

Demolition: Good or Bad for Property Conditions and Values?

Mike Downs Center for Indiana
Politics

April 16, 2010

Acknowledgments

- City of Fort Wayne Division of Community Development
- Allen County Geographic Information System Department (<http://www.acimap.us/pati/>)
- Jason Lester, Jill Downs, Joe DeSimone, Alex Milentis

Introduction

- There is some debate about which is better – leaving a vacant house standing or demolishing it.
- There are good arguments and plenty of people supporting both positions.
- There is very little research that attempts to answer this question.

Terminology

- Land: The physical ground of a property – grass, garden, trees, shrubs, etc.
- Structure: The house on the property
- Improvements: The house, garage, and other buildings on the property
- Property: Generic term for land and structure

Methodology: Populations

- For purposes of this research, “better” was defined as condition of structures, land, and assessed values of land and improvements for the subject properties and adjoining properties
- Two populations are compared
 - Properties within Fort Wayne corporate boundaries for which a demolition permit has been issued
 - Properties within Fort Wayne corporate boundaries on record as having water shut off for at least 17 months as of April 30, 2009
 - Shut-off properties were used as a proxy for structures that could have been demolished, but have not been

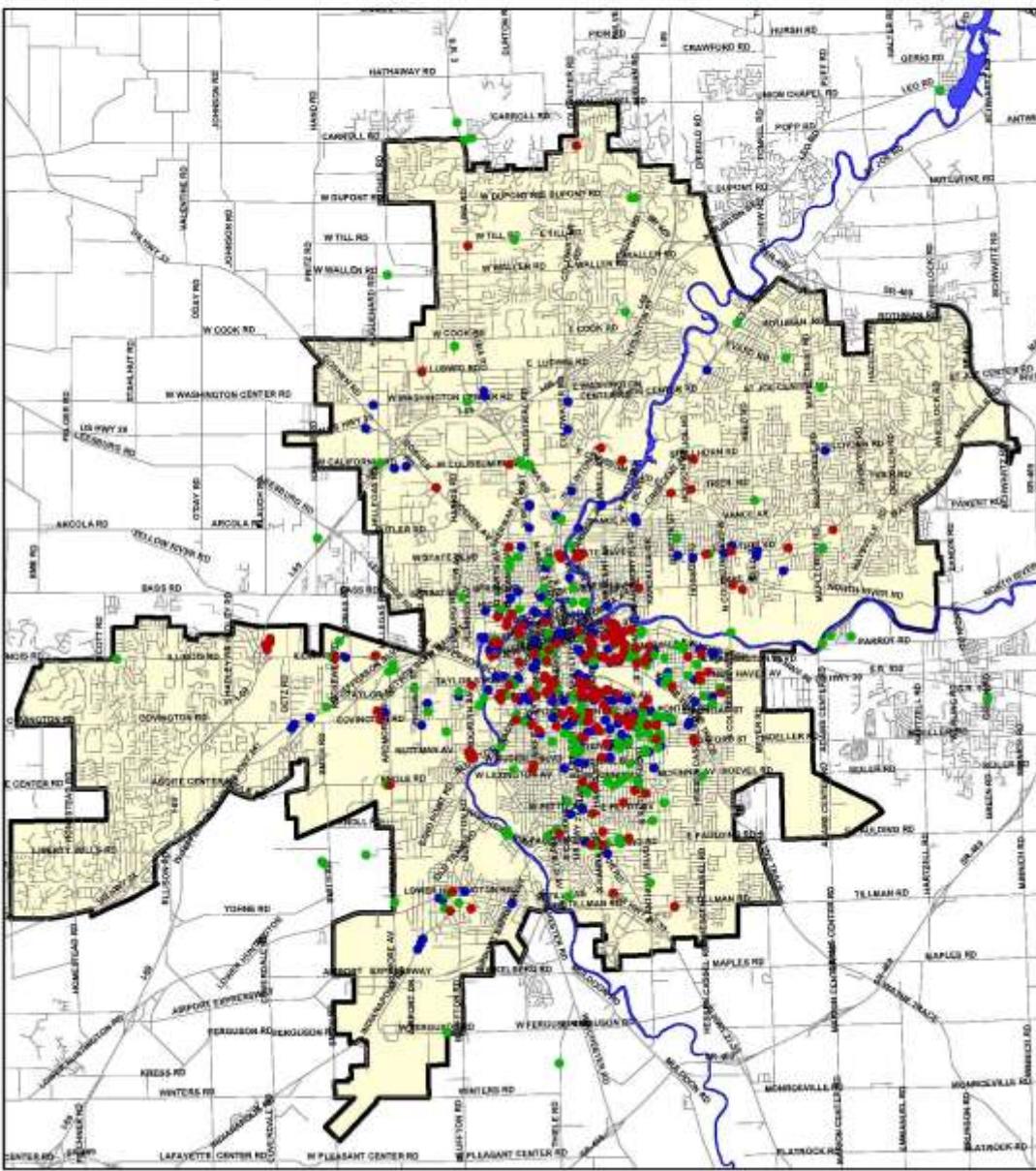
Methodology: Populations

- This research included properties within Fort Wayne corporate boundaries for which:
 - demolition permits were issued from 1996 through 2007 (N=3,143)
 - water had been shut off for 17 to 160 months (N=1,980)

Downs demolition research

demolition samples

Legend

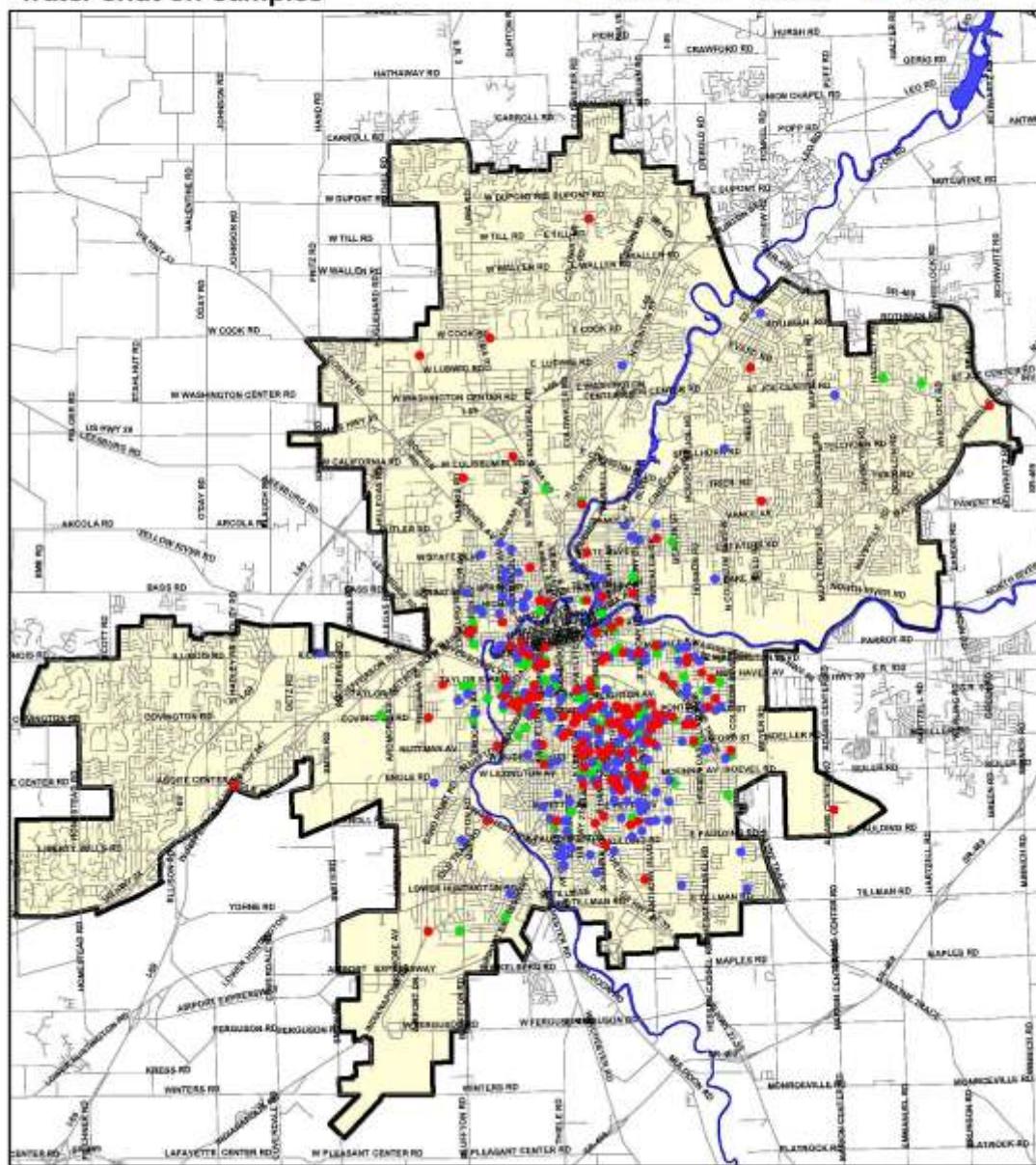


Downs demolition research

water shut off samples

Legend

● S- 07 - 04 ● S- 03 - 00 ● S- 99 - 96



Structure: No Issues



Structure: Minor Rehab Needed



Structure: Moderate Rehab Needed



Structure: Major Rehab or Demolition Needed



Land: Excellent



Land: Good



Land: Fair



Land: Poor



Summary of Findings Based on Descriptive Statistics

- 54.7% of all demolition permits issued in Fort Wayne are for demolitions that are not part of a specific revitalization program
- 89.3% of subject structures were vacant versus 31.4% of adjoining structures being vacant
- 5.8% of the subject properties had a new structure versus 3.1% of the adjoining properties

Summary of Findings Based on Descriptive Statistics

- The condition of the subject land was much worse than the condition of the adjoining land (27.9% v. 4.8% = poor)
- The condition of the subject structures was much worse than the condition of the adjoining structures (10.5% v. 0.9% = major rehab needed)
- 29% of the subject lands were in excellent or good condition
- 41.2% of the subject structures had no issues or only minor issues

Summary of Findings Based on Descriptive Statistics

- The assessed value of the subject land was lower than the adjoining land (\$4,382 v. \$5,929). Much of this can be attributed to the higher percentage of subject properties with no structures. Land with structures is assessed at a higher value because of the water and sewer taps.
- The assessed value of the structures on the subject properties was lower than the value on the adjoining properties (\$15,803 v. \$28,512).
- Almost 90% of all properties (subject and adjoining) are single family units. This compares to 70.2% of all units in Fort Wayne being single unit structures.

Summary of Findings from Difference of Means

- The condition of the subject land is worse for shut-off properties than for demolition properties (3.03 v. 2.84). The structure contributes to the mess on the land. Vegetation grows up next to the structure and may not get cut or removed when the lot is mowed.
- Land that is adjoining a shut-off property is marginally better cared for than land adjoining a demolition property (2.42 v. 2.59).
- The subject structure is in much better condition when it is on a demolition property than when it is on a shut-off property (1.64 v. 2.66). This is logical since it is a new structure.
- There is no statistically significant finding for the condition of adjoining structures for these populations.

Summary of Findings from Difference of Means

- The value of shut-off land is much higher than the value of the land where the structure has been demolished (\$5,696 v. \$2,816). This is because the water and sewer taps add value to the land.
- There is no statistically significant difference between the means for the adjoining land or improvement values for the demolition and shut-off populations.

Summary of Findings from Difference of Means

- When zero values and the top and bottom 10% of the values are eliminated from the analysis, there still is a higher value for shut-off land than demolition land. The value of structures increases dramatically for demolition properties and now is higher than the value of the structures on the shut-off properties.
- There is no statistically significant difference between the means for the adjoining land or improvement values for the demolition and shut-off populations.

Summary of Findings from Correlations

- There is a positive relationship between subject land conditions and the condition of the structure on that property and with the land and structure on adjoining property. In other words, as the condition of the subject land gets worse, so does the condition of the subject structure and the land and structure on the adjoining property. The relationship is strongest with the condition of the subject structure.
- The relationships persist if we look at just demolition properties or just shut-off properties. The relationship is slightly stronger among the demolition properties than the shut-off properties.

Summary of Findings from Correlations

- There is a negative relationship between the subject land condition and the value of the subject improvements and adjoining land and improvements. It is strongest with the adjoining improvements.
- The relationships persist if we look at shut-off properties, but persist only for adjoining improvement values if we look at demolition properties.

Findings Supporting Demolition

- Land in the demolition population is cared for better than land in the shut-off population
- Poor subject land condition has a greater relationship with decreasing values for adjoining land and structures in the shut-off population than the demolition population
- Over time the condition of land in the shut-off population deteriorates more than land in the demolition population
- Over time shut off land and the land adjoining shut-off land declines in value more than the subject land and adjoining land in the demolition population

Findings Opposing Demolition

- Assessed value of land is higher in the shut-off population than in the demolition population
- Land adjoining shut-off property is marginally better cared for than land adjoining an empty lot
- Poor subject land condition in the demolition population has a greater relationship with poor adjoining land and structure condition than in the shut-off population
- Rarely does someone build on a vacant lot
- 41% of the subject structures had no issues or only needed minor repair

Neutral Findings

- Properties in both populations are not cared for as well as adjoining properties
- 29% of the subject land is in excellent or good condition
- A disproportionate percentage of the structures included in the populations are single family units
- There is no statistically significant finding for the condition of adjoining structures for either population.
- There is no statistically significant difference between both populations for adjoining land or improvement values.
- There is no statistically significant relationship between time and the value of improvements on the subject or adjoining properties.

Summary Comments

- This research found no clear advantage or disadvantage to Fort Wayne's demolition program
- While there still is analysis to be done regarding whether it is better for a community to leave a vacant house standing or demolish it, it is time to shift the discussion to other arguments:
 - We should include other data in the analysis
 - We should test other definitions of “better”
 - We should discuss under what circumstances the findings might change and then research those

Next Steps

- Items to be added to the data set
 - Percentage of lots on the subject property block face that do not have a structure
 - Size of subject lot and adjoining lots
- Cost benefit analysis of demolition and mothballing a structure



MIKE DOWNS CENTER FOR INDIANA POLITICS

Mike Downs Center for Indiana Politics

2101 East Coliseum Blvd., CM Room 209

Fort Wayne, Indiana 46805

260.481.6691 voice

260.481.6895 fax

downsa@ipfw.edu

www.mikedownscenter.org