

# TEARDOWN STRATEGY REPORT



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Chicago Metropolitan Agency for Planning  
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## Introduction

For the past several decades, a vibrant real estate market across much of the Chicago metropolitan area has fueled the demolition of single-family homes as developers make way for larger, pricier and more modern housing. “Teardowns,” as these overhauled properties are often called, typically occur in older, more affluent communities where vacant lots are sparse and unimproved property is at a premium. The trend began in the late 1980s when well-heeled home buyers were attracted to the convenience and character of built-out suburbs, but wanted more design flexibility in their homes. Teardowns are still prevalent throughout the Chicago metropolitan area. Often the factors that prompt a teardown in one neighborhood will spark many more within blocks, creating a profound effect on the greater community.

The following report reports on CMAP’s initial findings on the issue of teardowns. The first section seeks to define what a teardown is. The second outlines the effects teardowns have had in the Chicago metropolitan area. The most significant effects were seen in community character, local municipal costs, the environment and housing/income mix. The third section describes strategies that have been employed by municipalities and preservation groups to mitigate these effects, and includes some local case studies.

## What Is a Teardown?

Teardowns are a controversial subject, and the debate extends to the definition of the term. What precisely is a teardown, and what distinguishes it from other forms of redevelopment? In this report, teardowns have been defined as one-to-one replacements of housing stock – essentially, tearing down an existing house and constructing another larger house in its place.



*Photo by Erica Benson (mysuburbanlife.com)*

Other forms of redevelopment are also important to consider in the Regional Comprehensive Plan, but will not be addressed in this white paper. For example, this paper avoids the topic of gentrification, though teardowns and gentrification are often related. While this is an important issue for the plan to address, CMAP will seek to understand this topic through other research.

As defined in this paper, teardowns also differ from other types of redevelopment in the condition of the structures they often replace. While many revitalization projects can renovate blighted, vacant, or obsolete construction, teardowns often replace structures that are functional, well-maintained, and valued by the community. This is often a subjective distinction, but is important to focus the scope of this paper.

## The Effects of Teardowns

### Community Character

Alteration of community character is the most conspicuous effect of teardowns. When interviewed, officials from several municipalities named this as the foremost criticism from their constituencies. However, while most communities oppose significant changes to character, few can agree on how to define character.

During the interviews, the most commonly identified attribute of character was housing size. According to one of the respondents, current single-family tastes have replaced “looking out” – or valuing large, scenic yards over capacious structures – with “building out” to the extent of the zoning code. Because generous zoning restrictions were often written in the era that favored larger setbacks, the effects of building out those parcels could not be seen until recently. Oak Park and Hinsdale were given as examples of this.

To others, specific architectural styles are central to character. Most of the neighborhoods impacted by teardowns are aging, affluent suburbs with buildings designed by notable architects. While few would argue that all maturing structures should be preserved, critics claim that teardowns often lack proper deliberation and that the replacement construction is insensitive to the aesthetics of the neighborhood. Also, the heightened commoditization of real estate that accompanies teardowns can spur a trend of “benign neglect,”

according to one preservation advocate: "...people say that 'if the dirt is worth more than the building, why should I waste my time painting?'"

Aside from the effect that teardowns can have on the character of the built environment, their impacts often reach the natural and social ones as well. When demolitions occur in older neighborhoods, like those most affected by teardowns, they often take mature trees and plantings with them. Also, teardowns decrease the amount of affordable housing in a neighborhood, diminishing the socio-economic diversity that once defined the community.

## Economic Costs

In the beginning, a strong redeeming quality of the teardown was its boost to the local tax base. A house three times the value of its predecessor paid three times the taxes of its predecessor. However, according to some preservation experts, this is not the fiscal windfall that it once appeared to be. In Hinsdale, the school board has repeatedly relied on bond issues to fund the needs of new students brought by teardowns, according to a village trustee, because teardowns often replace the housing of seniors or couples without children with structures intended for large families. According to the same source, the "Rule of Three" (i.e. teardowns are three times the size and three times the price of their predecessors) also applies to city services consumed by teardowns. Accordingly, the impacts to city infrastructure costs are now starting to outweigh the benefits of larger tax rolls.

Rebuilds aside, many experts also see economic costs in the demolition itself. Because of their labor-intensive nature, rehabs to older buildings can be more costly than tearing down and starting over, which is often a more materials-intensive process. However, while the labor market is most likely to be in or near the immediate community, the materials market likely draws supply from all over the country, or farther. Therefore, some experts argue that rehabs are actually better for local economies, even if not those of the parcel owners.

Some experts argue that teardowns reduce development pressure in greenfield areas by encouraging infill development, because smaller, older housing stock isn't sufficient for the needs and preferences of real estate buyers today. (El Nasser, 2002) According to this view, homes that are bought and torn down would stand vacant if the teardown did not occur, with the prospective buyers moving to a different location to purchase a house that meets their demands.

## Environment

Another effect of teardowns involves the natural environment. This analysis examines the local impacts of teardowns and the impacts that teardowns have on the larger region. Environmental effects include stormwater, landfill space, noise, and embodied energy, each described below.

### *Stormwater*

During interviews, most municipal officials named stormwater flows as their main environmental concern. As smaller homes are replaced by larger ones, the correlating increase in impervious surfaces makes stormwater management more difficult. When runoff water is not readily absorbed, it charges city storm drains, often overwhelming them, before seeking basements and garages. According to a recent study in Downers Grove, these effects are often made worse because, during the replacement construction, developers seldom excavate down as far as the previous buildings. This creates a steeper grade around the edge of the teardown property, and a greater likelihood of flooding nearby parcels (Pond et al, 2007).

While increased housing size alone can undermine drainage systems, other threats also loom. According to one expert, conventional suburban zoning (i.e. houses spread evenly over a vast site) often requires extensive paved connectors such as streets and driveways. "With all this pavement connected, there is much less opportunity for runoff to soak into the ground. In short, conventional development carries with it a subtle but powerful bias toward maximizing both the quantity and speed of runoff" (Sykes, 1998). Thus, current zoning, especially when applied to the redevelopment of teardowns often facilitates the type of stormwater problems described above.

### *Landfill space*

In general, construction and demolition (C&D) is one of the largest sources of waste in the United States, totaling "About 130 million tons per year, or about 25% of all the solid waste that is discarded" (Lennon, 2004). Teardowns can cause more waste than conventional demolitions because, in many cases, they carry

a tighter timeline, so most materials are hastily discarded, whether recyclable or not (Power, 2003). Construction waste was also an area of concern for municipalities interviewed for this paper.

#### *Noise and other nuisances during the construction process*

Residents of neighborhoods experiencing the teardown trend are also affected. As teardowns occur, their entire neighborhood can feel like a construction site, with dumpsters on every block and large trucks constantly passing by. A local director of community development said the impact of construction equipment on traffic, infrastructure and the general atmosphere was a primary concern to the surrounding neighborhood. (Rosenberg, 2006)

#### *Embodied energy*

A significant principal for understanding the value of an existing home is embodied energy. According to one international definition, "embodied energy represents all the energy consumed by all of the processes associated with the production of a building, from the acquisition of natural resources to product delivery. This includes the mining and manufacturing of materials and equipment, the transport of the materials and the administrative functions." (Government of Australia)

Examining embodied energy helps to get at the true costs of teardowns and links it to issues of air pollution and climate change (from the transport of materials and labor), natural resource depletion (forests, metals, gravel) and the environmental consequences of extracting materials. It goes beyond money and culture when evaluating an existing home. Put simply, it points to wasted energy, and the need for sustainable processes of building construction.

## **Housing/Income Mix**

Among experts, there are two strong and conflicting opinions about the impacts of teardowns on housing and income mix. First, many argue that teardowns increase property values and tax levies (due to the increased services they often require) that price lower-income residents out of their neighborhoods. They further claim that the displaced are often forced into already disinvested areas, which further polarizes the communities of haves and have-nots.

Conversely, other experts look at the influx of more expensive homes into teardown communities as a means to *increase* income mix, as it allows affluent homebuyers to buy in built-out areas, which are commonly more economically heterogeneous than their likely alternative: isolated pockets of wealth that form on the urban fringe. (El Nasser) However, experience has shown that most teardown communities are well above the regional median income before the trend even takes hold, albeit more so after.

## **Strategies to Address Teardowns**

Different municipalities have taken different approaches to mitigating the effects of the teardown trend. Some of these steps have been more successful than others. This section will highlight a variety of strategies that have been employed.

### **Redevelopment guidelines -- building scale ordinance or zoning amendment**

By limiting the dimensions of structures for teardown sites, local governments can ensure that redevelopment is congruous with the surrounding community. As mentioned above, setback and FAR discrepancies between old and new structures account for the majority of neighborhood complaints in communities experiencing teardowns. By tightening zoning restrictions and design guidelines, many municipalities have prompted greater symmetry in teardown redevelopments, and eased the tension that has long been an undesirable consequence of the trend. Design guidelines can go beyond dictating size. Certain building materials and architectural styles can also be required by these regulations, further minimizing a teardown's effect on community character.

With near unanimity, the respondents to our interviews deemed redevelopment guidelines the most effective strategy in regulating teardowns. This was, in part, because they are often more comprehensive than other strategies, and also because they are typically the most binding.

Lake Forest has drafted an extensive "workbook" that outlines the city's stringent building scale requirements and the processes to calculate them. (City of Lake Forest, 2005) Lake Forest also requires

developers to undergo a series of public hearings and design review board meetings to ensure that their designs fit with the greater community. One caveat of the design review board is that without clear criteria and authority, the process can become an ineffective formality. According to an official in Lake Forest, this was largely the case in that city until more specified review guidelines were written into code and better conveyed to the community. For more information on Lake Forest's program, please visit: <http://cityoflakeforest.com/pdf/cd/bulkbook.pdf>.

## Teardown Fee or Tax

A tax on the demolition of a house is a preemptive strategy that occurs at the permitting stage, before the house is demolished. This tax can pose an economic disincentive to the process or create public funds for affordable housing or municipal services. Thus, this tax can be aimed at mitigating the effects that teardowns have on the housing and income mix of communities as well as on municipal infrastructure.

Highland Park developed the first demolition ordinance in Illinois, which carried a \$10,000 teardown fee, with money going into an Affordable Housing Trust Fund. (Highland Park Illinois Community Land Trust) While proven a highly effective way to either deter teardowns, or counteract their effects, such ordinances often require home-rule authority, a distinction held by fewer than half the municipalities in the region. For more information on this program, please visit the program website: [http://www.cityhpil.com/pdf/commissions/housing\\_hpict.pdf](http://www.cityhpil.com/pdf/commissions/housing_hpict.pdf).

## Permitting Review or Delay

A major point of intervention for municipalities is during the permitting process. Depending on the size of a municipality, the growth rate, and its attitude toward development, the process for submitting, approving and processing a teardown can vary significantly. The length of the permitting process can give municipalities time to meet with developers or homeowners, properly review teardown applications and review the design of the new house and its impacts on the community. A demolition delay sets up a longer permitting process and requires a teardown to be reviewed by a building review commission. This strategy requires developers or homeowners to put more planning into the teardown, and can help to counteract the effect that teardowns have on community character by providing time to ensure that interested parties are notified and that the new house is in character with the existing housing in the neighborhood.

In 2006, the entire Village of Kenilworth was placed on the National Trust for Historic Preservation's 'Most Endangered List' due to the prevalence of teardowns in this community. This, coupled with an outcry from preservationists and community residents, prompted Kenilworth to enact a 9-month waiting period on demolition permits and form a building review commission to review those permits. The commission has the ability to delay issuance of a building permit for teardowns involving a building of "historic and/or architectural significance," and to use this time to "develop alternative plans to save buildings of special importance." (Kenilworth Ordinance No. 885) While a positive step, critics emphasize that the building review commission does not have the ability to enforce recommendations and that deferring to the commission in the first place is only voluntary. Also, the strategy focuses attention on buildings of 'historic and/or architectural significance' but does not address other homes that may be in good condition but become teardowns.

## Stormwater Ordinances

Municipalities may also find it useful to use stormwater ordinances to regulate teardowns characteristics. According to the aforementioned study of teardowns' effects on stormwater flows in Downers Grove, such an ordinance would include requirements about the following:

- Maximum percent impervious on lots
- Strict setback requirements
- Maximum yard slopes
- Restrictions on altering topography
- Site plan submittal requirements, including a stormwater management plan, prepared and sealed by a registered professional engineer
- Maintenance of adequate overflow routes

Also according to that study, “It is also imperative that a thorough plan review be completed and site inspection be performed to ensure that construction meets the new requirements. Special permit fees can be assessed that specifically address teardown/rebuild activity” (Pond et al, 2007).

## Renovation Zoning

A local non-profit, Preservation Chicago, proposes a unique set of “renovation zoning” requirements for potential teardown properties. According to this group, “...this new classification is to encourage the preservation and renovation of existing housing in neighborhoods that value their older buildings but do not meet the higher standards necessary to qualify as a designated Historic Landmark District.” (Preservation Chicago, 2005)

While renovation zoning has yet to be adopted by any local municipalities, it presents a novel concept – applying two zoning classifications to one parcel. Older buildings to be renovated would be given greater zoning flexibility than those properties that are slated for demolition. According to Preservation Chicago, this would restrict the size of redevelopment projects, while not preventing additions and renovations to a community’s extant structures. A description of the policy is online at: <http://www.preservationchicago.org/policy/renovation.html>

## Neighborhood Conservation Districts

Like Renovation Zoning, neighborhood conservation districts (NCD) present a useful tool for communities with a distinct historic character, but no formal claim to (or public support for) local landmark status. NCDs attempt to preserve the character of an entire community rather than focusing on the design of individual buildings. This helps prevent new construction that is incongruous to the established structures of a neighborhood while not being so rigid as to suffocate development.

NCDs are often implemented as “overlay districts,” or special zones that are subject to additional land-use regulations than the underlying zoning code requires. Often, they are drafted in conjunction with a city’s comprehensive plan, and seek to protect a unique resource like a watershed, natural area, or in the case of NCDs, community character (Church). Developers and property owners in an NCD must first adhere to the underlying zoning ordinance, and then abide by the guidelines of the overlay district.

While local historic landmark districts are regulated according to specific criteria that are unique to each district, properties in NCDs are usually addressed more generally. This can be a key point of contention between those favoring design flexibility and those demanding historical integrity (Stipe).

Some other key differences between NCDs and conventional preservation districts, as outlined in a study of NCDs for Brookline, Mass, are as follows:

- NCDs allow the public to determine what characteristics of a neighborhood should be preserved (and how strictly), instead of relying on the framework of the Secretary of the Interior’s Standards or the language of a local landmark ordinance.
- NCDs emphasize collective neighborhood attributes rather than the details of individual buildings.
- Buildings in NCDs are less often the subject of thorough *architectural* design reviews. Instead they are evaluated by their *size* and *orientation* relative to the rest of the neighborhood.
- NCD reviews are typically left to local planning staff instead of formal, volunteer-staffed historic preservation commissions (Duffy, 2005).

There are many other variables within the NCDs themselves. Some are mandatory, and others are incentive-based – occasionally both. Some are reviewed by municipal staff, and others are reviewed by volunteer boards (the former tends to be more popular and effective, according to the literature). According to the Brookline, Mass. study, “Incentives for neighborhood conservation fall into two main categories— financial benefits and relief from zoning restrictions. Financial incentives include outright grants, tax credits for rehabilitation work that meets local requirements, and in some cases freezing property tax assessments for a period of time. Zoning incentives may allow for a reduction of required setbacks” (Duffy, 2005).

While gaining in popularity throughout the country – and in cities downstate – NCDs have yet to catch on in the Chicago metropolitan region. According to the Brookline study, Lake Forest once considered establishing a NCD, however, the North Shore community has not done so to date. There is a push by some preservation experts to establish these districts locally. They believe that neighborhood conservation

districts would effectively maintain much of a community's character, while not being so restrictive as to be unpalatable to owners of historic property or the community at large.

## Deconstruction

Changes in the demolition process for teardowns could help to mitigate the effects of teardowns on the environment. This change does not have to be a burden and can in fact save developers money on demolition costs. "The demolition process is usually constrained because developers are on a tight timeframe and so the demolition process is done in one swoop, which results in higher landfill fees and missed opportunities." (Power, 2003) However, by considering "deconstruction" ideas, changing the demolition process can save developers and builders a significant amount of money by taking advantage of material specific recyclers and tipping fee savings.

According to the National Association of Homebuilders, "Deconstruction is actually a new term to describe an old process—the selective dismantling or removal of materials from buildings before or instead of demolition." (NAHB Research Center) The process can increase recycling in the demolition process and decrease the amount of construction waste that goes into landfills, but also can be used as a vehicle for community and economic development. "Construction and Demolition Debris (C&D) recycling is one of the most important aspects of [the sustainable building] movement... In providing materials to local vendors and processors, job site recycling creates employment and economic activity that help sustain local economies." (Lennon, 2004) This strategy is most effective when supported by the public through incentives and requirements, such as requiring a certain percentage of construction waste to be recycled. (NAHB, 2001) Deconstruction can cut down on the vehicle miles traveled of construction materials as the old materials can be reused in near proximity to their former location.

Municipal and state laws can help push the recycling and reuse of the materials from a teardown. For instance, Massachusetts has "proposed regulations that will ban the disposal of asphalt paving, brick, concrete, metal, and wood from solid waste handling facilities." (Boston Society of Architects, 2004) These types of state laws can help to drive the market for the recycling and reuse.

## Community Surveys

As stated previously, community character is difficult for municipalities to define. Sadly, many communities do not discover what makes them unique until demolition and redevelopment have relegated those traits to the local historical society. Therefore, some of the interview respondents recommended community surveys. These surveys would quantify the architectural styles, types of local business, open space, and many other attributes that define a community. The tally could then be used to better inform public policy and decisions regarding demolitions and new construction.

In the 1980s, Chicago commissioned a survey of its historic resources in what was fittingly dubbed the Chicago Historic Resources Survey (CHRS). (City of Chicago) The CHRS evaluated every city building constructed before World War II, detailed its historic or architectural contributions and imbued it with a color designation. From red to blue, the colors correspond to the buildings level of historic importance. While this survey is stunning in its breadth (17,371 properties were initially identified as having historically significant qualities) and level of detail (each "historic" property has a corresponding write-up that details the history, architect, and often, the community context of the building), it is often given only token consideration in zoning and demolition decisions. A recent ordinance requires a 90-day demolition delay for all "orange"-rated properties, but this often is not enough to stave off the wrecking ball. Information on these programs is available online at: <http://www.ci.chi.il.us/Landmarks/CHRS.html>.



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