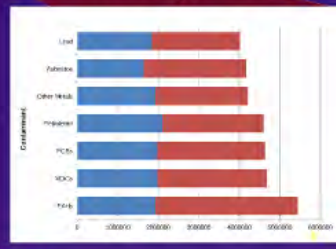
Average Property Cleanup Cost per Acre by Contaminant Type and Property Size



Average Estimated vs. Disbursed Total Costs by Contaminant Type for Completed Cleanups (Ohio + Matched Funds)



, Development
USEPA Data Analysis
oring the Clean Ohio dataset



What projects had the greatest reinvestment?

What did Clean Ohio budget funds for?
$50 million active remedy
$35 million demolition
$30 million asbestos abatement
$20 million acquisition/infrastructure
$13 million consultant fees
$2 million Institutional & Eng Controls

What did Clean Ohio Save money on?
Competitively procured, contractor provided services

Project Methodology
- Source Documents

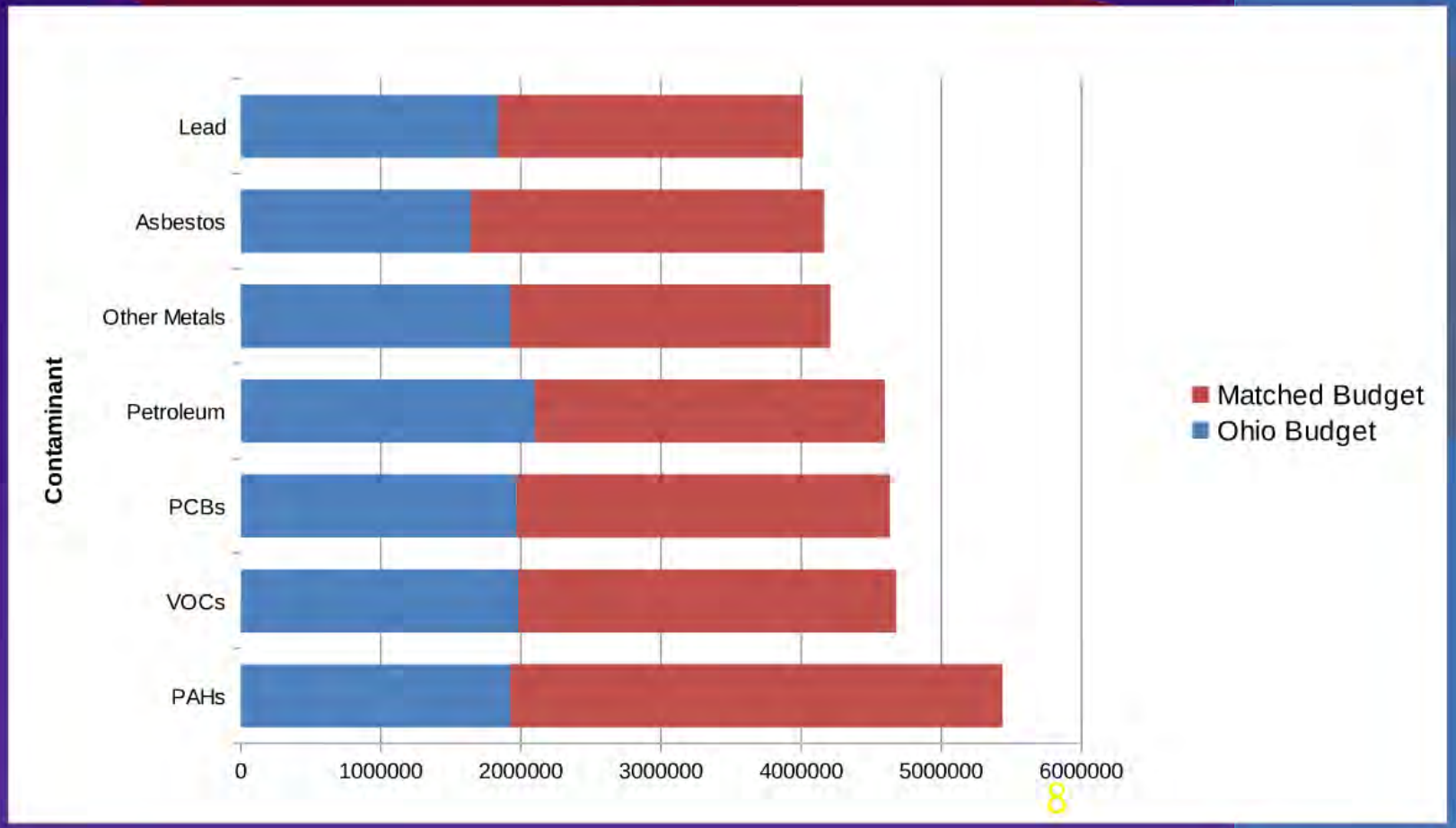
Retail/Residential
ROI 26

Govt/Office
ROI 8-9

Industrial
ROI 5

End Use
vs
ROI

Average Budgeted and Matching Costs by Contaminant Type (millions of dollars)



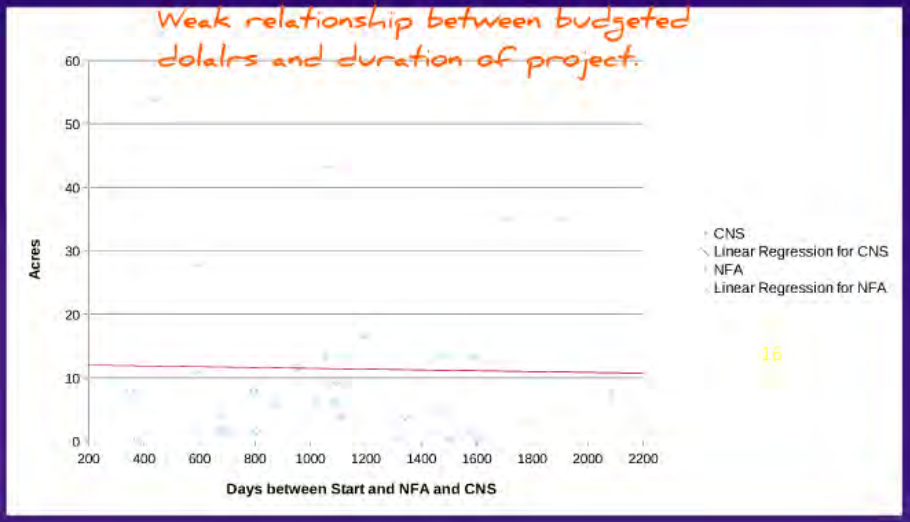
Return on Investment for the 87 project portfolio is $1.9 billion dollars and 9,400 jobs.

This is with 27 currently undeveloped sites.

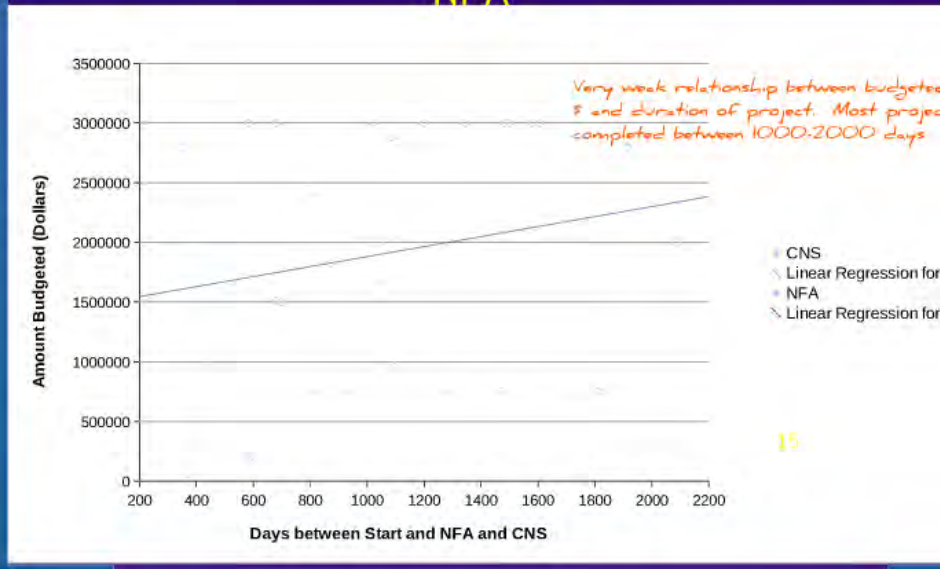
What did Clean Ohio Save money on?

Competitively procured, contractor provided services

Property Size v. Days to CNS or NFA



Budgeted Dollars v. Days to CNS or NFA



Size matters - but not to the regulatory time frame