LOSING HARTFORD: TRANSPORTATION POLICY AND THE DECLINE OF AN AMERICAN CITY

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Abstract

This study reveals that, since 1960, parking provision has tripled in Hartford, Connecticut, even as population and employment have dropped. This has weakened the city's urban fabric and enabled a rise in automobile dependence. A review of historical policy trends suggests that city officials acknowledged the consequences of this shift, but failed to correct it.

Meanwhile, at least one major employer in the city has been able to curb automobile use by its employees. If the city adopted similar policies, it could recaim large tracts of land and begin to rebuild its urban fabric while diversifying its transportation system.

Introduction

Hartford, Connecticut, is a city of around 120,000 people that serves as a major employment center for the greater metropolitan region. Historically, it has been considered *the insurance capitol of the world* and still houses a number of major insurance companies. Over the past fifty years, significant portions of the city have been rebuilt to accommodate high-speed expressways and high-rise buildings. In many ways, these changes were motivated by the growth of competing suburbs in the region.

Since these changes began, around 1960, automobile use in the city has increased by 40 percent and travel by other modes has decreased. As national interest in energy security, greenhouse gas reductions, and traffic safety grows, trends of rising automobile use in urban areas are alarming.

Research has shown that compact urban development supports alternative modes of transportation to automobiles (Ewing & Cervero 2001; McCormack, Rutherford, & Wilkinson 2001; Cervero 2002). Therefore, this study takes a closer look at Hartford's recent history to understand how the automobile has gained prominence, what are the implications, and what is the city's potential to reverse this trend.

Research methodology

The goals of this study were to identify influential policy decisions in Hartford over the study period 1960 to 2007 and to quantify the impacts of these decisions on the built environment (particularly in the downtown) and on travel behavior in the city. In order to better understand the potential benefits of transportation policy in the city, the researchers also examined private sector policies and the influence they have on the travel behavior of employees in the city.

After reviewing literature on transportation policy and demand management, the researchers chose to focus on parking policy. The first reason for this focus is that parking cost and provision play a key role in influencing travel behavior, as shown in Willson & Shoup (1990), Hess (2001), Shiftan & Burd-Eden (2001), and Shoup (2007). Secondly, parking facilities require considerable amounts of land, affecting the urban form of a city (Manville & Shoup 2005; Marshall & Garrick 2006).

The first component of the research was a systematic review of city records over the study period. The researchers documented records related to transportation and parking in order to identify trends in policy prioritization and major shifts in this structure.

A critical component of this study was the quantification of parking provision over the study period. The researchers used aerial images from 1957, 1965, 1995, and recent images from Google Maps to identify and map parking facilities. These maps were used to calculate the total area devoted to parking facilities and the changes over time. In the city's downtown, where commercial land is considered the most valuable and where many jobs are clustered, the researchers also estimated the total number of parking spaces in surface lots, parking structures, and on-street parking.

In order to understand the context in which parking provision changed over the study period and the effects of these changes on travel behavior, the researchers relied on census data to explain population, employment, and means of commuter travel.

Finally, the researchers used information from correspondences with representatives from six major employers in Hartford to explain the city's potential for reducing automobile travel and the role that parking availability plays.

Historical policies

Throughout the 1960s – following the passage of the Federal Highway Act of 1956 – Hartford underwent significant physical changes. Large-scale razing took place in order to accommodate the construction of two major interstate highways, many complementary parking facilities, and a number of modernist skyscrapers. From then on, the role of parking facilities in the city remained a contentious subject among city policy-makers.

In general, over the past five decades, city officials have expressed concern over the detrimental impacts of parking facilities within the downtown but many have also considered parking facilities necessary for competing economically with surrounding suburbs. The records regarding these subjects are extensive, but we have included a few key demonstrative points below.

As early as 1962, the City Plan Commission in Hartford acknowledged that, given the city's limited land, it required "careful, intensive study of the impact of highway takings and parking facilities if these takings are not to result in strangulation of the City" (City of Hartford 1963, 374). In 1973, new concerns were voiced by the city council; they stated, "Grade level parking lots and multi-storied parking garages in the CBD encourage the use of motor vehicles by employees which conflicts with the City's mass transit and clean air goals" (City of Hartford 1973, 1794). By 1978, the city council strongly supported a moratorium on the construction of parking garages downtown (City of Hartford 1979, 1247). Clearly, there was a sense among policy-makers that the consequences of parking facilities would outweigh the potential benefits.

Despite these concerns, there remained a push for the city to meet what some apparently considered a perpetual shortage of parking. For example, in 1971, the City Manager proposed that the city, "Evaluate possible ways of providing additional off-street parking such as partial street closings or use of property acquired by the City for back taxes" (City of Hartford 1971, 1151). In 1972, the city council stated, "The most critical improvement to these neighborhood business districts [competing with comparable suburban districts] is the provision of off-street parking facilities" (City of Hartford 1973, 580). At other times, the need for parking was considered "immediate" (City of Hartford 1971, 78) and "essential" (City of Hartford 1985, 111).

In the following analyses, we provide evidence suggesting that it was the latter view – that of parking shortages – which prevailed, resulting in the continued growth of parking facilities in the downtown. Furthermore, we show that this has actually enabled increases in automobile use at the detriment of the city's urban fabric, just as some officials predicted.

Parking provision and demographics

The city of Hartford covers approximately 17.3 square miles of land. Our parking analysis reveals that from roughly 1960 to 2000, the total land area for exclusive parking facilities increased from 0.54 square miles to 1.45 square miles. This change suggests that officials were at least partly successful in implementing their plans for off-street parking. However, this increase occurred even as the population in Hartford decreased from 162,000 to 122,000 and the number of workers decreased from 114,000 to 106,000. This suggests that, although parking provision may have helped Hartford to compete with surrounding suburbs, it did not enable the city to grow – in fact, increasing parking provision may have been prohibitive to growth. The growth of parking outpaced other

indicators of growth such that the area of parking per resident increased by a factor of more than 3.5 and the area of parking per worker increased by a factor of 3.

A more revealing picture can be gauged by examining the changes that occurred strictly within downtown Hartford. Figure 1 shows the parking facilities that existed in the downtown circa 1960. Including parking structures and on-street parking, there were approximately 15,000 parking spaces covering 7.5% of the land downtown. Within less than a decade – during construction of the city's two expressways – the number of parking spaces increased by more than fifty percent. As shown in Figure 2, this trend continued over the next four decades. By 2000, the number of spaces had more than tripled to 46,000 covering 22% of the land.

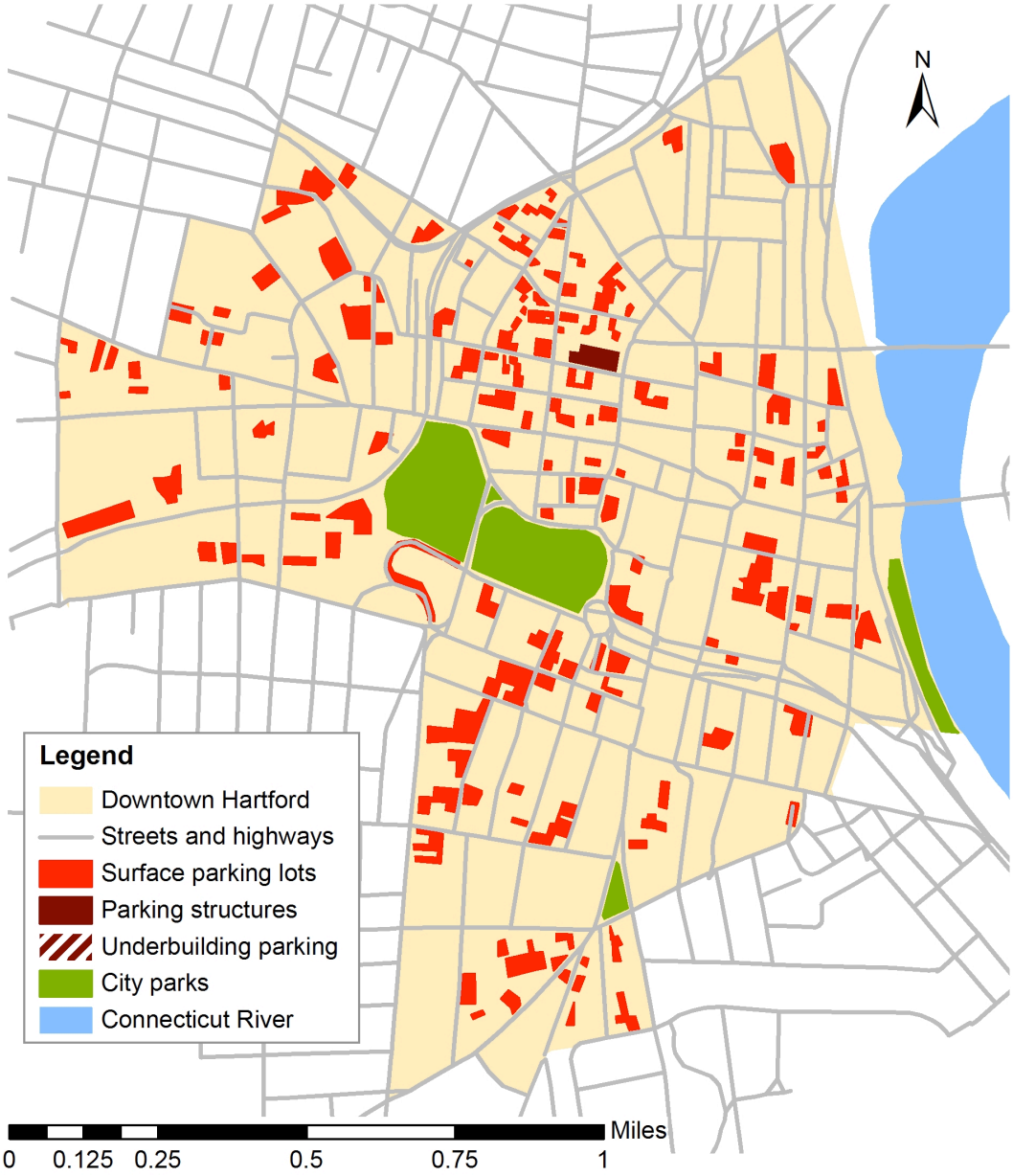

Figure 1 Parking in downtown Hartford, CT, circa 1960

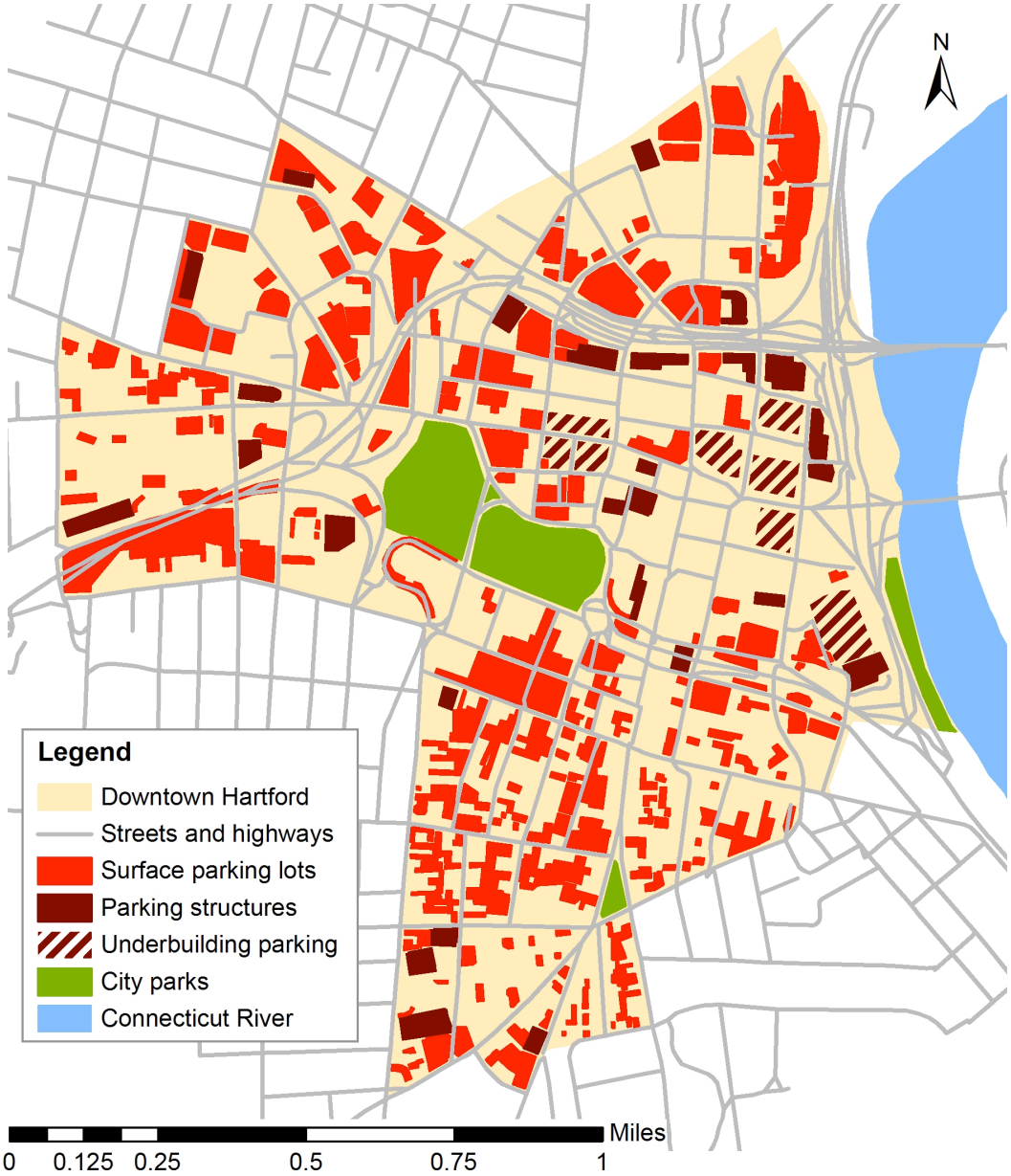

Figure 2 Parking in downtown Hartford, CT, circa 2000

Once again, it is unclear whether this increase in parking was fully justifiable; however, the impact of these facilities on the built environment is quite clear. In the downtown, entire blocks have been turned from human-scale building fronts to expansive surface lots. Not only do these lots occupy land that could otherwise be used for housing or commercial development, but they create an environment that is hostile to pedestrians. Many employees are able to park near their place of work and walk very little, stifling potential economic activity in downtown shops and restaurants. Furthermore, the lack of housing opportunities in close proximity to the downtown has forced employees to live further away where driving is often their only reasonable transportation option, regardless of their preference.

Travel behavior

To show how travel behavior has changed in Hartford since 1960, the researchers relied on the commuter means of travel from US census data. These trends are shown in Figure 3. This data reveals that in 1960, only 53 percent of commuters in Hartford traveled by automobile. By 2007, however, this had risen to 73 percent. Meanwhile, transit use dropped from 31 to 17 percent and walking and biking dropped from 16 to only 7 percent. These trends are not unlike national trends, although the rise in automobile use is more pronounced.

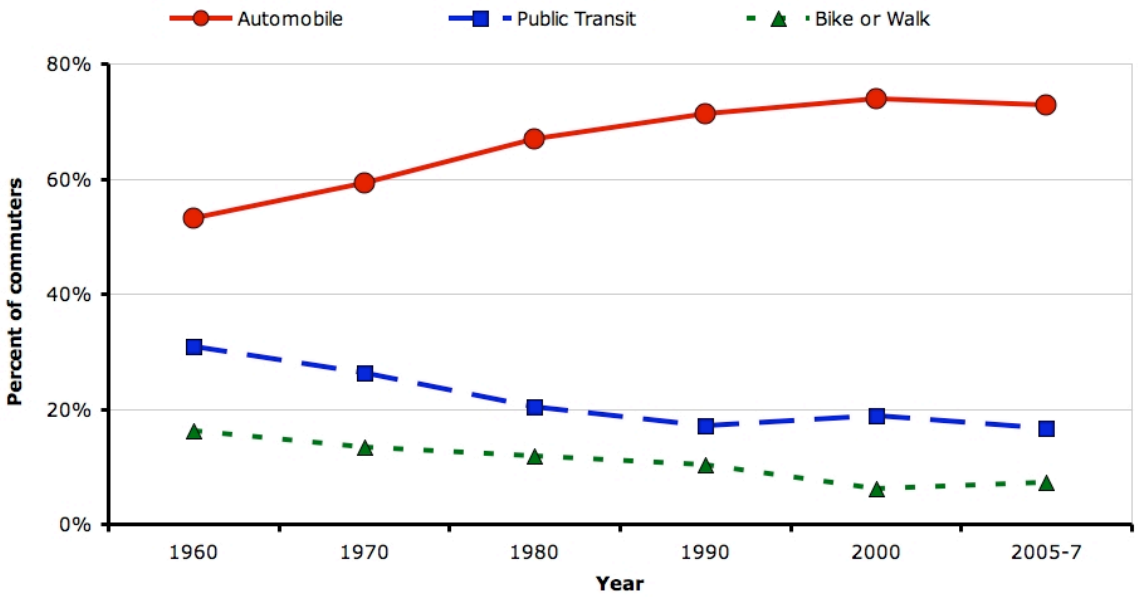

Figure 3 Historical mode shares for employees in the city of Hartford

It is worth noting here that the rates of walking and biking have dropped just as much as transit use has (by about 50 percent). This suggests that while it was creating incentives to drive, such as ample parking, the city also created disincentives to walk or bike. In other words, attention to the built urban environment goes hand-in-hand with investments in transit for enabling a diverse transportation system in Hartford. The transformation of city lots from human-scale buildings to parking facilities has thereby perpetuated a cycle of automobile-dependence that city officials never seemed quite able to satisfy.

The private sector and the city's potential

Given the evolution of Hartford over the past five decades, the question remains as to how the city might be able to reverse the growth of parking facilities and the increasing dependence on automobiles. To some, it might seem that travel by automobile is essential to Hartford and that parking demands are still unmet. However, as discussed below, at least one predominant local insurance company has adopted a model that suggests otherwise.

A handful of major employers in the city of Hartford were surveyed. At businesses that provide free and ample parking – the Hartford Courant, Hartford Hospital, the City of Hartford, and the State Department of Environmental Protection – between 83 and 95

percent of employees drive alone to work. That is higher than the rate of driving to work for Hartford residents (73 percent). However, at the Travelers Companies, Inc., where employees are charged between 70 and 125 dollars per month for parking, only 71 percent drive alone to work.

The decision to charge employees for parking at the Travelers was based largely on a shortage of parking and the high cost for providing additional parking in structured facilities. In fact, the company has enough spaces for only half of its employees, leaving 21% who seek alternative private parking. The company also provides subsidies for transit passes, allows vanpools to park for free, and encourages cycling.

Another Hartford insurance company, Aetna, Inc., has enough parking available for at least 85 percent of employees and also charges an undisclosed amount for employees to park. Of its commuters, 84 percent drive alone.

These companies that have begun exploring non-automobile access for their employees have done so in the context of a very auto-dependent city. Some cities – such as Cambridge, Mass., and Portland, Ore. – have brought about similar shifts through city led initiatives such as limiting the amount of new parking through zoning ordinances and by adopting strategies that prioritize walking and cycling. In contrast, a few major private employers in Hartford have led efforts to manage transportation demand without supportive regulation of the local or state government. This is a shortcoming of the City, which could produce positive results by enacting similar policies citywide.

According to data from the Census Transportation Planning Product, 90 percent of workers in Hartford travel by private automobile using approximately 88,000 cars. If all employees in Hartford used alternatives to the automobile at the same rate as those working at the Travelers, the city could reclaim the land needed for at least 19,000 parked cars – approximately 0.24 square miles of surface parking. This would account for roughly 90 percent of the surface lots in the downtown or 19 percent of surface lots in the entire city.

Furthermore, converting parking lots to human-scale buildings can potentially create an environment that is more supportive of walking, cycling, and transit and reconnect the downtown to residential districts. The opportunity to build additional housing and amenities within the downtown could prompt economic development for the city while providing a larger pool of employees within walking distance of the city's major employers.

Conclusions

Over the past fifty years in Hartford, much of the built environment has been dismantled to accommodate parking; the amount of parking has nearly tripled since 1960. Meanwhile, automobile use has increased by almost 40 percent while transit use, biking, and walking have dropped by 45 to 55 percent. In order for the city to reduce greenhouse gas emissions and other pollution, reduce traffic congestion, and free up land for development, they should begin to reverse this trend.

As demonstrated by one major insurance company in the city – the Travelers Company, Inc. – charging for parking and subsidizing transit use can potentially reduce the rate of driving and the number of parking spaces used. Based on this company's model, the city of Hartford could reduce the rate of employees driving in the city and the total space needed for surface parking each by one-fifth. This would enable great swaths

of parking to be replaced with compact development that would encourage economic development and alternative modes of travel – a positive cycle that could benefit the city significantly.

A mandate requiring employers to charge employees for parking most likely cannot be instituted without buy-in from many parties. However, this structure can be encouraged on economic grounds. Furthermore, changes in policy can begin with the City and State offices in the downtown – both of which provide ample, free parking to their employees.

When compared to its surrounding suburbs, Hartford's greatest strengths are its historical urban form and its compact development. By emulating more suburban parking policies, the city has weakened these attributes. This study suggests that Hartford should build upon its urban fabric instead of dismantling it.

References

Cervero, R. 2002. Built environments and mode choice: Toward a normative framework. *Transportation Research Part D: Transport and Environment* 7, (4): 265-284.

City of Hartford. 1963. *Journal of Court of Common Council of the City of Hartford, 1961-1963*.

City of Hartford. 1973. *Journal of Court of Common Council of the City of Hartford, 1971-1973*.

City of Hartford. 1979. *Journal of Court of Common Council of the City of Hartford, 1977-1969*.

City of Hartford. 1979. *Journal of Court of Common Council of the City of Hartford, 1969-1971*.

City of Hartford. 1985. *Journal of Court of Common Council of the City of Hartford, 1983-1985*.

Ewing, R., and R. Cervero. 2001. Travel and the built environment: A synthesis. *Transportation Research Record* (1780): 87-113.

Hess, D.B. 2001. Effect of free parking on commuter mode choice: Evidence from travel diary data. *Transportation Research Record* (1753): 35-42.

Manville, M., and D. Shoup. 2005. Parking, people, and cities. *Journal of Urban Planning and Development* 131, (4): 233-245.

Marshall, W.E., and Garrick, N.W. 2006. Parking at mixed-use centers in small cities. *Transportation Research Record* (1977): 164-171

McCormack, E., G.S. Rutherford, and M.G. Wilkinson. 2001. Travel impacts of mixed land use neighborhoods in Seattle, Washington. *Transportation Research Record* (1780): 25-32.

Shiftan, Y., and R. Burd-Eden. 2001. Modeling response to parking policy. *Transportation Research Record* (1765): 27-34.

Shoup, D. 2007. Cruising for parking. *Access* 30, (Spring): 16-22.