Paradigms for rebuilding the central city: urban, suburban or neo-traditional

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Abstract

The last half of the Twentieth Century has been a period of decline for many older industrialized cities in America. Along with population and job losses, the cities have experienced reduced levels of private investment. One consequence of this decline has been the creation of large areas of vacant land and derelict buildings in these central cities. Revitalization efforts employ one of the following development paradigms:

- Urban – Rebuilding neighborhoods with higher density new housing, making use of the existing street patterns and infrastructure.
- Suburban – Creating new neighborhoods that are oriented to the private automobile, with single family homes on large lots.
- Neo-Traditional – Creating new neighborhoods that are high in density and provide a mixture of land uses, intended to provide a pedestrian-oriented environment and foster a sense of community.

The City of Detroit has adopted policies, such as land use and development regulations, that favor the urban model for redevelopment. Market surveys, however, find more support for the suburban model, while some developers have an interest in the Neo-Traditional form. These conflicting perspectives have contributed to slowing the pace of redevelopment. The City must find more innovative and flexible development regulations if the redevelopment potential of Detroit is to be realized.

1 Introduction

America cities, particularly those that matured prior to the Second World War and those with fixed municipal boundaries, have experienced significant losses in population and economic activity in recent years (see Rusk [1]). Of the 18
largest cities in the United States in 1950 (all those with a population of at least half a million), only Los Angeles and Houston have not experienced population losses since then. In the other 16 cities, population losses have ranged from slight (New York City, San Francisco) to significant (Detroit, St. Louis). In these and numerous smaller cities, population declines have created both the opportunity and the necessity for municipalities to pursue revitalization strategies. While the traditional American attitude has been to continually move on to a new frontier, there is increasing interest in preservation of what exists and in the creation of sustainable communities (Moe & Wilkie [2]). The motivation for this emerging interest is varied, ranging from a concern over damage to natural resources to a recognition of high costs and social inequity of present development patterns. Nevertheless, individuals and communities have a heightened interest in promoting the redevelopment and revitalization of urban core communities.

The challenges facing urban revitalization efforts are significant. The societal trends of the last half century that have shifted population and economic activity to the suburbs and the sunbelt will not be easy to reverse or even to slow. Scenic and climatic amenities can not be recreated in other locations. Under the existing system, greenfield developments will continue to be perceived as less costly (and certainly less difficult) than brownfield redevelopments. Consumer preferences may, all other things being equal, still favor new, suburban style developments to more urban settings.

The tools available to promote central city revitalization are often quite limited. The regional cooperation necessary to promote sustainable urban communities is often lacking (Porter [3]). Financial resources, from local taxes to intergovernmental transfers, are limited. Tax concessions may only effect investment decisions at the margin. Zoning and other land use regulations are even more passive, able only to direct, but not create, private investment.

2. Models for Urban Development

The dominant patterns of urban development in the United States over the past two centuries have been shaped by the contemporary modes of transportation. The gradual evolution of city form through the Nineteenth and early Twentieth centuries was replace by a new urban design paradigm in the post-World War II period as a result of the increased dependence on the private automobile and trucks as the primary means of intra-urban transportation. The increasing reliance on private motor vehicles has changed the basic urban form from urban to suburban.

In recent years, there has been a growing interest in promoting a new model of urban development, one that is more similar to the urban form that predominated in the pre-War era. The advocates of this New Urbanism movement are concerned not only with the aesthetics of new developments but also with the implications of urban form for such social aspects as fostering a sense of community.
2.1 Urban

Through much of the Nineteenth Century, large cities were developed at high densities to facilitate access to ports, factories and commercial areas. So long as the primary methods of urban transportation were walking and (for the well-to-do) the horse and carriage, the physical extent of the cities was, in practice limited. The pedestrian city helped shape circulation systems and development patterns as well. With few exceptions, buildings and the land parcels on which they were located were small and close together. The result was a fine-grained mix of land uses. Streets were narrow and generally short.

As technology and transportation evolved in the latter half of the Nineteenth Century, so did urban form. Railroads and electrical distribution systems permitted the dispersal of factories and other activities. The provision of public transportation systems allowed workers to disperse as well. The fixed nature of the urban transportation systems, however, resulted in the maintenance of higher residential densities along their routes.

The dispersal of manufacturing and distribution facilities contributed to the development of the commercial cores of the cities, where retail, financial, government and office uses were concentrated. An office building boom occurred in the Central Business Districts of many cities during the prosperous 1920s. The downtown cores benefited from public transportation systems, including electric and diesel buses, as well as trolleys and subways. Although transportation routes were prime locations for local commercial and service activities, neighborhood commercial centers were largely pedestrian oriented.

During the early decades of this Century, American cities began to adopt planning and development controls. The importance of public investments in infrastructure (circulation and transportation systems, public facilities, parks and open space) was emphasized in the early master plans that followed the Chicago model. New York City's zoning ordinance introduced the concept of separation of land uses to protect property values and provide for efficient public services. Urban development prior to World War II thus was characterized as relatively high density, focused on a downtown core that was supported by a well used public transportation system. Most daily activities were available within walking distance for most residents. Zoning and other land use controls were only beginning to make their impact felt in the outlying portions of the central cities.

2.2 Suburban

The Suburban model of development has predominated in the United States since the end of the Second World War. Initially mass produced tract housing was built on an urban model to quickly and efficiently meet the post-War housing shortage. By the 1950s, however, the suburban model soon began to emerge. Land uses have become increasingly separated. Large, low density residential developments covered large areas of the suburbs, making public transportation infeasible (Kunstler [4]).
This suburban development model was derived in part from the principles of the British Garden City movement and the Neighborhood Unit concept of Clarence Perry (Buder [5]), along with the frenetic activities of the new merchant builders. These ideas were refined and codified in the publications of the Urban Land Institute [6], a development industry trade association. New suburban development was increasingly designed to accommodate the private automobile, which became ubiquitous throughout American cities. At the neighborhood level, subdivision design consciously attempted to shift through traffic away from residential streets through the use of cul-de-sacs and loop streets. Widely used planning standards (for example, DeChiara & Koppelman [7]) called for limiting access from local streets and driveways to thoroughfares.

Community planning and zoning controls have reinforced these standards so that suburban development patterns are relatively homogeneous throughout the country [4]. Suburban municipalities have established regulations that define appropriate building lot sizes, setbacks and subdivision layouts. The standards extend to shopping centers as well as offices and factories, where buildings are often allowed to occupy only 30 percent of the lot. (Parking areas may cover most of the rest.) As a result of these overall low development densities, a primary characteristic of suburban development is the dependence on the private automobile for virtually all travel.

2.3 Neo-Traditional

Over the past decade, there has been increased interest in a new model for urban development, one that emphasizes pedestrian scale communities. Traditional Neighborhood Design (TND) or Neo-Traditional planning principles take as their models the urban neighborhoods and small towns of the first half of this century. Leading proponents of this movement, such as Andreas Duany [8] and Peter Calthorpe [9], advocate a model of residential development that is much more design conscious than the typical suburb. Neo-Traditional developments are intended to have a distinct look and feel, often incorporating vernacular architectural styles.

In addition to this design emphasis, the TND model differs from the typical suburb in a number of important ways (Fulton [10]):

- Pedestrian concerns are foremost in the design, with the automobile relegated a secondary role;
- Streets are important community spaces; the rights of way are narrow and buildings are uniformly set close to the street.
- Single family homes on narrow lots predominate; these homes typically have front porches.
- Although parking is allowed on the streets, most cars are accommodated in garages accessed from rear lanes.
- The street pattern is rectilinear and non-hierarchical in order to distribute traffic more evenly.
- Heterogeneous, small scale land uses are encouraged.
• Design controls are both strict and prescriptive; in Neo-Traditional communities set backs become “build to” lines. Several hundred Neo-Traditional developments have been initiated around the country (Steuteville [11]). For the most part, they have proven to be commercial successes. Few of these developments, however, have adhered strictly to all of the principles of Neo-Traditional planning. While most of the TND developments are located in the suburbs, these principles have also been encouraged for the redevelopment of urban areas as well. The U.S. Department of Housing and Urban Development has encouraged the use of TND principles in the planning of community redevelopment because of the emphasis on community in Neo-Traditional designs.

3. The Detroit Context

3.1 Historic Development

Through the course of the Twentieth Century, the City of Detroit has experienced extremes of rapid growth and sharp declines. During the first three decades of the Century, as the auto industry emerged, the City of Detroit saw its population increase six-fold. Over the past half century, the City of Detroit has experienced a significant decline in population and economic activity. From a total population of 1.85 million in 1950, the city has declined to a population of less than one million at the end of the century. Along with this population loss, the city has experienced a decline in jobs and investment.

Table 1 Selected Indicators of Decline in Detroit

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<thead>
<tr>
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<th>Mid-Century</th>
<th>1990s</th>
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<tbody>
<tr>
<td>Households</td>
<td>515,000 (1950)</td>
<td>339,137 (1999)</td>
</tr>
<tr>
<td>Housing Units</td>
<td>521,000 (1950)</td>
<td>370,828 (1999)</td>
</tr>
<tr>
<td>Retail Establishments</td>
<td>18,242 (1948)</td>
<td>3,448 (1992)</td>
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Sources: U. S. Bureau of the Census [12]; Southeast Michigan Council of Governments [13].

Detroit’s urban form has been shaped by radial thoroughfares and rail lines, overlaid on a grid. The radials focused on the point of original settlement on the Detroit River, which has become the city’s downtown area. With the exception of the downtown area and scattered locations in the outlying areas of Detroit, most of the city is laid out on an orthogonal street pattern, based on a one mile grid. Commercial parcels line the major streets throughout the city. Individual commercial lots typically measured 20 by 100 feet. Single family homes predominate in all areas of the city, with the exception of the central commercial core. The typical size of a development parcel (which can accommodate a one or two family structure) is 25 or 30 feet wide by 100
feet deep. In the outer parts of the city, parcel sizes increase to 35 to 40 foot frontages. Thus, even though Detroit developed primarily as a city of homes, with just twelve percent of all dwelling units in structures of ten or more units, the overall density is relatively high, about six units per acre.

3.2 Redevelopment Policies

At the end of the Second World War, about 75 percent of the 140 square mile area of the City of Detroit was developed. Much of the remainder was already platted for a mixture of small scale single family and strip commercial development. Although the city still had room to grow, officials were concerned with the need for redevelopment of the city’s slums to provide opportunities for larger scale economic development. As expressed in its urban design plans (Thomas [14]), Detroit’s central area would be rebuilt at high densities with a mix of land uses. Public transportation investments, including a new subway, would reinforce this development form.

Detroit was an early participant in the Federal government’s Urban Renewal program during the 1950s and 1960s. Most of the City’s major redevelopment projects were intended to support economic development activities, including the expansion of the Central Business District and major institutions (hospitals, cultural and educational institutions), as well as the creation of modern industrial parks to compete with suburban developments. All together, about 2.7 square miles of the city were included in the Urban Renewal effort.

The Lafayette-Elmwood area just east of the CBD is Detroit’s primary residential renewal area. Begun in 1949 as Detroit’s first Urban Renewal project, the clearance and rebuilding of this one square mile area has only recently been completed. This was a high density area of run-down single family homes and apartments, neighborhood commercial and small manufacturing facilities. It has been transformed into an area of high-rise apartments, row houses and garden apartments. Although the Lafayette-Elmwood area no longer includes any single family homes, it is lower in density than previously, with about half the pre-renewal population, because of the provision of generous amounts of public open space.

During the long history of the redevelopment of this residential area, the characteristics of the Detroit housing and real estate market changed significantly. In the immediate post-World War II period, Detroit faced a significant housing shortage, especially for its rapidly increasing African-American population. Just as the City exhausted its supply of vacant land suitable for development, its population and employment base began to decline. Not only did some Urban Renewal lands lay fallow for a number of years (with some never finding their planned uses), but the city experienced large scale abandonment of homes, factories and commercial buildings in the older parts of the city.

During the 1970s and 1980s, Detroit pursued a redevelopment strategy that emphasized large scale projects that required extensive land assembly.
wide spread abandonment and limited demand made it relatively easy to assemble more than 450 acres for a new General Motors assembly plant and over 600 acres for a new Chrysler Corporation manufacturing facility. It was possible to accommodate these suburban style developments without excessive displacement of residents or businesses.

Not surprisingly, Detroit has experienced limited development of new single family homes during the last two decades, an average of fewer than 30 new homes a year between 1979 and 1998 [13]. Not only was the supply of land for new subdivisions limited, but the soft property market also made it difficult to build new housing that was marketable. This lack of new single family housing in Detroit has meant that much of the available supply does not meeting the standards of today’s market, especially in terms of size and amenities.

During the 1980s and 1990s, more than 100,000 housing units were demolished in Detroit. About nine percent of the city, some 13.5 square miles, is now vacant. Failure to pay property taxes has resulted in the reversion of many of these properties to City ownership. Detroit is now landlord for more than 46,000 properties, both vacant and developed. The number of vacant housing units in the city remains high (over 8.5 percent of the total). Because many of these properties have deteriorated, it seems likely that additional demolitions will result in an increase in the amount of vacant land.

Despite the availability of significant amounts of vacant land, Detroit has seen only two new residential subdivisions developed in the past decade, both with the active participation of local financial institutions. These developments together have provided a total of about 300 new single family homes in a relatively low density suburban style environment. The 60 foot lots in these new developments were created by combining two of the existing platted lots. Both developments are gated communities and further disrupt the existing street grid with cul-de-sacs. The substantial public subsidies provided undoubtedly contributed to the market success of these developments.

The potential for scattered site (“infill”) new single family housing development in Detroit is inhibited by current public policies. The City of Detroit Zoning Ordinance [15] requires that any new single family home be built on a 5,000 square foot lot with a minimum frontage of 50 feet. Few of the platted lots in the City currently meet this standard. Moreover, the City’s development approval process is complex and lengthy. Even in Detroit’s one single family zoning category, a new home must comply with extensive architectural compatibility standards.

### 3.3 Current Policy Issues

For more than a generation, new residential development in Detroit has been limited by the different perceptions of the most appropriate form for the new development. The City of Detroit Planning and Development Department believes that the most appropriate form for the redevelopment of the City is one that is characteristically urban. That is, residential densities and housing types should be distinct from what is available in the suburbs. While single family
homes are expected to continue to predominate, the city should offer smaller lots and more multifamily options than the suburbs. The existing pattern of narrow platted lots on an orthogonal street system meets these requirements. Despite the fact that new subdivisions with larger lots have been readily accepted by the market, this type of development is not actively encouraged by the City. Rather, infill developments, with new residential structures placed on available sites along existing streets, are encouraged, but have attracted only limited interest. Virtually all of the single family developments that have won City approval in the last five years have been on lots with less than 50 foot frontages. The City has been more successful in attracting new multifamily development, including high rise and garden apartments, as well as row houses. Multifamily units have averaged almost 450 units a year for the past two decades. Most of these are rental units and few have been built without some public subsidies.

Market surveys (Prince [16]) generally indicate that most households prefer lower density, suburban style environments. Even those households expressing interest in a city location, but would prefer suburban style amenities and features, such as an attached garage and greater distance between structures. Market surveys in other contexts have also found that the preference for a more urban development form is expressed by only 20 to 30 percent of households (Filion & Bunting [17]).

The current interest in Neo-Traditional development would seem to be compatible with the City’s objectives of preserving its distinctly urban form. Some City development regulations are not consistent with the principles of Traditional Neighborhood Design. With limited exceptions, mixed use developments are not permitted. Minimum parking requirements and maximum lot coverage restrictions (no more than 35 percent of the lot area) militate against the high density appearance of TND. Even the minimum frontage requirement of 50 feet is also problematic in this regard. A few builders have, nevertheless, expressed interest in applying the Neo-Traditional model in Detroit. For the most part, however, the resulting developments consist exclusively of multifamily structures, with none of the community facilities.

4. Conclusions

4.1 Detroit

In planning for its future, Detroit officials must recognize both the constraints of the city’s development history and the changing circumstances in the regional economy and property market. Much of the city’s existing capital stock is not competitive with newer developments in the suburban fringe communities. Moreover, many of the locational advantages that city neighborhoods traditionally enjoyed when the urban area was focused on the riverfront and the downtown area, no longer exist. Absent significant metropolitan-wide population growth, Detroit’s population is unlikely to rise much above current levels, causing the low demand for city properties to continue.
Urban Planning, however, is concerned with change, whether growth, decline or rebuilding. In Detroit, planning must recognize that the most appropriate urban form is one that is quite different from that which existed at mid-century. The Detroit urban area can not be forced back to a monocentric form. Multiple activity centers and high levels of accessibility (based on the private motor vehicles) will inhibit a return to higher densities.

Planning and development controls suitable to these market realities must be adopted and pursued. Even if the pace of redevelopment in Detroit is increased considerably, the renewal of the city will be a decades long process. Over time, the constraints that shape today’s planning choices will also change. Planning standards must provide sufficient guidance to would-be developers and investors while still providing flexibility necessary to respond to changing circumstances and markets.

4.2 General

In some respects, the City of Detroit may represent the limiting case of modern industrial urban decline and the one for which revitalization efforts will be most challenging. There are, however, some general lessons to be learned from this experience. Perhaps the most important one is that plans must not be drawn up in a vacuum. Contextual changes – demographic, economic and technological – are capable of invalidating the assumptions underlying any plan. City plans are unlikely to remain valid for long.

Government planning must recognize its limitations. Future urban development will increasingly be shaped by public-private partnerships. Most city building will require the investment of large amounts of private capital, following market indicators. While public investments in infrastructure will continue to be important, they alone will be insufficient to change the form of urban areas.

Other types of planning and development controls have a largely passive effect on urban form. The impacts of zoning and other land use regulations are felt only if and when a market emerges. Rigid adherence to a plan that does not meet the needs of the market will cause development potential to be realized in a different location.

Planners in the United States must recognize that they are no longer the only ones responsible for master plans and ideal urban designs. Even the grandest plans will be ignored if they do not meet the preferences of potential consumers. More modest plans, responding to market signals and adapting to changing circumstances, have greater potential value.

References


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