Cleveland State University
EngagedScholarship@CSU

Levin.
PUBLIC SERVICE. LEADERSHIP. CHANGE.

Urban Publications

Maxine Goodman Levin College of Urban Affairs

9-2017

Center for Population Dynamics Quarterly Brief September 2017: Repopulating Cleveland from the Inside Out

Richey Piiparinen
Cleveland State University, r.piiparinen@csuohio.edu

Thomas Bier
Cleveland State University, t.bier@csuohio.edu

Charlie Post
Cleveland State University, c.post@csuohio.edu

Mark J. Salling PhD, GISP
Cleveland State University, m.salling@csuohio.edu

How does access to this work benefit you? Let us know!
Follow this and additional works at: https://engagedscholarship.csuohio.edu/urban_facpub

Part of the Urban Studies and Planning Commons

Repopulating Cleveland from the Inside Out

By Richey Piiparinen, Tom Bier, Charlie Post, and Mark Salling

The Center for Population Dynamics

Maxine Goodman Levin College of Urban Affairs

Contact: r.piiparinen@csuohio.edu

Background

How can Cleveland repopulate? Generally, there are two theories of thought: by focusing on regional economic development, so that people follow jobs; and by focusing on local economic development, particularly in housing and quality of place. Here, jobs follow people.

While the oft-heard question in city building is whether people follow jobs or jobs follow people, recent research suggest it is likely both[1]. Cleveland needs both a jobs strategy and a housing strategy to incur repopulation. This report brief sketches out the framework of a housing strategy, while an upcoming report by The Center for Population Dynamics called "The Healing Economy: An Economic Redevelopment Framework for Cleveland" details a jobs strategy[2].

A Housing Strategy Goal

Cleveland's peak housing stock was in 1960, with an estimated 283,000 housing units. The occupancy rate was 95.4%. By 2015 the city lost 70,760 housing units, largely due to demolition. The occupancy rate is now 78.8%. The decline in occupancy coupled with the removal of housing units has coincided with a population decline from 876,050 to 390,584.

Source: Census	1960	2015
Population	876,050	390,584
Housing Units	282,914	212,154
Avg. HH Size	3.25	2.33
Occupancy Rate	95.40%	78.80%

If a robust housing strategy was undertaken—led primarily by the construction of new units and the rehab and reoccupying of existing, livable vacant units —what would the impact be on population? The question supposes there's a goal in mind when it comes rebuilding the city's housing stock. In his new book "Housing Dynamics in Northeast Ohio: Setting the Stage for Resurgence", Tom Bier suggested this goal should be dependent on the fiscal health of Cuyahoga County. "[S]tart by asking: How much housing construction is needed each year to keep Cuyahoga's residential tax base at least equal to the rate of inflation?" Bier wrote. "The answer will become the primary goal.[3]"

In calculating that goal, Bier found that since the early 80's Cuyahoga County's share of Northeast Ohio's new housing fell from 40 percent to 20 percent (See Figure 1). If the county's share were to increase back to 40 percent (assuming 8,000 new units annually), a reasonable goal for the county would be 3,200 new units annually[4]. "But where can 3,200 units be located year after year, decade after decade?" Bier asks. With the county's outer suburbs nearly built out the "focus has to be on Cleveland", with a goal of adding 1,600 units yearly to Cleveland over the next 20 years. The objective, then, is to add 32,000 new housing units by 2038, with a population impact of about 67,100 additional people to Cleveland[5]. Moreover, if occupancy rates rose from 78.8% to 90%[6] via the rehabilitation of existing vacant units, another 46,500

---

[1] http://www.tandfonline.com/doi/full/10.1080/00343404.2016.1254765

[2] Working Paper

[3] http://engagedscholarship.csuohio.edu/cgi/viewcontent.cgi?article=1003&context=msl_ae_ebooks

[4] Bier writes: "During the years 1994-2015, the county needed an annual average of nearly $700 million (in 2015 dollars) in new construction in order for its tax duplicate to keep pace with inflation. The annual average fell short by nearly $200 million. Between the early 1980s and 2016, the county's share of the region's new housing fell from 40 percent to 20 percent. If the county's share were to increase back to 40 percent, and assuming 8,000 new units annually in the region, Cuyahoga's share would be 3,200. At $250,000 per unit, $800 million would be added to the County's tax base each year".

[5] This assumes a 90% occupancy rate.

[6] A 90% occupancy rate is the average over the last 5 decades. Source: Decennial Census.

people would be gained[7]. Combined, the city's population would grow from about 390,600 to 504,200 in 20 years, a gain of 113,600 people.

Figure 1: Number of Residential Permits: City of Cleveland, Cuyahoga Suburbs, and Northeast Ohio. Source: Census Building Survey
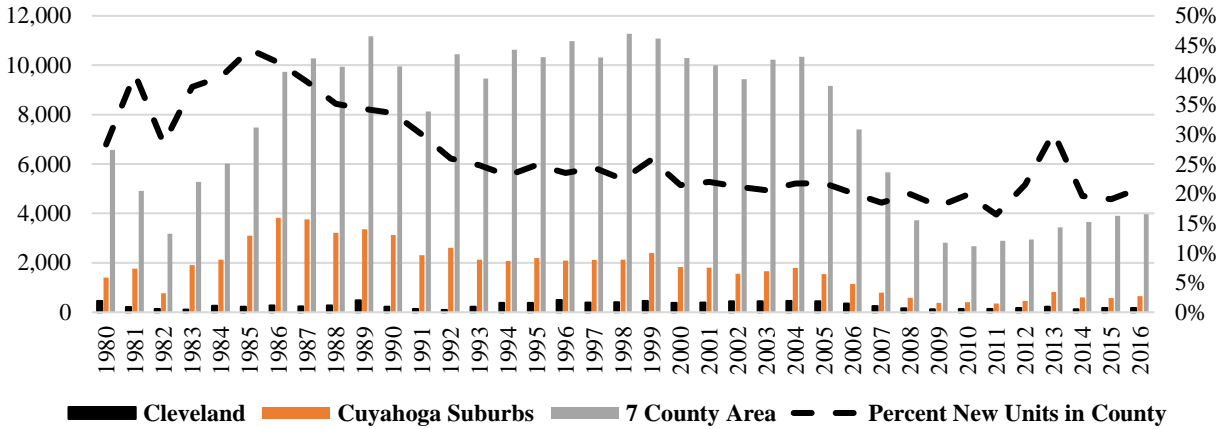
Repopulating from the Inside Out

To understand the likelihood Cleveland can add new housing and repopulate—and where exactly the regrowth would unfold—a basic understanding of the evolution of the urban form is helpful. Image 1 shows the Metropolitan Development Model (1982) with Stage I "Urbanization" giving way to Stage II "Suburbanization". In Cleveland that shift began occurring as early as the 1930's, so details the 1941 study "Decentralization: A Problem in Cleveland's Future"[8]. Stage III, or "disurbanization", is when "the metropolis loses its compact nodal structure, and the central city, along with its nearby suburbs, tends to decline both in population and employment". This pattern still predominates locally today. Stage IV, or "Reurbanization", is the final stage of the model, in which urban core population is growing while regional metropolitan growth stalls out.

Image 1: Berg's (1982) Metropolitan Development Model

---
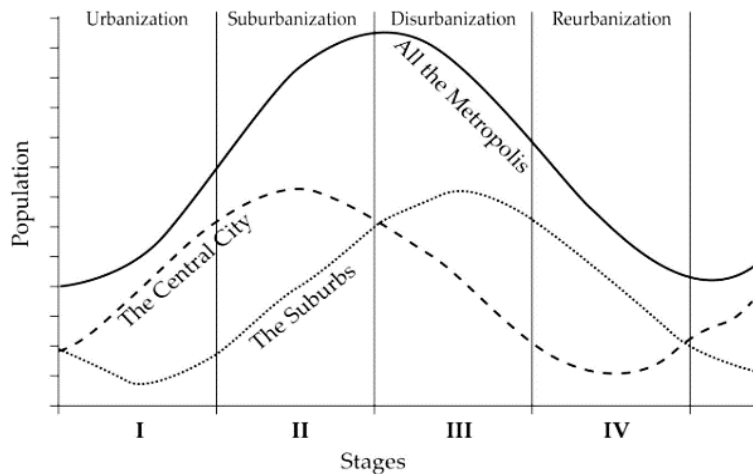
[7] This calculation supposes that 4,000 vacant units cannot be rehabbed and a 2.33 Avg. Household Size.
[8] Robbins, L.S. 1941. "Decentralization: A Problem in Cleveland's Future"

This last evolutionary stage is just starting to be realized in Cleveland. Map 1 shows population gain and loss by census tract from 1970 to 2015. Areas of population growth are generally within 2 miles of Public Square, particularly the Downtown census tracts[9]. Downtown's growing population has neutralized the population loss in the urban core, as illustrated in Figure 2. Specifically, Cleveland's population declined by only 2% since 1970 up to a 2 mile radius from Public Square, compared with declines of 50.1% and 51.7% in radiuses between 2 to 4 miles and 4 to 6 miles, respectively.
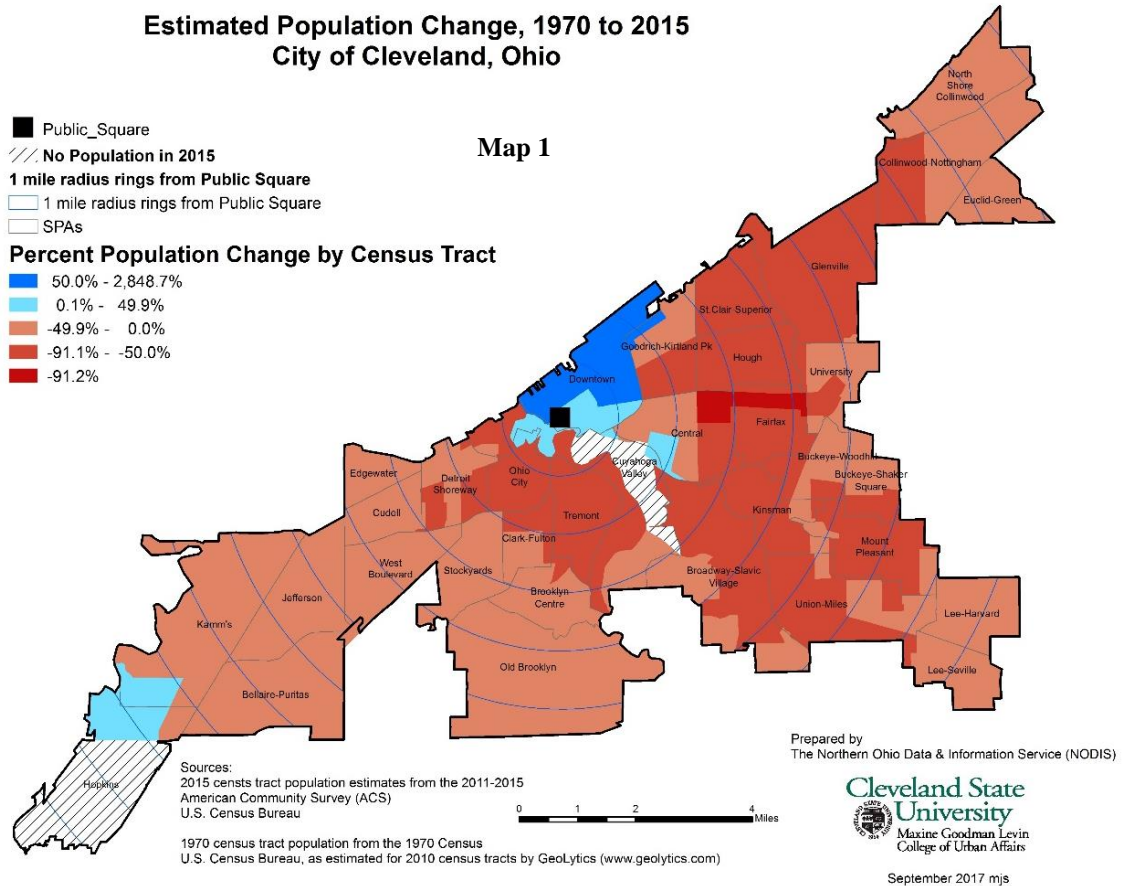

Estimated Population Change, 1970 to 2015
City of Cleveland, Ohio

Map 1

Public_Square
No Population in 2015
1 mile radius rings from Public Square
1 mile radius rings from Public Square
SPAs
Percent Population Change by Census Tract
50.0% - 2,848.7%
0.1% - 49.9%
-49.9% - 0.0%
-91.1% - -50.0%
-91.2%

Sources:
2015 censts tract population estimates from the 2011-2015
American Community Survey (ACS)
U.S. Census Bureau

1970 census tract population from the 1970 Census
U.S. Census Bureau, as estimated for 2010 census tracts by GeoLytics (www.geolytics.com)

Prepared by
The Northern Ohio Data & Information Service (NODIS)

Cleveland State University
Maxine Goodman Levin
College of Urban Affairs

September 2017 mjs

Figure 2: Percent Change in Population 1970 to 2015 by Distance from Downtown
**Source: Decennial Census, ACS 5-Year**

Miles from Downtown

---
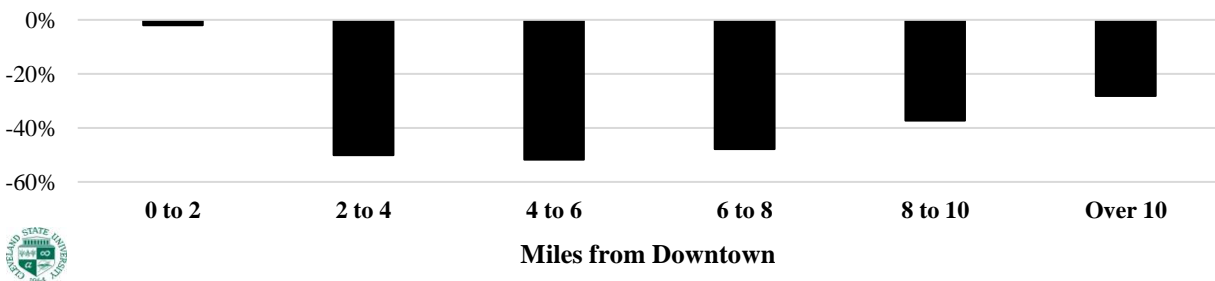
[9] Between 2010 to 2015 the city lost on average 1,360 people a year, whereas the census tracts comprising Downtown added 815 a year since 2010. By contrast, the rate of loss during the 2000s was about 8,150 people a year. Source: Census ACS 1-Year, 5-Year.

This "inside out" pattern is also reflected in the change of housing units over time. Between 1970 and 2015, the number of housing units within a 2 mile radius of Public Square actually increased by 38.4%, indicative of a demand for center city living (See Figure 3). As with the loss of total population, the largest declines in housing units occurred between miles 2 to 4 (-30.5%) and 4 to 6 (-27.9%) (See Map 2).

Figure 3: Percent Change in Housing Units 1970 to 2015 by Distance from Downtown. Source: Decennial Census, ACS 5-Year
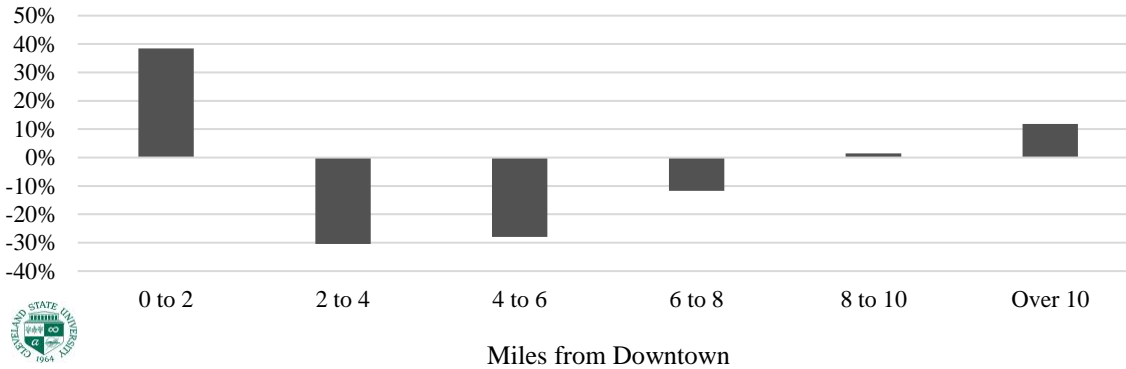

**Estimated Change in Housing Units, 1970 to 2015
City of Cleveland, Ohio**

Map 2
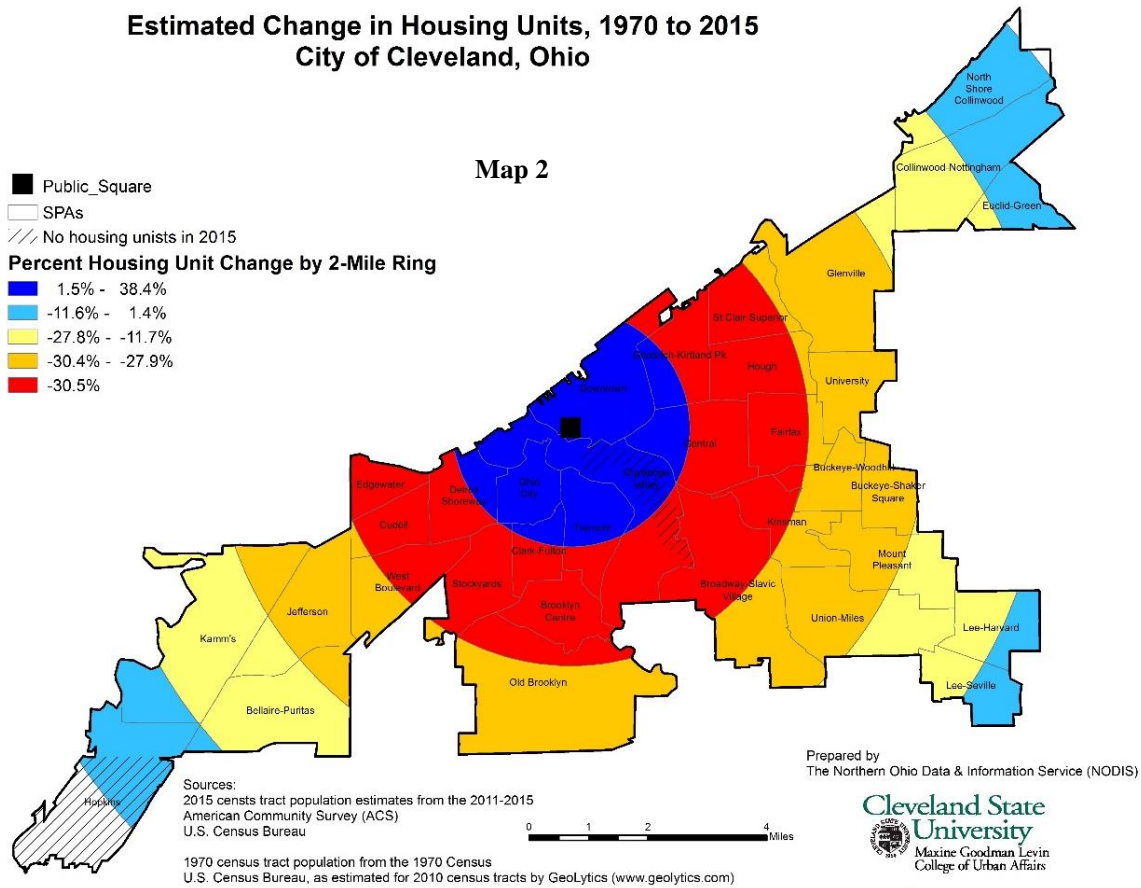
A final indication that Cleveland is growing from the "inside out" is reflected in changes in median sales prices. As shown in Figure 4, the median sales price of a home within a 1 mile buffer of Public Square was $190,362 from 2014 to 2016. This is higher than the inflation-adjusted sales price up to 1 mile out from 1989 to 1991 ($144,378). The biggest change, though, occurred between 1 to 2 mile from Downtown. Today, the median sales price in that area is $147,644—a 447% increase from the 1989 to 1991 timeframe ($27,000). The sales price from mile 2 to 3, however, drops dramatically to $35,000, meaning the "inside out" pattern has yet to extend into neighborhoods within that buffered area.

Figure 4: Median Sales Price City of Cleveland by Mile from Downtown
1989-1991 vs. 2014-201. **Source: Cuyahoga County Auditor**
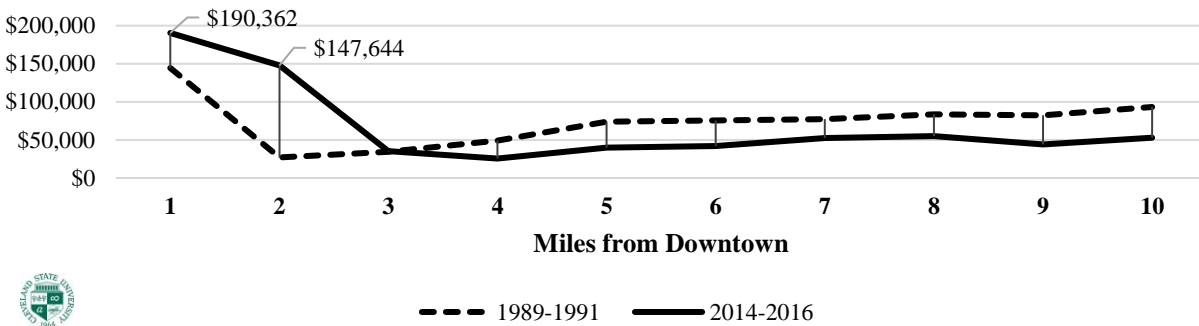
Taken together, local housing strategists should be cognizant of the exact delineation of this "inside out" pattern with a focus on the hardest hit areas that are adjacent to the urban core, particularly those neighborhoods that are 2 to 4 miles and 4 to 6 miles outside of Downtown. Those two areas accounted for 62% of the city's population loss since 1970, and an astounding 89% of the city's housing unit loss. Not surprisingly, it is also where the majority of the vacant land is (See Map 3), with the percentage of all parcels that are vacant lots being highest in Central (49%), Fairfax (45%), Hough (43%), and Kinsman (43%), according to a 2015 study by The Thriving Communities Institute[10]. A next step is a block-by-block level analysis citywide that not only maps market strength at the street level, but can

Vacant Parcels within the City of Cleveland
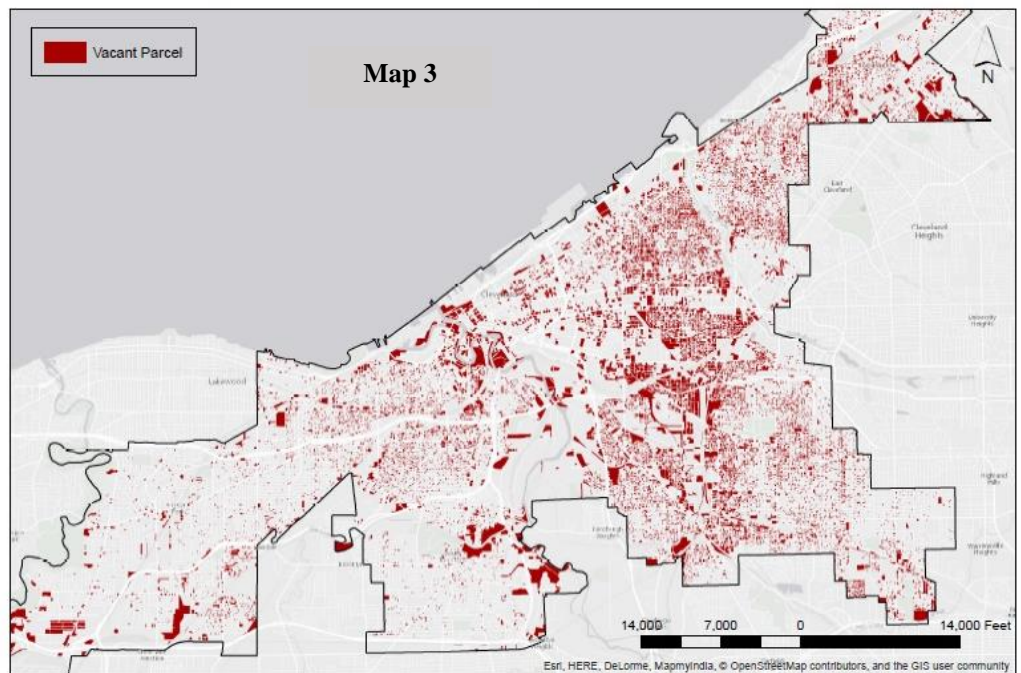
Created by Nathen Causman; June 7, 2017
Source: NEOCANDO NST, 2017

---

[10] https://www.wrlandconservancy.org/wp-content/uploads/2015/11/WRLC_Loveland_Cleveland_Survey_Report_20151121.pdf

also suggest the appropriate housing intervention—be it demolition and land holding, subsidized new construction and/or rehab, and market rate new construction and/or rehab. Consider this subsequent analysis Cleveland's "20 Year Housing Plan".