

Shrinking Cities in the Industrial Belt: A Focus on Small and Mid-size Cities in Northwestern Ohio



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Abstract

The concept of shrinking cities has received a lot of attention in the last few years, but much of the initial focus has been on Europe. While research on shrinking cities in the United States is still nascent, the challenge is acute in the industrial midwest, where cities are facing the consequences of the decline of the manufacturing industry. More recently, the housing foreclosure crisis has also had severe impacts on these old industrial cities.

This report seeks to highlight and categorize land use planning responses to shrinkage in selected small and medium sized cities in the rustbelt. Based on a broad review of the literature and a more focused look at Youngstown, OH and Canton, OH, these responses can broadly be grouped into four areas: investing in downtowns, greening, re-sizing and mixed approaches. The report is organized into five sections: an introduction; a section that sets the context, including definitions and varying patterns of shrinkage; a short description of planning responses in Youngstown and Canton to show different approaches; findings; based on this background, an illustration of how one might plan for a shrinking city like Toledo; and finally, some conclusions. This fourth section, on how one might plan for a shrinking city like Toledo, is based on student work in a collaborative urban design studio with urban planning students from the University of Toledo and architecture students from Bowling Green State University. Also included in this report, as an appendix, is a reference list of articles on shrinking cities that were used as background, but not necessarily cited in the body of the report.

Introduction

Cities the world over are facing the prospect of declining populations, collectively becoming part of what has been referred to as the 'shrinking city phenomenon' (Oswald and Reinerts, 2006). Globally, one in four large cities declined in population between 1990 and 2000 (Lindsey, 2007). While much of the discussion of shrinking cities has focused on Europe, the challenge is especially acute in the industrial midwest of the U.S., where cities are facing the consequences of the decline of the manufacturing industry (Vey, 2007; Pallagst, 2007, 2008). The U.S. housing foreclosure crisis has also had severe impacts on these old industrial cities.

The paper adds to this growing area of interest by highlighting and categorizing planning responses to shrinkage in the industrial belt, drawing lessons that may be valuable to other cities, and suggesting some avenues for further research.

The Context

Definitions

While the term 'shrinking cities' is widely used, there is no single definition. Some authors identify them as those older industrial areas that have lost more than 25% of their population over the last 40 years, and that are characterized physically by abandoned properties, vacancies, and blight (Schilling and Logan, 2008; Vey, 2007) .

Pallagst (2007) includes economic decline in her definition, which leads to job loss and associated population loss, and ultimately a change in the character of the built environment. Beauregard (2007) measures shrinkage simply by population loss, but categorizes as shrinking those cities that have lost population in the period of 1980 to the present, as the trends prior to this period were concurrent with widespread suburban growth and urban decline in many cities. The Shrinking Cities International Research Network defines it as a densely populated urban area with at least 10,000 residents that has faced population losses in large parts for more than two years and is undergoing economic transformation with some symptoms of a structural crisis.

If one were to use population loss alone as a measure of shrinkage, Table 1 shows shrinkage in selected cities in the U.S. industrial midwest. Interestingly, six of the ten cities included in the table have competed in and were finalists or winners in the National Civic League’s All-American City award (National Civic League 2008).

| City | Peak Population | 2008 Population (estimated) | Percent Change from Peak | Percent Change 1980-2000 |
|-------------|-------------------|-----------------------------|--------------------------|--------------------------|
| Youngstown | 168,330 in 1950 | 72,925 | -56.7 | -28.9 |
| Flint* | 196,940 in 1960 | 112,900 | -42.7 | -21.7 |
| Pittsburgh* | 676,806 in 1950 | 310,037 | -54.2 | -21.1 |
| Detroit | 1,849,568 in 1950 | 912,062 | -50.7 | -20.9 |
| Buffalo* | 580,132 in 1950 | 276,059 | -52.4 | -18.2 |
| Cleveland** | 914,808 in 1950 | 433,748 | -59.0 | -16.6 |
| Cincinnati | 503,998 in 1950 | 333,336 | -33.9 | -14.1 |
| Canton | 116,912 in 1950 | 78,362 | -33.0 | -13.2 |
| Toledo** | 383,818 in 1970 | 293,201 | -23.6 | -11.6 |
| Akron** | 290,351 in 1960 | 207,510 | -28.5 | -8.5 |

Source: US Census

** Winner of the National Civic League’s All-American City award.

* Finalist for All-American City award.

Table 1: Population Changes of Select Rustbelt Cities

Varying Patterns of Shrinkage

Within Cities

The patterns of shrinkage vary widely. In the U.S, inner city decline coupled with suburban development led to a ‘doughnut’ effect that began in the 1960s and 1970s, that has continued with more recent job-loss and out-migration. In Paris, a stable core is surrounded by shrinking suburban rings where industry was once located, while in eastern Germany, cities are shrinking unevenly, producing a perforated pattern (Pallagst, 2008). This is also seen in cities like Detroit, where in some neighborhoods, residents have taken over adjacent vacant lots creating areas of suburban-like low-density development (Armborst et al, 2008).

Shrinking cities in the U.S. are often characterized by vacant and abandoned properties, both in the form of vacant overgrown lots and derelict and decaying structures. Accorino and Johnson (2000) write that vacant properties have historically been viewed as a symptom of urban decay, when in actuality it is a cause of negative externalities that decrease the property values of remaining residents, attract crime and vandalism, and stifle development. A consequence of this shrinkage is the challenge of funding an infrastructure that was designed for a larger population, in some cases nearly double the current number of residents. This is not only inefficient, but financially challenging due to the shrinking tax base.

Regional Patterns

Though not limited to older industrial areas of the midwest, urban shrinkage is most prevalent in these areas. These currently shrinking cities often developed on the foundation of a strong manufacturing industry that is now in decline. Unable to quickly diversify, these cities have experienced significant economic decline resulting in population out-migration. In many cases, such as cities in Ohio, the economic decline of these industrial cities is felt by their metropolitan region as a whole (Brookings, 2007). Eight cities in Ohio, including Canton and Youngstown, are viewed as significantly underperforming in economic and social indicators (Brookings, 2007). In the U.S., the majority of these cities are found heavily concentrated in the industrial areas of the northeast and midwest (Fishman, 2005; Vey, 2007). Population changes between 1980 and 2000 for select cities in the midwest industrial belt are seen below in Figure 1.

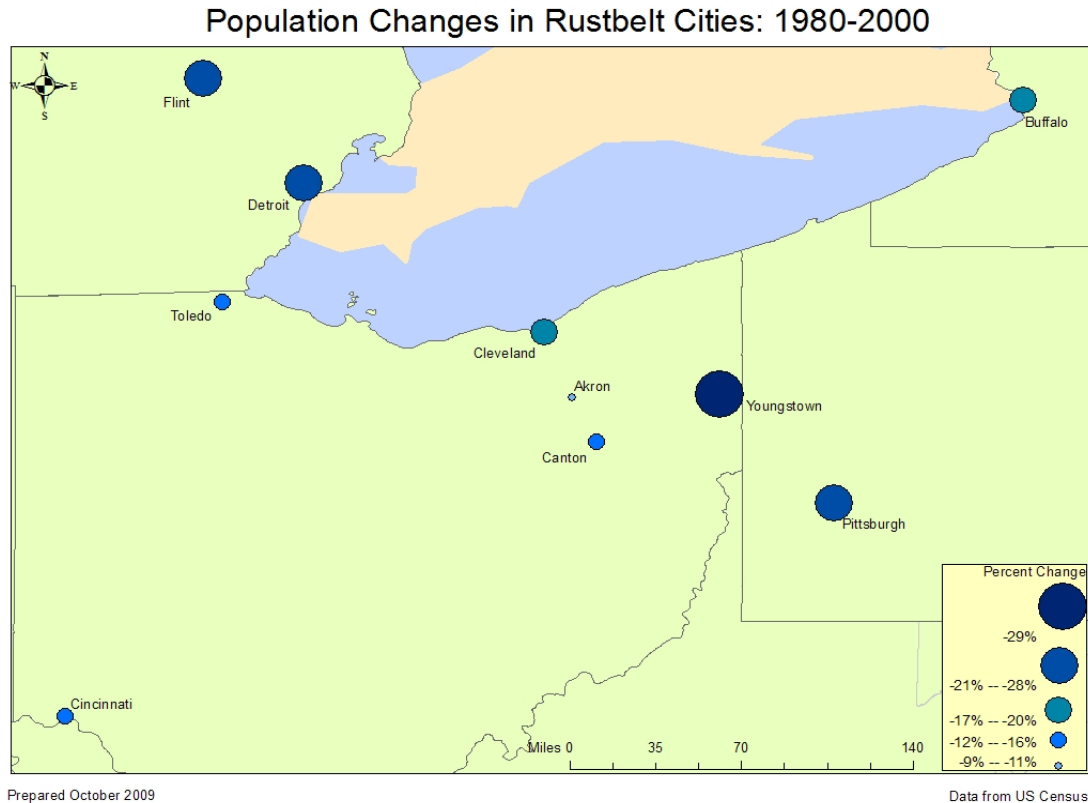


Figure 1: Population Changes in Rustbelt Cities

It is also important to note here that some cities, Pittsburgh and Toledo for example, have been critical of census estimates that depict declining populations (WXPI News, 01/15/09). While this may be in part due to efforts by city leaders to minimize the population loss being experienced by their cities, state and federal funding and political representation are at stake with changes in population.

A Focus on Two Cities: Youngstown and Canton

In addition to a broader look at land use planning responses to shrinking populations in cities in the industrial mid-west, a deeper dive into the planning responses in two cities is instructive. For the purposes of this report, the focus is on Youngstown and Canton, two cities of comparable size which have followed different approaches.

Youngstown

Youngstown, Ohio is a former industrial city in Northeast Ohio. Located only sixty miles from Pittsburgh, Youngstown was once a booming steel town. Longtime residents will likely never forget the day now known as Black Monday, September 19, 1977, when The Youngstown Sheet & Tube Company became the first of several steel companies to announce closures and layoffs. Between 1979 and 1981, 10,000 jobs were lost (Mahoning Valley History 09/17/07). Population change in Youngstown between 1980 and 2000 is seen in Figure 2.

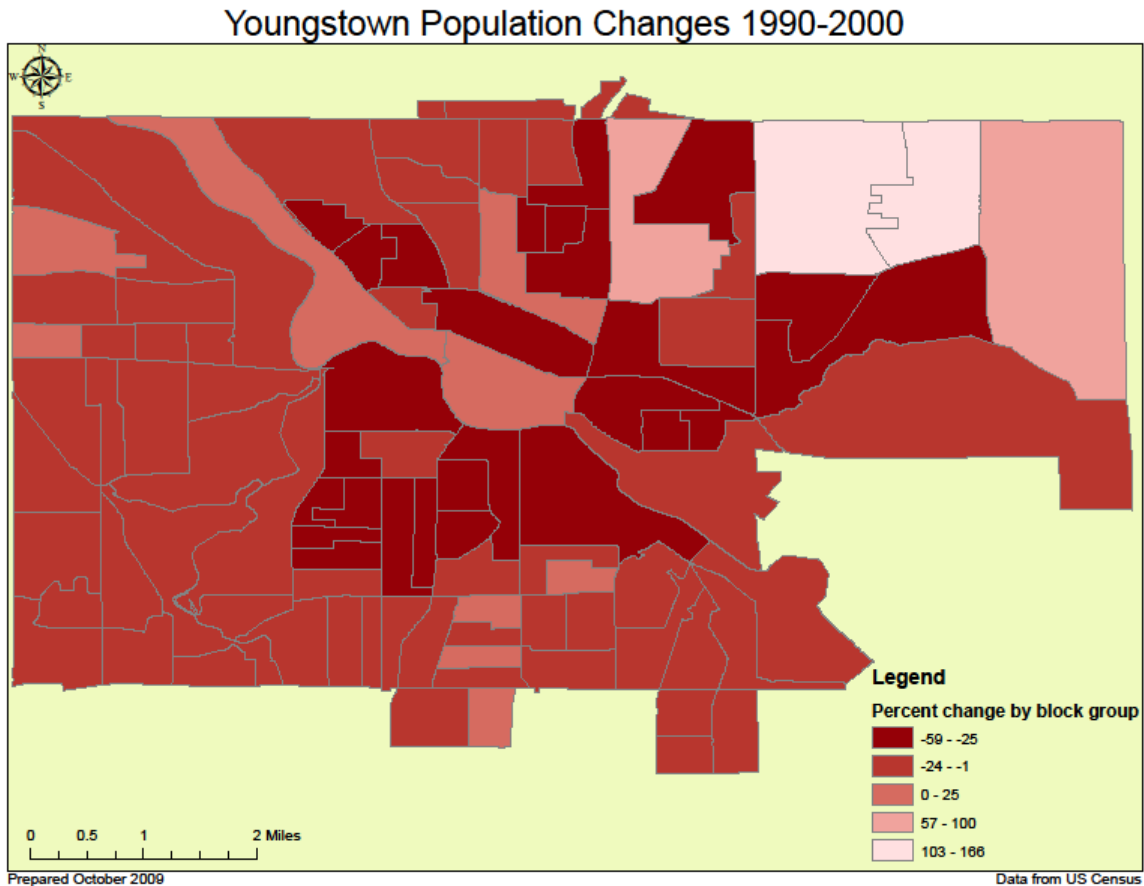


Figure 2: Youngstown Population Changes 1990-2000

With such a drastic and sudden economic collapse, it is not surprising that Youngstown struggles with poverty. Nearly one-third of its residents live below the poverty level, and the median income is just over \$20,000. Having lost more than half of its peak population, Youngstown has accepted the fact that the population decline it has experienced is not going to reverse itself. Thus, they needed a plan to take this fact into account and address the excess of infrastructure and vacant lots plaguing the city, and so they developed the Youngstown 2010 Plan.

The plan has its roots in 1999, when city officials concluded that, for all their efforts to lure new development to replace the now-closed steel mills that brought Youngstown to glory, they simply had an urban footprint and an infrastructure system that was much larger than needed, or than could be afforded. The task to create a new approach was given to Jay Williams, then a city planner and now Youngstown's mayor. The result was a changing of the guard, so to speak, where key players were younger, and many came from other cities to take positions with the city or at Youngstown State, which partnered with the city on the plan. With a fresh outlook, the plan began with the first update to the city's comprehensive plan since 1951 (Swope 2006).

The plan has won many awards, including the American Planning Association's 2007 National Planning Excellence Award for Public Outreach (City of Youngstown 2004). The Youngstown 2010 plan was built around four major principles: 1) accepting that Youngstown is a shrinking city, 2) redefining the economy in the post-steel era, 3) improving the city's image and improving quality of life, and 4) empowering local leaders.

Abandoned properties are a significant part of Youngstown's physical makeup, and the city more than quadrupled the budget for demolition from 2005 to 2007 (Aepple, 2007). The majority of such properties are in minority neighborhoods, so these segments of the population will be most affected, though the city has promised that it will not force anyone to move. The city will no longer provide assistance to fix up homes in these areas, however, but will encourage residents to move into stable neighborhoods by luring them with such funds (Swope 2006).

Canton

Canton, Ohio, is located southwest of Youngstown, and is also experiencing a steady decline, though not as severe as other cities. (See Figure 3.) Canton is probably best known as being the home of the Pro Football Hall of Fame, an 83,000 square-foot tourist attraction. Unlike Youngstown, Canton does not have a university.

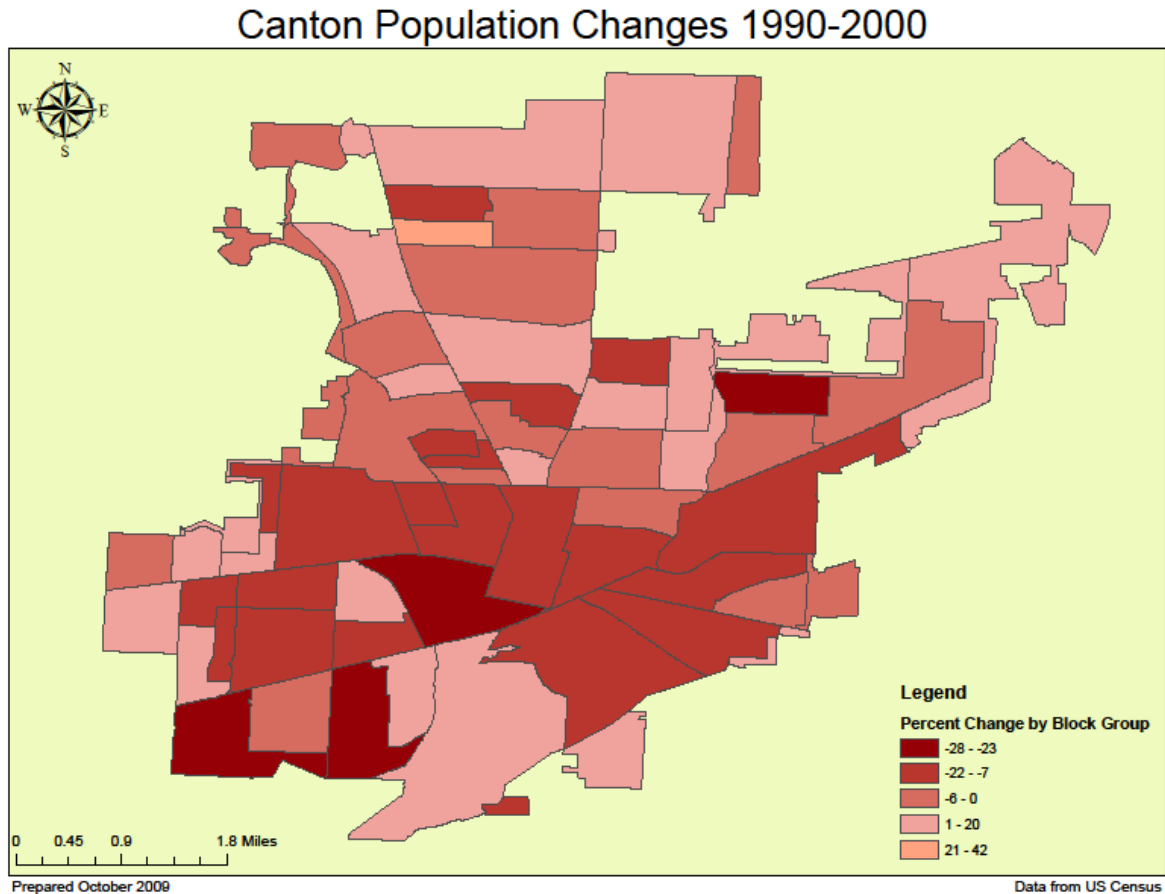


Figure 3: Canton Population Changes 1990-2000

Canton's growth was due primarily to being a center of manufacturing for agricultural implements and machinery, thanks to its close proximity to Ohio's heartland. The city may have had the potential to grow larger, but city leaders passed on two important infrastructure developments in the 1800's. During the late 1820s, planners of the Ohio and Erie Canal offered to build the canal through Canton. Residents refused, believing that disease would run rampant through the community due to the standing water in the canal. The canal was built through Massillon instead. Canton also rejected railroads initially, because they did not want to pay into the infrastructure like the developers of the Cleveland and Pittsburgh Railroad had asked, believing that the railroad would have to build the track through Canton anyway. The developers constructed the line eighteen miles east of Canton, through Alliance.

Canton's current approach is that of revitalization, particularly focusing on its downtown. The city commissioned a report titled *The Roadmap to Sustainability* in 2007, which "fuses best practices from cities recovering from population losses with best practices from growing cities struggling with resource shortages" (Leurig and Terway 2007, p. 13). The recommendations of the report call for Canton to focus on efficiency to save on government expenditures, promoting ecological integrity, and creating a land bank

inspired by that of Genesee County and Flint, Michigan to address the vacant property issue. Also, in 2006, Canton commissioned a report known as the Brain Gain study to find ways to attract and maintain young professionals.

Findings on Planning Responses: Investing in Downtown, Greening, Resizing and Hybrid Approaches to Shrinking Cities

Based on a broad review of the literature (including articles in the popular press), and including a more focused look at Youngstown, OH and Canton, OH, these responses can broadly be grouped into four areas: investing in downtowns, greening, re-sizing and mixed approaches.

Planning for growth vs. planning for shrinkage

The field of planning, in general, has long been geared to anticipate and plan for growth (Swope 2006). Pallagst (quoted in Leonard, 2009) says that there is a “cultural taboo” about admitting decline in America that has led to cities continuing to plan for growth even while they are shrinking. Another expert, Hunter Morrison of Youngstown State University explains that according to some, “it’s un-American” to not be growing as a city, which can make planning for shrinkage a tough sell (Aepfel, 2007). As a result, the traditional planning response to shrinkage has been a combination of Smart Growth practices to reign in sprawl and fragmented revitalization efforts - attempts to reinvigorate inner-city neighborhoods or downtowns (Pallagst, 2008).

Shrinking cities have used several strategies to address the problem (Allweil, 2007). Some cities continue to invest in downtown projects hoping for a return to growth even as they face population loss; current spatial planning approaches dealing with shrinking cities in this region can be grouped in three categories: greening, re-sizing, and finally, mixed strategies, which combine two or more of these approaches.

Planning for Growth

Investing in physical development projects, especially downtown

Although there are prominent exceptions like Cleveland, most midwestern shrinking cities have typically grown by creating suburbs and exurban developments around a hollowed out core (Pallagst, 2008). Some scholars have argued that there is little connection between these new forms of development and the downtown (Fishman, 1987), or that the two are interdependent (Garreau, 1991). In a case study on Cleveland, Bingham and Kalich (1996) suggest that the downtown depends on the suburbs, rather than the other way around. Yet, even as the urban population has drifted outwards, there are arguments for the continuing importance of the downtown of the primary city in the metropolitan area. Some scholars argue that that the downtown has regional importance and that the suburbs in a metropolitan area need the downtown

to flourish as their health is dependent on the health of the downtown (Savitch, et al, 1993). Others have suggested that downtowns offer spaces that suburbs do not offer – urban spaces that allow opportunities for interaction, diversity, culture, and a sense of place (Beauregard, 2003; Rypkema, 2003; Faulk, 2006; Porter, 1997; Strom 2008).

Clearly, there is disagreement on the role and importance of the primary city and its downtown to a metropolitan area. However, Faulk (2006) in a review of the literature on downtown development argues that “numerous policies and projects have been implemented to lure people and business back downtown. The movement to revitalize once vibrant urban centers that have gone through a protracted period of decline has gained momentum over the last few decades.” (p. 625).

Shrinking cities in the U.S. midwest have continued to invest in their downtowns in the project planning model - large-scale, capital-intensive projects such as convention centers, sports arenas, commercial buildings (Gratz and Mintz, 1998). Among the prominent shrinking cities that have used this approach, investing in large new projects like sports stadiums/arenas/cultural centers, commercial space and housing, are Cleveland, Detroit and Pittsburgh. Smaller cities have followed this model as well. Akron, for example, has a new art museum, and Youngstown has two recent judicial buildings. “Particularly in the late 1980s and 1990s, such images became clichés: gleaming office towers, festival marketplaces, gentrified neighborhoods, historically restored train stations, waterfront marinas and multi-peaked skylines” (Beauregard, 2003:viii).

Planning for Shrinkage

Greening

The greening of cities can occur at different levels, ranging from the greening of rooftops to developing green regions (Yaro, 2008). At the city scale, it has become a tool to change the character and use of vacant land within shrinking cities. Philadelphia is a widely cited example of a city using greening as a policy specifically to tackle shrinkage and resulting vacant properties (Bonham and Smith, 2008). Working with residents, businesses and local organizations, Philadelphia Green, a program run by the Philadelphia Horticultural Society, reclaims vacant urban land through greening. The focus is on individual lots which are cleared of litter, followed by grading, planting grass and a few saplings to create pocket-park-type settings. Long-term maintenance of these lots is part of the program. In one of the few studies to calculate the economic impact such greening policies, Wachter and Gillen (2006) found that proximity to a neglected vacant lot reduced the value of a home by 20 percent from the base value of an adjacent home. Location adjacent to a lot that has been improved through cleaning and greening increased the home’s base value by approximately 15 percent. In a pilot project, five lots have also been used for storm water management (Bonham and Smith, 2008: 239)

Youngstown, OH also offers a very interesting case of greening. Utilizing a community-based planning process in which over 5000 people participated directly, Youngstown's first new comprehensive plan in fifty years changed the focus from planning for growth to planning for shrinkage. Youngstown's comprehensive plan, Youngstown 2010, calls for "accepting that Youngstown is a smaller city". Vacant and abandoned lots have been cleaned and greened, including attempts to see if some of these lots can be assembled to create wetlands. Other lots have been given to residents in adjoining lots so they can enlarge their side yards (Swope, 2006).

Resizing

Arguing that "a shrinking city cannot merely retract its perimeter," (p.7), Rybczynski and Linneman (1999) propose that that cities sell large tracts as de-annexed, unincorporated areas to developers who could then develop 'suburban' communities (and municipalities) within the city boundaries, thus creating smaller, more viable cities. Another attempt at resizing is limiting service provision to parts of the city that are sparsely populated and re-directing resources to more densely populated areas. For example, a Youngstown, Ohio, program to help low-income households fix their homes had been distributed on a first-come first-served basis, irrespective of the condition of the neighborhood. Now homeowners in less-stable, less densely populated areas of the city are provided incentives (up to \$50,000) to move to other parts of the city so that streets can be closed off and services such as street lighting, police patrols and garbage pick-up can be shut down in those areas (Swope, 2006, Christie, L. 2008). Youngstown has a moratorium on the construction of homes financed with low-income housing tax credits. Swope (2006) quotes the mayor of the city as saying, "A brand-new house constructed between two houses that need to be demolished—we're not doing anybody a favor. It's not that we don't need decent quality housing for low-income individuals, but where we house them in the city has to be well thought out."

Land banks, used to much lauded effect by cities like Cleveland and counties like Genesee County (which includes the city of Flint) in Michigan, re-size lots within a city by assembling multiple lots and then turning the title over to qualified for-profit or non-profit developers (Dewar, 2006; Harvard University, 2007).

Mixed approaches

While this paper has categorized various approaches to shrinking cities, in practice, most cities employ a number of these approaches simultaneously. Thus, Youngstown has a Clean and Green program, while also directing investment to the more densely settled sections of their city (Swope, 2006). Pittsburgh is investing on large capital investment projects downtown while also having a very successful green building initiative. It is fifth in the nation for the number of green buildings (buildings receiving the Leadership in Energy and Environmental Design, or LEED, certification by the national council) and 10th in the nation for total square feet in LEED certified buildings, with 2.86 million square feet. Philadelphia has implemented Philadelphia Green, a cleaning and greening program, in conjunction with the city's Neighborhood

Transformation Initiative (Kromer, 2002). Cleveland has a land bank while making huge investments in a downtown entertainment district including two sports stadiums.

Applications for Toledo

Based on the experience of shrinking cities in the industrial midwest as already noted above, and to further explore the role of planning and design as it might apply to a shrinking city such as Toledo, architecture students from Bowling Green State University and geography and planning students from the University of Toledo worked on a collaborative studio to develop design/planning proposals for Dorr Street. This street forms the southern boundary of the University of Toledo's main campus, and is a major east-west artery, stretching from the suburbs to downtown. The studio was titled, *The Street in the City: Dorr Street as an Anchor for a Shrinking Toledo*.

Students were assigned sections of Dorr Street. They analyzed their site and developed urban design proposals keeping in mind the larger context of the city – minimal resources and declining population and economy. Students had access to earlier proposals for Dorr Street, were encouraged to talk to stakeholders in the area – store owners, shoppers, residents and students, among others, and could consult members of the city's non-profit design and planning community.

Below is one of the studio projects, developed for a stretch of Dorr Street close to downtown. Students were required to ground their proposals strongly in the needs of the community and this initially proved to be a challenge for some. Students started by proposing the design of big new buildings and sweeping vistas, involving no small amount of demolition – a typical revitalization approach. But, as they began to pay attention to the context of the city and the desires of residents in the area, students tended more towards a mixed approach, with a substantial emphasis on greening.

In their proposal, this group refers to the history of this section of Dorr Street (See Figures 4 and 5). Links to this history are seen in two ways. First, the attempt to minimize demolition of existing buildings to build new ones, in order not to repeat the mistakes of urban renewal which many residents remember. Second, the effort to bring back some of the arts and entertainment uses for which this neighborhood was famous.

1978

Urban Renewal demolition in the 1970's

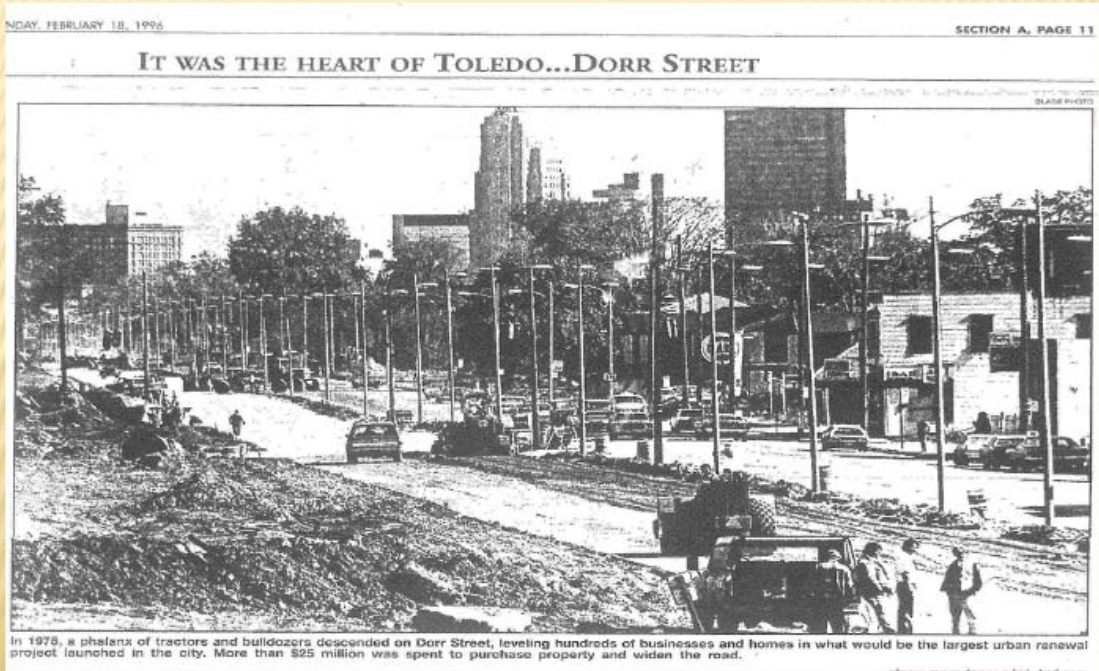


Figure 4: Dorr Street's History of Demolition

Source: UT/BGSU Studio Collaboration

1930 -1970s

A vibrant commercial and residential thoroughfare
from Washington to Smead



Figure 5: A Vibrant History Uncovered for this Stretch of Dorr Street
Source: UT/BGSU Studio Collaboration

This group responded to one of the physical manifestations of shrinkage – vacant land – not by proposing new buildings (which would be the conventional route), but by using the large amount of open space on their site to create a large green space (see Figure 6). Any suggested new buildings are small in scale and the proposed uses reflect the needs of residents. In this case, a new building was proposed for a neighborhood shopping plaza which would house a much-needed grocery store, post office and other such neighborhood amenities that this area currently lacks. Also, while new buildings and uses are suggested, the proposal makes clear that these buildings are only suggested, and should be phased in, on an as-needed basis (see Figure 7).



Figure 6: Proposed Green Space Incorporating Vacant Land
Source: UT/BGSU Studio Collaboration

EXISTING FIGURE GROUND



PROPOSED FIGURE GROUND



Figure 7: Proposed New Buildings (in red in the lower drawing): Buildings are small scale, to be built as needed, for community-identified uses

Source: UT/BGSU Studio Collaboration

Wherever feasible, the proposal suggests the refurbishment of existing and long-vacant buildings, such as the Macomber Building (Figure 8).

MACOMBER BUILDING



Figure 8: Macomber Building Re-Use Suggested
Source: UT/BGSU Studio Collaboration

The proposal suggests a movie theater, connecting both to the history of the area which was once a thriving cultural hub, and the current needs of the community. The Magic Johnson model, successful in many inner cities, was recommended (Figure 9). Also suggested was the use of solar panels and green energy, making the connection to a burgeoning alternative energy cluster developing in the city (Figure 10).

MOVIE THEATER

Magic Johnson Theater business model

- Quality multiplexes in urban communities
- Underserved by modern Cineplexes
- Encouraging local economic growth
- Job development
- Solar power

Figure 9: Magic Johnson Urban Theater Model
Source: UT/BGSU Studio Collaboration

SOLAR ROOF PANELS



Livermore, California

Figure 10: Examples of Alternative Energy Use
Source: UT/BGSU Studio Collaboration

Conclusions

It is clear that the investing in downtowns, though appealing perhaps to civic leaders for symbolic reasons, is a planning strategy that pre-supposes a growing city and is ill-suited to cities that are rapidly losing population. Greening and resizing approaches (as seen in this proposal) hold a lot of potential and can be selectively applied in several cities based on the local context. However, there are a few areas that do not merit a lot of attention in current planning responses to shrinking cities, but need further examination.

Participation/Social Issues/Equity

First, much of the focus of these policies is physical. The Youngstown 2012 process was based on wide participation, but role of residents is less clear in most other examples cited earlier. Even in the Youngstown plan, Schatz (2008) finds that while the plan addresses economic and environmental concerns to some degree, social issues are not addressed as much. The literature is not yet explicit about the social dimensions of shrinkage. Who will determine what approach a city should take to

address shrinkage? Which neighborhoods in the city will be the focus of strategic investments or alternatively neighborhoods with limited service provision, and who will decide? What process can ensure that marginalized residents of the community have a role in decision-making?

Addressing Shrinkage Regionally

Planning for shrinkage is still a difficult idea to sell to politicians, not least because of the negative connotations of the term. There is still a strong tendency among shrinking cities in the industrial belt to invest in their downtowns, despite trends that show that a return to previous highs in populations is highly unlikely. Perhaps there is room to address shrinkage at a regional or national level, while still allowing innovation and city-specific responses at the municipal level.

References

Accordino, J. & Johnson, G. T. (2000). Addressing the vacant and abandoned property problem. *Journal of Urban Affairs*, 22(3), pp 301-315.

Aepfel, T. (2007, May 3). As its population declines, Youngstown thinks small rather than trying to grow. *Wall Street Journal*.

<http://www.realestatejournal.com/buysell/regionalnews/20070504-aepfel.html>

Allweil, Y. (2007) Shrinking Cities: Like a Slow Motion Katrina. **Places** 19:1. pp 91-93.

Armborst, T., D. D'Oca, D. and G. Theodore (2008) Improve Your Lot.

http://www.interboropartners.net/wpcontent/uploads/2008/09/071022_interboro_improve_your_lot.pdf

Beauregard, R. (2003) *Voices of Decline: The Postwar Fate of U.S. Cities*. New York: Routledge.

Beauregard, R. (2007). Shrinking Cities in the United States in Historical Perspective: A Research Note. Conference proceedings of *The Future of Shrinking Cities - Problems, Patterns and Strategies of Urban Transformation in a Global Context*.

http://metrostudies.berkeley.edu/publications/proceedings/Shrinking/9Beauregard_PA_fi nal.pdf

Bingham R. and V. Kalich (1996) The tie that binds: downtowns, suburbs, and the dependence hypothesis. *Journal of Urban Affairs*, 18(2), pp. 153-171.

Birch E. and S. Wachter (eds.) (2008) *Growing Greener Cities: Urban Sustainability in the Twenty-First Century*. Philadelphia: University of Pennsylvania Press.

Bonham, B. and P. Smith (2008) Transformation through greening. In Birch E. and S. Wachter (eds.) *Growing Greener Cities: Urban Sustainability in the Twenty-First Century*. Philadelphia: University of Pennsylvania Press.

Brookings Institute. (2007). State profile: Ohio. In *Restoring prosperity: The state's role in revitalizing America's older industrial cities*. Washington, DC.

Christie, L. You Can't Pay Them Enough to Leave. CNN.com. April 24, 2008.

Dewar, M. (2006) Selling tax reverted land: Lessons from Cleveland and Detroit. *Journal of the American Planning Association*, 72(2), pp. 167-180.

Faulk, D. (2006) The Process and Practice of Downtown Revitalization. Review of Policy Research Journal 23:2.

Fishman, R. (1987) *Bourgeois Utopias: The Rise and Fall of Suburbia*. New York: Basic Books

Fishman, R. (2005). Suburbanization: USA. In P. Oswalt (Ed.), *Shrinking Cities: Vol. 1 International Research*. New York: Distributed Art Publishers, pp. 66-73.

Garreau, J. (1991) *Edge City: Life on the New Frontier*. New York: Doubleday

Gratz, R. and N. Mintz (1998) *Cities Back from the Edge: New Life for Downtown*. New York: Wiley

Harvard University (2007) Urban Land Reform Initiative
<http://www.innovations.harvard.edu/awards.html?id=52621>

Kromer, J. 2002. *Vacant Property Policy and Practice: Baltimore and Philadelphia*. Brookings Institute.

Leonard, T. (2009, June 13). US cities may have to be bulldozed in order to survive. *Telegraph.co.uk*.
<http://www.telegraph.co.uk/finance/financetopics/financialcrisis/5516536/US-cities-may-have-to-be-bulldozed-in-order-to-survive.html>

Lindsey, C. (2007). Smart decline. *Panorama*. pp. 17-21.

National Civic League. (2008). List of past winners of the All-American City award.
http://www.ncl.org/aac/past_winners/past_winners.html

Oswalt, P. and Rieniets, T. 2006. *Atlas of Shrinking Cities*, Hatje Cantz Verlag, Ostfildern, Germany.

P. Oswalt (Ed.), *Shrinking Cities: Vol. 1 International Research* (p.66-73). New York: Distributed Art Publishers.

Pallagst, K. (2007). Shrinking Cities in the United States of America: Three Cases, Three Planning Stories. Conference proceedings of *The Future of Shrinking Cities - Problems, Patterns and Strategies of Urban Transformation in a Global Context*.

http://metrostudies.berkeley.edu/publications/proceedings/Shrinking/11Pallagst_PA_final.pdf

Pallagst, K. (2008). Shrinking cities: Planning challenges from an international perspective." In Cities Growing Smaller, Kent State University, pp. 6-16.

Porter, Michael. 1997. New Strategies for Inner City Economic Development. *Economic Development Quarterly* 11(1).

Rybczynski, W. and Linneman, P. 1999. How to Save Our Shrinking Cities. **Public Interest**. 135. pp 30-44.

Rypkema, D. 2003. The Importance of Downtown in the 21st Century. *Journal of the American Planning Association*. 69:1.

Savitch, H., Collins, D., Sanders, D., Markham, J. (1993) Ties that Bind: Central Cities, Suburbs and the New Metropolitan Region. *Economic Development Quarterly* 7:4. pp. 341 – 357.

Schatz, L. (2008) Innovation in the face of population decline: "Smart shrinkage in Youngstown, Ohio". Paper prepared for ACSP/AESOP Roundtable and SCiRN PhD Academy, Chicago, Illinois.

Schilling, J., & Logan, J. (2008). Greening the rust belt: A green infrastructure model for right sizing America's shrinking cities. *Journal of the American Planning Association*, 74(4), pp. 451-466.

Strom, E. 2008. Rethinking the Politics of Downtown Development. *Journal of Urban Affairs* 30(1).

Swope, C. (2006, November). Youngstown, smart decline. *Governing Magazine*, pp. 46-52.

United States Census Bureau. www.census.gov

Vey, J.S. (2007). Restoring prosperity: The state role in revitalizing America's older industrial cities. The Brookings Institution Metropolitan Policy Program. www3.brookings.edu/metro/pubs/20070520_oic.pdf.

Wachter, S. and Gillen K. (2006) Public investment strategies: How they matter for neighborhoods in Philadelphia. [http://www.upenn.edu/penniur/pdf/Public Investment Strategies.pdf](http://www.upenn.edu/penniur/pdf/Public%20Investment%20Strategies.pdf)

WXPI.com. (January 15, 2009). Pittsburgh may challenge Census putting city behind Toledo. <http://www.wpxi.com/news/18480627/detail.html>

Yaro, R. and D. Kooris (2008) Growing Greener Regions. In Birch E. and S. Wachter (eds.) *Growing Greener Cities: Urban Sustainability in the Twenty-First Century*. Philadelphia: University of Pennsylvania Press.

Appendix

Media references

- Aepfel, T. (2007, May 3). As its population declines, Youngstown thinks small rather than trying to grow. *Wall Street Journal*.
<http://www.realestatejournal.com/buysell/regionalnews/20070504-aepfel.html>
- Brooks, A. (2009, July 13). Flint, Mich.: Growing stronger by growing smaller? *NPR News, Morning Edition*.
<http://www.npr.org/templates/story/story.php?storyId=106492824&ft=1&f=1006>
- Cary, N. (2009, August 14). After years of decline, Cleveland aims to go green. *CNBC.com*. <http://www.cnbc.com/id/32412510/for/cnbc/>
- Christie, L. (2008, April 24). The incredible shrinking city. *CNNMoney.com*.
http://money.cnn.com/2008/04/08/real_estate/radical_city_plan/index.htm
- DelVecchio, R. (2007, February 7). UC Berkeley scholars to consider the shrinking of cities. *San Francisco Chronicle*. <http://www.sfgate.com/cgi-bin/article.cgi?f=/c/a/2007/02/07/BAG01O058A1.DTL>
- Editorial. (2006, June 24). Our shrinking cities. *The Toledo Blade*.
<http://www.toledoblade.com/apps/pbcs.dll/article?AID=/20060624/OPINION02/606240317>
- El Nasser, H. (2006, December 27). As older cities shrink, some reinvent themselves. *USA Today*. http://www.usatoday.com/news/nation/2006-12-26-shrinking-cities-cover_x.htm
- Fairbanks, P. (2008, July 9). Youngstown, facing problems similar to Buffalo's, shrinks by design. *The Buffalo News*.
<http://www.buffalonews.com/cityregion/buffaloerie/story/387344.html>
- Lanks, B. (May 2006). The incredible shrinking city: Facing steep population decline, Youngstown, Ohio, is repositioning itself. *Metropolis Magazine Online*.
<http://www.metropolismag.com/story/20060417/the-incredible-shrinking-city>
- Leonard, T. (2009, June 13). US cities may have to be bulldozed in order to survive. *Telegraph.co.uk*.
<http://www.telegraph.co.uk/finance/financetopics/financialcrisis/5516536/US-cities-may-have-to-be-bulldozed-in-order-to-survive.html>

Lindsey, C. (2007). Smart decline. *Panorama*. pp. 17-21.

Nightline (television episode). (2009, October 29). Demolition derby on real estate: A new trend: knocking down some properties to improve other values. <http://abcnews.go.com/video/playerIndex?id=8942942>

Smith, R. (2008, October 25). Strategies for rebuilding Cleveland: What can be learned from other cities? *Cleveland Plain Dealer*.
http://blog.cleveland.com/metro/2008/10/strategies_for_rebuiding_cleve.html

Sullivan, A. and Krolicki, K. (2009, July 16). Some shrinking U.S. cities find splendor in green. *Forbes.com*.
<http://www.forbes.com/feeds/afx/2009/07/16/afx6663384.html>

Swope, C. (2006, November). Feature: Youngstown, smart decline. *Governing Magazine*, pp. 46-52.

Toland, B. (2009, June 23). Struggling cities examine ways to accommodate smaller populations. *Pittsburgh Post-Gazette*. <http://www.post-gazette.com/pg/09174/979180-28.stm>

Tumber, C. (2009). Small, green, and good: The role of neglected cities in a sustainable future. *Boston Review*, 34(2), <http://>