ECONOMIC IMPACTS OF MAHONING COUNTY LAND BANK

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Abstract

This report presents the economic impact analysis of residential demolition, rehabilitation and greening activities performed by the Mahoning County Land Reutilization Corporation (MCLRC or Mahoning County Land Bank) on the regional economy. Specifically, the analysis estimates the total expenditures, labor income, economic output and income taxes associated with demolition, rehabilitation and greening activities between 2009 and 2019.

Based on the estimates, all land bank activities since 2009 have had a cumulative economic impact of \$33.2 million in Mahoning County. Demolitions between 2009 and 2019 generated 75,656 labor hours and approximately \$21 million in local economic output; rehabilitations between 2014 and 2019 generated 46,634 labor hours and approximately \$8.9 million in local economic output; and greening activity between 2015 and 2019 generated 4,311 labor hours and approximately \$2.2 million in local economic output. The estimates also show that \$1.50 in economic impact is realized for every \$1 of expenditures on demolitions, and \$1.43 in economic impact for every \$1 of expenditures on rehabilitations and greening. Moreover, these activities generated approximately \$49,000 in taxes to Mahoning County and \$430,000 in taxes to the state of Ohio.

Introduction

Land banking has been in practice since the 1960's, when cities across the U.S. began to experience heavy population shifts from cities to suburbs. The result was not only fewer people in core cities, but also a self-perpetuating cycle of elevated vacancy rates, higher crime rates and declining tax bases. Land banks were devised to combat the growing number of abandoned and tax delinquent properties in inner cities. By acquiring and reserving land, public entities were able to "bank" these lands for future use. Over the years, land bank activities have primarily focused on acquiring tax delinquent properties. Legal processes and streamlined regulation have enabled land banks to more effectively acquire, manage and dispose of property (Alexander, 2011). The mission of Mahoning County Land Bank is to acquire vacant, abandoned, tax-delinquent properties and make them productive spaces again through restoration and repurposing efforts.

Previous research has shown that blight reduction methods such as demolition, rehabilitation, new construction and vacant lot improvement are associated with higher neighborhood property values, increased employment and local tax revenue, and decreased crime rates (Branas et al., 2016; Cui and Walsh 2015; Han 2014). This report focuses on the labor, value added and output associated with Mahoning County Land Bank activities between 2009 and 2019.

IMPLAN software was used to estimate the value added, multipliers and state and local taxes for each year, using the total expenditures on demolition, rehabilitation activity and greening activities as the input in the estimation.

RESULTS

Table 1. Summary of the Cost, Resale Price and Market Value of YNDC Rehabilitation Properties by Tract

Tract	Number of Rehab	Median Purchase Price	Median Rehab Cost	Median Resale Price	Median Current Market Value (MCMV)	Adjacent Properties (MAPV)	Properties on Block (MPBV)	(MCMV -MAPV)	(MCMV -MPBV)
801200	3	\$775	\$42,862	\$45,000	\$34,270	\$41,640	\$38,280	(\$7,370)	(\$4,010)
801300	3	0	\$48,568	\$26,700	\$28,980	\$35,810	\$20,710	(\$6,830)	\$8,270
801400	8	0	\$38,511	\$52,500	\$49,125	\$44,470	\$44,470	\$4,655	\$4,655
801500	12	\$374	\$59,942	\$66,500	\$52,245	\$41,525	\$43,370	\$10,720	\$8,875
802300	3	\$12,500	\$37,671	N/A	\$18,530	\$15,280	\$9,480	\$3,250	\$9,050
802400	12	\$12,500	\$63,385	\$44,750	\$50,695	\$43,325	\$34,990	\$7,370	\$15,705
802500	41	\$10,101	\$38,946	N/A	\$25,610	\$18,785	\$15,070	\$6,825	\$10,540
802600	2	0	\$45,186	\$63,000	\$63,635	\$75,085	\$56,330	(\$11,450)	\$7,305
802701	3	0	\$51,078	\$65,000	\$72,270	\$66,060	\$66,060	\$6,210	\$6,210
802702	11	0	\$50,267	\$69,000	\$71,580	\$60,850	\$56,450	\$10,730	\$15,130
802800	5	\$550	\$33,174	\$48,000	\$52,560	\$37,500	\$37,980	\$15,060	\$14,580
802900	1	0	\$18,362	\$25,000	\$28,860	\$24,940	\$30,315	\$3,920	(\$1,455)
803000	2	\$875	\$31,346	\$38,500	\$33,880	\$29,840	\$36,775	\$4,040	(\$2,895)
804100	2	\$275	\$30,421	\$45,000	\$54,845	\$31,700	\$36,870	\$23,145	\$17,975
804200	6	\$550	\$50,937	\$57,000	\$48,540	\$45,360	\$40,680	\$3,180	\$7,860
811400	1	0	\$22,225	\$40,000	\$87,020	\$69,230	\$67,060	\$17,790	\$19,960
812400	1	0	\$38,904	\$50,000	\$67,940	\$49,850	\$56,670	\$18,090	\$11,270
812601	1	0	\$10,530	\$55,000	\$84,410	\$82,640	\$87,975	\$1,770	(\$3,565)
812603	1	0	\$22,625	\$35,000	\$66,280	\$92,840	\$97,395	(\$26,560)	(\$31,115)
813800	3	\$550	\$58,079	\$35,100	\$28,970	\$24,150	\$21,300	\$4,820	\$7,670
814100	1	0	N/A	N/A	\$25,480	N/A	\$15,485	\$25,480	\$9,995
Median	3	0	\$38,904	\$45,000	\$50,695	\$41,640	\$38,280	\$4,820	\$8,270

Mahoning County Land Bank acquires and transfers most of the properties rehabilitated by Youngstown Neighborhood Development Corp. (YNDC). Table 1 summarizes rehabilitation activity by census tract. It is evident from the table that rehabilitation activity was associated with a positive impact on property values. The median market property value of rehabilitated properties of \$50,695 is significantly greater than the median market values of adjacent properties (\$41,640) and the median market value of properties on the same block (\$38,280). In addition, the median market value of rehabilitated properties is higher than median market value of adjacent properties in 17 of 21 census tracts and higher than the median market value of properties on the same block in 16 of 21 census tracts.

Economic Impacts of Residential Demolition

TABLE 2. TOTAL EXPENDITURE ON DEMOLITION AND MAHONING COUNTY ECONOMIC IMPACTS, 2009-2019

Year	N	Total Expenditure on demolition	Labor hours	Equivalent # of FT Jobs	Labor Income	Value Added	Total Economic Output	Multiplier Effect
2009-2014	286	\$3,377,292	16,016	8	\$192,192	\$2,657,813	\$6,035,104	1.8
2015	132	\$1,558,750	7,392	4	\$88,704	\$612,812	\$2,171,562	1.39
2016	118	\$1,152,112	6,608	3	\$79,296	\$452,234	\$1,604,346	1.39
2017	186	\$1,722,889	10,416	5	\$124,992	\$696,931	\$2,419,820	1.4
2018	418	\$4,079,012	23,408	11	\$280,896	\$1,681,549	\$5,760,561	1.41
2019	211	\$2,144,930	11,816	6	\$141,792	\$932,431	\$3,077,361	1.43
Total	1351	\$14,034,985	75,656	37	\$715,680	\$7,033,770	\$21,068,754	1.5

 $\label{eq:continuous} \begin{aligned} & Total \; Exp \; on \; Demolition = Testing \; Exp \; + \; Abatement \; Exp \; + \; Demolition \; Exp \; + \; Labor \\ & Income \end{aligned}$

Labor Hours = contractors *56 hours

Value Added = IMPLAN Estimate

Labor Income = Contractors*(12/hour*56)

Total Economic Output = Total Exp on Demolition +Value Added

 $Multiplier = Total \ Economic \ Output/Total \ Exp \ on \ Demolition$

Foot Note: Value added Estimate in IMPLAN – Type Use (Industry Contribution Analysis), Specification Use (Maintenance and Repair Construction of Residential Structures), and dollar year is 2021.

From Table 2, total expenditure on demolitions from 2009 to 2019 was approximately \$14 million. The value of expenditure was pushed through specific industry sectors relevant to the expenditure type (demolition activity) to generate labor hours, labor income, value added and total economic output figures. The total expenditure created an estimated 75,656 labor hours, which is the equivalent of approximately 37 full-time jobs. The total economic output created from the \$14 million is estimated at \$21 million, which equates to a multiplier effect of 1.50X. In other words, \$1 of expenditure creates \$1.50 in economic output for Mahoning County. Note these estimates do not include the increase in property values associated with the MCLRC's demolition activity.

TABLE 3. STATE & LOCAL TAX ESTIMATE ASSOCIATED WITH THE TOTAL ECONOMIC OUTPUT DUE TO DEMOLITION (2009-2019)

Year	Mahoning County	State of Ohio	Total
2009-2014	\$12,374	\$91,107	\$103,481
2015	\$4,473	\$30,290	\$34,763
2016	\$3,220	\$22,233	\$25,454
2017	\$5,077	\$36,441	\$41,517
2018	\$12,083	\$83,762	\$95,845
2019	\$6,651	\$45,130	\$51,781
Total	\$43,878	\$308,963	\$352,842

Source: IMPLAN DATA (Projected)

Foot Note: Income tax Estimate (in IMPLAN – Type Use (Industry Contribution Analysis), Specification Use (Maintenance and Repair Construction of Residential Structures), and dollar year is 2021.

From Table 3, the total direct tax from 2009 to 2019 was roughly \$44,000 for Mahoning County and \$308,000 for the state of Ohio. Note these estimates do not include any property taxes associated with the MCLRC's demolition activity.

Economic Impacts of Residential Rehabilitation

TABLE 4. TOTAL EXPENDITURE ON YNDC REHABILITATION AND MAHONING COUNTY ECONOMIC IMPACTS, 2014-2019

Year	N	Total Annual Expenditure on Rehabilitation	Labor hours	Equivalent # of FT Jobs	Labor Income	Value Added	Total Economic Output	Multiplier Effect
2014	125	\$421,820	7000	3	\$84,000	\$190,286	\$612,106	1.45
2015	85	\$942,904	4746	2	\$56,952	\$420,983	\$1,363,887	1.45
2016	134	\$819,863	7504	4	\$90,048	\$359,193	\$1,179,056	1.44
2017	150	\$1,260,889	8414	4	\$100,968	\$547,489	\$1,808,378	1.43
2018	161	\$1,171,905	9030	4	\$108,360	\$504,275	\$1,676,180	1.43
2019	178	\$1,623,169	9940	5	\$119,280	\$689,302	\$2,312,471	1.42
Total	833	\$6,240,551	46634	22	\$559,608	\$2,711,528	\$8,952,079	1.43

Total Annual Exp on Rehabilitation = Rehabilitation Cost+ labor Income

Labor Hours = contractors *56 hours

Value Added = IMPLAN Estimate

Labor Income = Contractors*(12/hour*56)

 $Total\ Economic\ Output = Total\ Annual\ Expenditure\ on\ Rehabilitation\ + Value\ Added$

Multiplier = Total Economic Output/Total Annual Exp on Rehabilitation

Foot Note: Value added Estimate in IMPLAN – Type Use (Industry Contribution Analysis), Specification Use (Community food, housing and other relief services including rehabilitation services), number 495 and dollar year is 2021)

From Table 4, the total expenditure on rehabilitations by YNDC from 2014 to 2019 was approximately \$6.2 million. The value of expenditure was pushed through specific industry sectors relevant to the expenditure type (rehabilitation activity) to generate labor hours, labor income, value added and total economic output figures. The total expenditure created an estimated 46,634 labor hours, which is the equivalent of approximately 22 full-time jobs. The total economic output created from the \$6.2 million is estimated at \$8.95 million, which equates to a multiplier effect of 1.43X. In other words, \$1 of expenditure creates \$1.43 in Mahoning County economic output. Note these estimates do not include the increase in property values associated with the YNDC's rehabilitation activity.

TABLE 5. STATE & LOCAL TAX ESTIMATE ASSOCIATED WITH THE TOTAL ECONOMIC OUTPUT DUE TO REHABILITATION, 2014-2019

Year	Mahoning County	State of Ohio	Total
2014	\$371	\$6,035	\$6,406
2015	\$795	\$13,180	\$13,975
2016	\$671	\$11,756	\$12,427
2017	\$1,026	\$18,100	\$19,127
2018	\$1,081	\$15,993	\$17,073
2019	\$1,300	\$25,021	\$26,321
TOTAL	\$5,244	\$90,085	\$95,328

Source: IMPLAN DATA (Projected)

Note: Tax Estimate (in IMPLAN – Type Use (Industry Contribution Analysis), Specification Use (Community food, housing and other relief services including rehabilitation services), and dollar year is 2021.

From Table 5, the total direct tax from 2014 to 2019 was roughly \$5,000 for Mahoning County and \$90,000 for the state of Ohio. Note these estimates do not include any property taxes associated with the YNDC's rehabilitation activity.

Economic Impacts of Residential Greening

TABLE 6. TOTAL EXPENDITURE ON GREENING AND MAHONING COUNTY ECONOMIC IMPACTS, 2015-2019

Year	N	Total Annual Expenditure on Greening	Labor hours	Equivalent # of FT Jobs	Labor Income	Value Added	Total Economic Output	Multiplier Effect
2015	133	\$247,606	399	0.2	\$4,788	\$110,550	\$358,155	1.45
2016	184	\$200,559	552	0.3	\$6,624	\$87,868	\$288,426	1.44
2017	187	\$318,587	561	0.3	\$6,732	\$138,333	\$456,920	1.43
2018	460	\$499,289	1380	0.7	\$16,560	\$214,846	\$714,135	1.43
2019	473	\$959,176	1419	0.7	\$17,028	\$407,328	\$1,366,504	1.42
Total	1437	\$2,225,216	4311	2.1	\$51,732	\$958,925	\$3,184,140	1.43

Total Annual Exp on Greening = Greening Cost+ labor Income

Labor Hours = contractors *3 hours

Value Added = IMPLAN Estimate

Labor Income = Contractors*(12/hour*3 hours)

Total Economic Output = Total Annual Expenditure on Greening +Value Added

Multiplier = Total Economic Output/Total Annual Exp on Greening

Foot Note: Value added estimate in IMPLAN – Type Use (Industry Contribution Analysis), Specification Use (Community food, housing and other relief services including rehabilitation services), dollar year is 2021.

From Table 6, the total expenditure on greening from 2015 to 2019 was approximately \$2.2 million. The value of expenditure was pushed through specific industry sectors relevant to the expenditure type (greening activity) to generate labor hours, labor income, value added and total economic output figures. The total expenditure created an estimated 4,311 labor hours, which is equivalent to approximately 2.1 full-time jobs. The total economic output created from the \$2.2 million is estimated at \$3.1 million, a multiplier effect of 1.43X. In other words, \$1 of expenditure creates \$1.43 in Mahoning County economic output. Note these estimates do not include the increase in property values associated with the MCLRC's greening activity.

TABLE 7. STATE & LOCAL TAX ESTIMATE ASSOCIATED WITH THE TOTAL ECONOMIC OUTPUT ON GREENING (2015-2019)

Year	Mahoning County	State of Ohio	Total
2015	\$209	\$3,461	\$3,670
2016	\$164	\$2,876	\$3,040
2017	\$259	\$4,573	\$4,833
2018	\$460	\$6,814	\$7,274
2019	\$768	\$14,786	\$15,554
TOTAL	\$1,861	\$32,510	\$34,370

Source: IMPLAN DATA (Projected)

Foot Note: Income tax Estimate (in IMPLAN – Type Use (Industry Contribution Analysis), Specification Use (Community food, housing and other relief services including rehabilitation services) and dollar year is 2021.

From Table7, the total direct tax from 2015 to 2019 was approximately \$1,800 for Mahoning County and \$32,500 for the state of Ohio. Note these estimates do not include any property taxes associated with the MCLRC's greening activity.

REPORT SUMMARY

This report is an economic impact evaluation aimed at measuring the economic outcomes from 2009 to 2019 of MCLRC activity. Taking all MCLRC expenditures into account, the analysis shows a total estimated economic impact of \$32 million (sum of economic output from demolition, rehabilitation and greening activity) in Mahoning County since 2009.

SUPPORTING THE LOCAL ECONOMY

- \$21 million in local economic impact and 75,656 labor hours created the equivalent of approximately 37 full-time jobs from MCLRC's expenditure of \$14 million on demolitions between 2009 and 2019.
- \$8.9 million in local economic impact and 46,634 labor hours created the equivalent of approximately 22 full-time jobs from YNDC's expenditure of \$6.2 million on rehabilitation between 2014 and 2019.
- \$3.18 million in local economic impact and 4,311 labor hours created the equivalent to approximately 2.1 full-time jobs from MCLRC's expenditure of \$2.22 million on greening between 2015 and 2019.

ESTIMATED BENEFIT-COST RATIOS

- \$1.50 in economic impact (benefit) for every \$1 of MCLRC demolition activity expenditure.
- \$1.43 in economic impact (benefit) for every \$1 of YNDC rehabilitation activity expenditure.
- \$1.43 in economic impact (benefit) for every \$1 of MCLRC Greening activity expenditure.

STATE AND LOCAL (MAHONING) TAX REVENUE ESTIMATED PROJECTED (IMPLAN)

- \$43,800 revenue generated in Mahoning County and \$308,900 revenue generated for the state of Ohio created from demolition activity from MCLRC's budget expenditures of \$14 million between 2009 and 2019.
- \$5,200 revenue generated in Mahoning County and \$90,000 generated for the state of Ohio created from rehabilitation activity from YNDC's 2014 to 2019 expenditures of \$6.2 million.
- \$1,800 revenue generated in Mahoning County and \$32,500 revenue generated for the state of Ohio created from greening activity from MCLRC's 2015 to 2019 expenditures of \$2.2 million.

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