



Executive Summary: Decision Support for Property Intervention

Rehab Impacts in Greater Cleveland
2009 – 2015

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Visit rehabimpact.com to download the report and use the mapping tool to interact with results.

Executive Summary

In 2013, U.S. Treasury authorized select states to use their Hardest Hit Fund allocations to eliminate blight through demolition. U.S. Treasury authorized demolition of blight because research established that it protects home values and preserves homeownership. Now, Cleveland Neighborhood Progress has asked us to investigate whether blight elimination through housing rehabilitation (rehab) also protects home values and preserves homeownership. Does rehabbing vacant and foreclosed properties increase surrounding property values? Is rehabbing associated with a lowering of mortgage foreclosure rates? These are the questions this study asks.

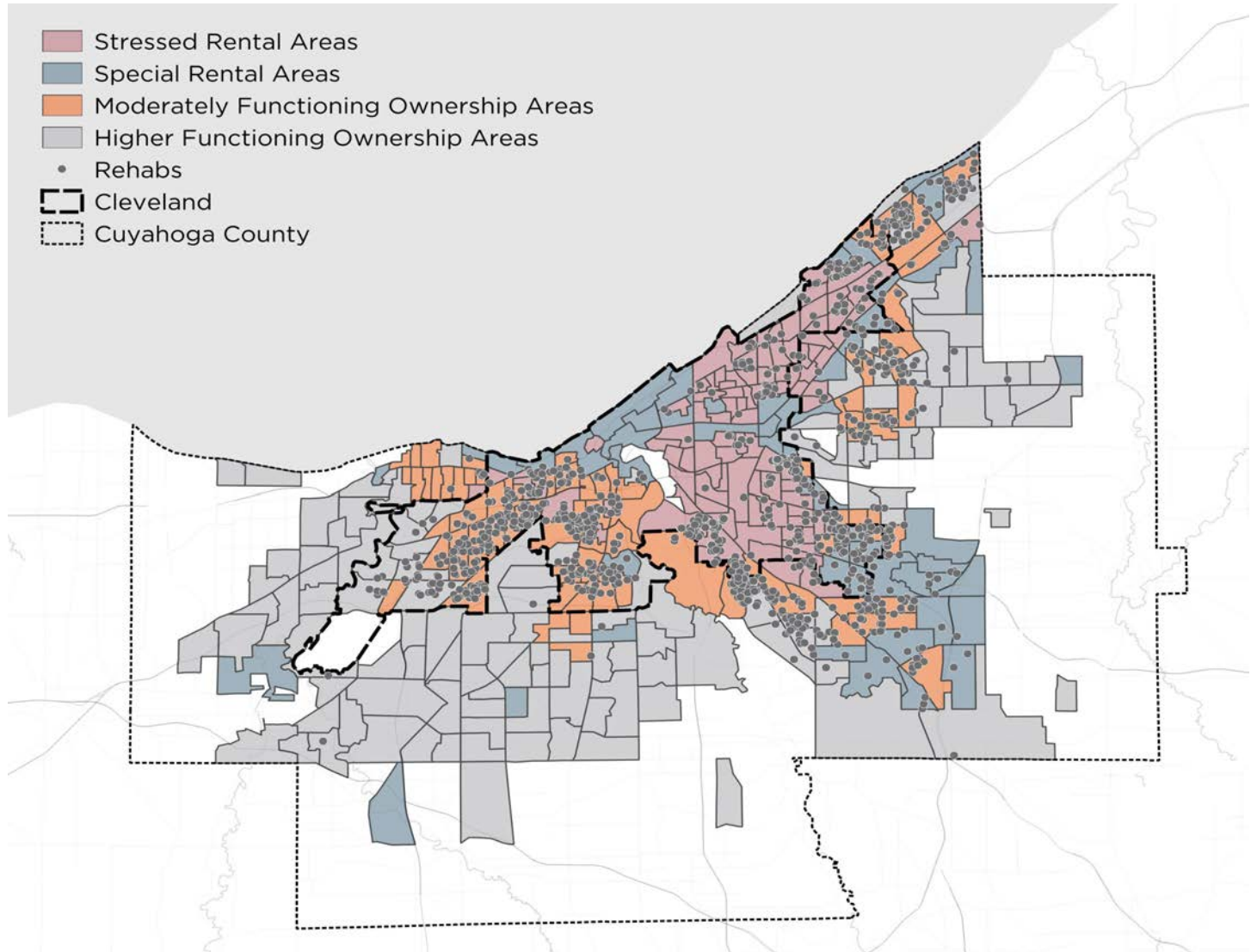
We estimate that 1,081 programmatic rehabs completed between 2009 and 2015 in Cuyahoga County preserved or increased just over half a billion dollars - \$539,318,308 - in the values of surrounding homes. This averages out to \$498,907 of property value impact per rehab. Rehab impacts vary by submarket, with weaker submarkets realizing less impact per rehab, and stronger submarkets more. The rehabs nevertheless show positive impacts in every submarket studied.

We also found that the occurrence of programmatic rehabs was strongly associated with faster declines in mortgage foreclosure rates over time. The relationship between rehabs and faster mortgage foreclosure rate declines over time is significant in all submarkets. This suggests that rehab is a significant determinant in the lowering of mortgage foreclosure rates.

The following sections explain our results in greater detail. The full report offers in-depth analysis and explanation. But first it is important to note what this study does not cover. This study does not measure the change in value of the rehabbed properties themselves. This study also does not calculate the impacts of the rehabs on property tax collection. This study does not compare the relative merits of rehab versus demolition in eliminating blight, preserving value, and growing the property tax base. This study does not measure the impacts of rehab on other, important factors of community well-being, such as crime rates, tenure, feelings of community well-being, etc. These are all worthwhile topics of investigation. This study is simply not designed to address those topics, although the property value impact spreads and other statistics in the full study may be helpful in addressing those questions.

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Greater Cleveland Study Area with Rehab Locations Identified by Submarket



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PROPERTY VALUE IMPACTS FROM REHAB

The table below provides our estimates of the property value impacts caused by programmatic rehabilitation. Results are broken out by housing submarket. The submarkets are those areas of the county where rehabs occurred, and, additionally, areas similar to areas where rehab occurred. On the left the four submarkets are identified: Stressed Rental Areas, Special Rental Areas, Moderately Functioning Ownership Areas, and Higher Functioning Ownership Areas. “Rehab Count” shows a count of rehabs that occurred within each submarket during the 2009-2015 study period.

How Much a Rehab Impacts Housing Values within 500 Feet, by Submarket

Submarket	Rehab Count	Property Value Impact	Avg. Impact Per Rehab
Stressed Rental Areas	247	\$1,746,543	\$7,071
Special Rental Areas	157	\$106,098,226	\$675,785
Moderately Functioning Ownership Areas	533	\$267,380,189	\$501,651
Higher Functioning Ownership Areas	144	\$164,093,351	\$1,139,537
TOTAL	1,081	\$539,318,308	\$498,907

“Property Value Impact” shows the sum total of positive value impacts rehabs had on houses within 500 feet of them in each submarket. Our study does not measure the value increase enjoyed by the rehabbed properties themselves; we only measure the impacts on properties near the rehabs. Then “Property Value Impact” is divided by Rehab Count to show the average impact of each rehab on the houses near it.

To determine these estimates, we used hedonic modeling. Hedonic modeling is used in the real estate industry and academia to determine how the features of a home – number of bedrooms and bathrooms, square footage, age, etc. – impact the property value. Our modeling approach takes it further by determining, for example, how much less a home is worth if a vacant and tax-foreclosed house is within 500 feet of it. We also determine how much more that home is worth for each renter or owner-occupied, tax-current house within 500 feet. We then measure the difference, or “property value impact spread,” between having the vacant house and the occupied house nearby. So, for example, if a nearby vacant house has a -1% impact on the home’s value, and a nearby occupied house has a +1% impact, then the property value impact spread is +2%. The table on the next page shows the “before” and “after” spreads achieved through the rehabs.

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How Much a House’s Value Changes When a Rehab Occurs within 500 Feet, By Transformation Type

Rehab Before and After Status	Stressed Rental Areas	Special Rental Areas	Moderately Functioning Ownership Areas	Higher Functioning Ownership Areas
Vacant Mortgage Foreclosure Becomes Owner Occupied Tax Current	0.46%	2.72%	2.06%	2.81%
Vacant Mortgage Foreclosure Becomes Renter Occupied Tax Current	0.00%	2.72%	1.54%	2.34%
Vacant Mortgage Foreclosure Becomes Vacant Tax Current	0.00%	1.02%	1.33%	0.53%
Land Bank Owned Becomes Owner Occupied Tax Current	0.46%	10.16%	6.07%	11.09%
Land Bank Owned Becomes Renter Occupied Tax Current	0.00%	10.16%	5.55%	10.63%
Land Bank Owned Becomes Vacant Tax Current	0.00%	8.46%	5.34%	8.82%
Land Bank Owned Becomes Owner Occupied Tax Delinquent	-0.98%	7.46%	3.61%	10.94%
Land Bank Owned Becomes Vacant Tax Delinquent	-0.48%	5.84%	3.21%	5.28%

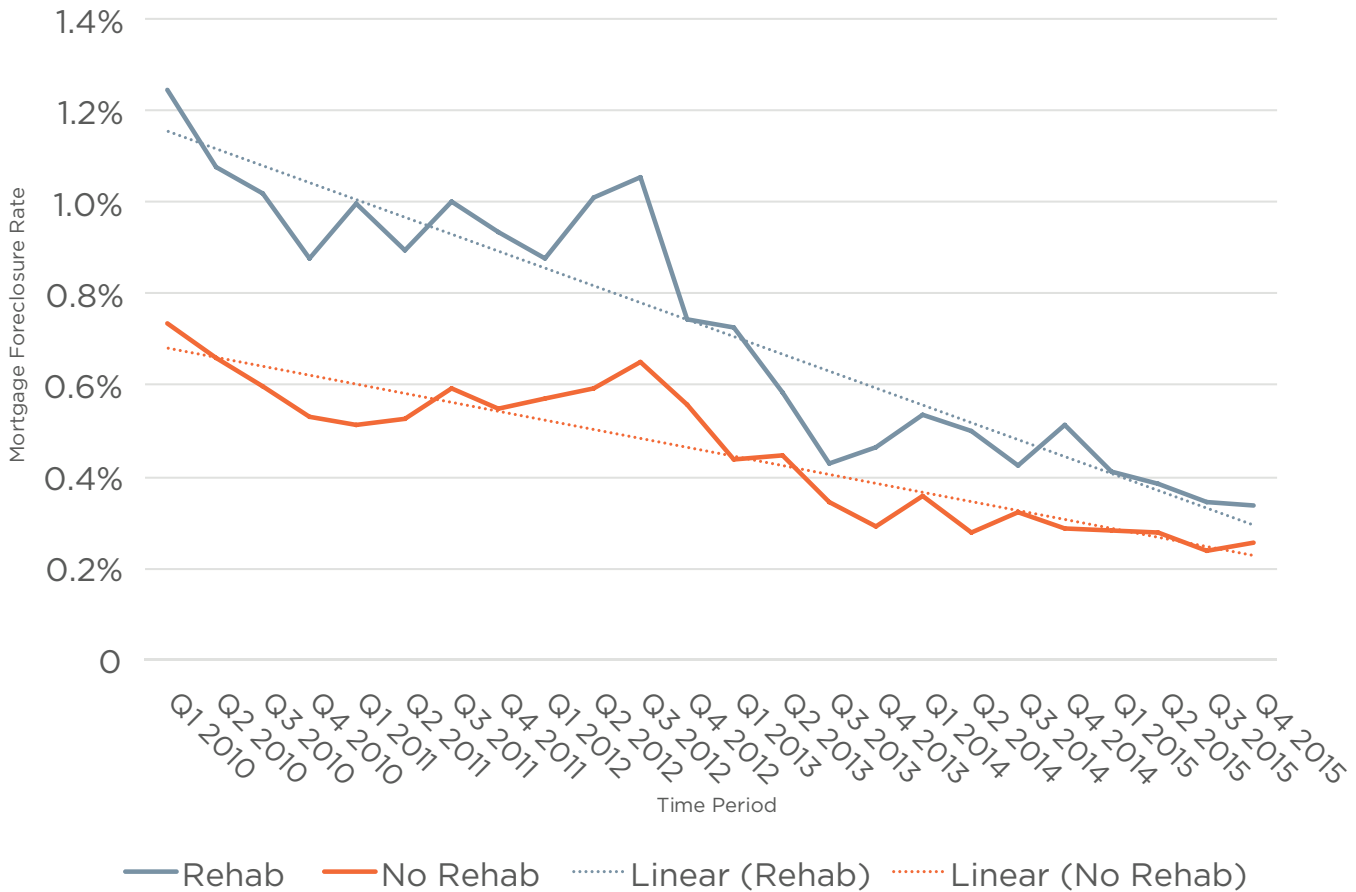
Now, what does a rehab do? As suggested in this table, a rehab usually but not always transforms a vacant, abandoned house into an occupied and tax-current home. Each type of transformation has an associated change in value for all the homes within 500 feet. We applied the appropriate value changes for all of the houses surrounding each of the 1,081 rehabs. The resulting sum is \$539,318,308. This is the estimated overall impact of all the rehabs on their nearby properties, and is expressed as “Property Value Impact.”

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REHAB AND MORTGAGE FORECLOSURE RATES

The chart below visualizes the results of a comparative trends analysis. We compared the mortgage foreclosure rates in areas with rehabs to the mortgage foreclosure rates in areas without rehabs. The trend shows that the rates of mortgage foreclosure are declining everywhere, but are declining faster in areas with rehabs. We ran a statistical test to make sure that this visualization reflects reality. It does. The visualization and statistical test suggest that the occurrence of rehabs is a determinant of faster declining mortgage foreclosure rates.

Mortgage Foreclosure Rates Over Time in All Submarket Areas Combined



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As the executive summary above highlights, property value impacts caused by rehab vary by submarket, with weaker submarkets realizing less impact per rehab, and stronger submarkets more. Further, the relationship between rehabs and faster mortgage foreclosure rate declines over time is significant in all submarkets, suggesting that rehab is a determinant in lowering mortgage foreclosure rates. This study therefore finds that rehab protects home values and preserves homeownership in the Greater Cleveland study area.



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