Metro Boston Perfect Fit Parking Initiative

Phase 1 Executive Summary

Report by the **Metropolitan Area Planning Council**

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Parking is a point of contention in communities across Metro Boston, and a matter of great importance to the region's housing, transportation, and economic future. Yet many deliberations about the topic occur in the absence of hard data about the amount of parking that is actually utilized. Parking requirements for new housing developments tend to rely more on precedent, neighborhood concerns, and instinct than they do empirical analysis. While some municipalities are taking data-driven approaches to parking management in their downtowns, few have yet to take a systematic approach to creating demand-based parking requirements for multifamily residential developments. A demand-based parking approach uses field observations and statistical models about likely parking demand as the basis for determining off-street parking requirements, and uses parking policy as a tool to discourage vehicle ownership and reduce vehicle miles traveled (VMT) in highly transit-accessible and walkable locations.

The Metropolitan Area Planning Council (MAPC) has begun an initiative to develop the data and tools that communities need to establish informed, sustainable, and economical parking policies. This report summarizes Phase 1 of that effort, which entailed field surveys of 80 multifamily residential developments to measure actual parking utilization, and statistical modeling of the results to assess what neighborhood and building factors are associated with parking demand. Phase 1 was limited to five municipalities north of Boston: Arlington, Chelsea, Everett, Malden, and Melrose. Future phases of the work will include data collection in additional parts of the region, refinement of the parking demand model, and creation of digital tools to support community decision-making. In doing so, MAPC references the work of the Center for Neighborhood Technology, which has conducted similar work in three other major metro areas: Seattle, Washington D.C., and Chicago.

While there is a tremendous range of parking issues that can be explored in the Metro Boston area, Phase 1focuses on municipal off-street parking requirements for multifamily developments. Historically, these requirements have been determined outside the context of actual parking utilization data, and tend to remain unchanged for long periods of time. The relatively arbitrary nature of determining parking requirements is reflected in the surveyed municipalities; among these five communities, parking requirements for multifamily developments range anywhere from 1 to 2 spaces per unit. Several have already taken steps to move away from a single parking requirement for all multifamily developments within a community, regardless of context, and instead allow for fewer spaces to be constructed in some of the most walkable and transit-oriented neighborhoods. Ideally, the Perfect Fit Parking Initiative will encourage cities and towns to continue to move in this direction of creating context-specific parking requirements that are based on up-to-date parking utilization data. We also hope it will encourage developers to propose an amount of parking that is consistent with actual demand, rather than frequently exaggerated expectations.

The results of Phase 1 are twofold. First, MAPC field surveys found that approximately one in four multifamily residential parking spaces were unused during the hours when most people are at home and asleep, precisely the time one would expect the highest utilization. On average, each housing unit has 1.15 spaces available, but utilizes only 0.85 spaces. In all, MAPC counted nearly 1,200 empty spaces sitting unused across the 80 surveyed properties. This finding alone suggests that municipalities would be well-advised to revisit the standards that are creating excess parking. It also suggests that developers and property managers would benefit from limiting unnecessary parking, which can be expensive to build and maintain. Figure 1 below demonstrates the range of utilization rates observed across the 80 surveyed properties.

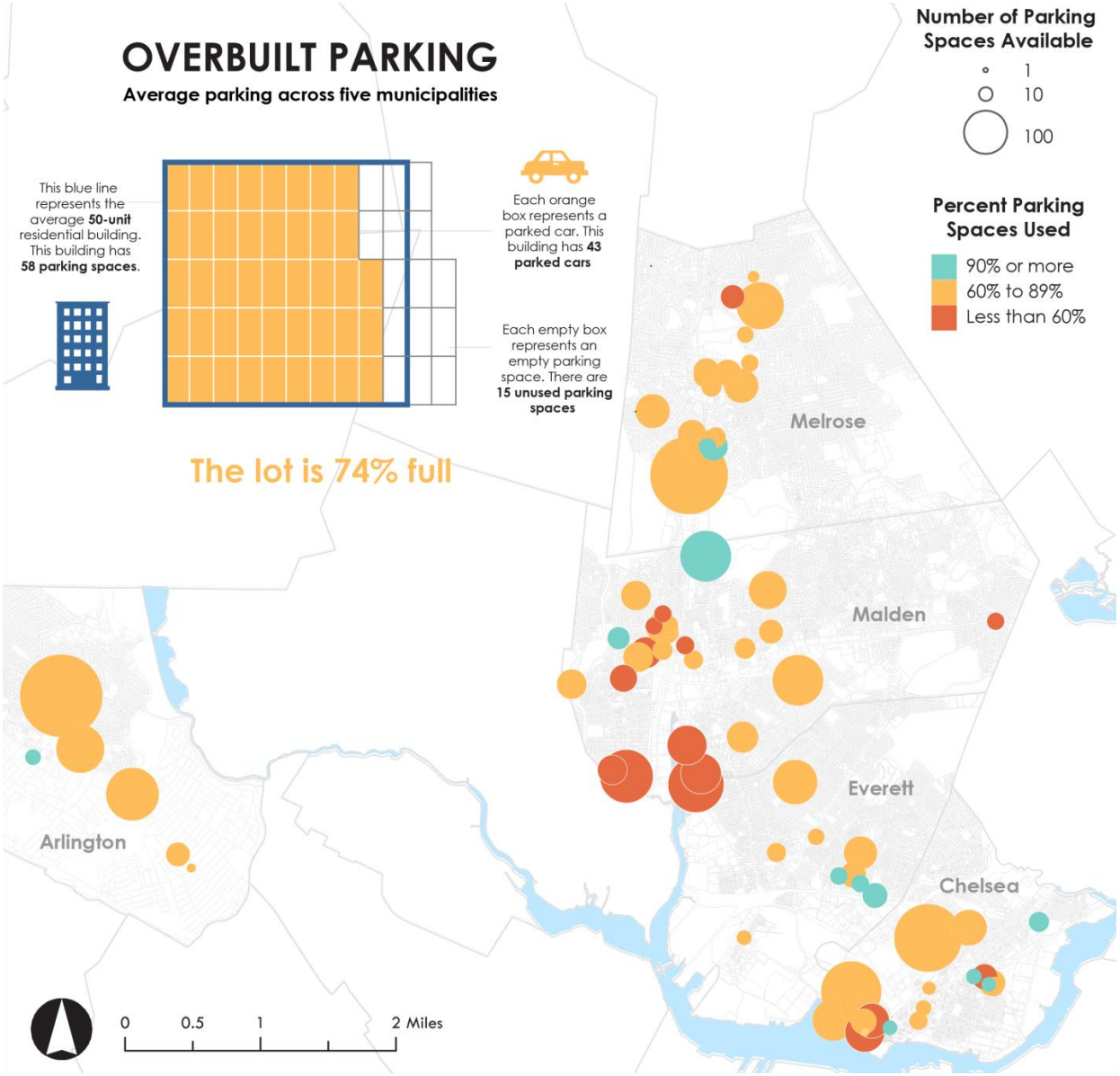

Figure 1: Observed Trends in Parking Utilization at Surveyed Multifamily Developments

Second, statistical modeling suggests that parking demand may be induced by abundant parking supply: the number of parking spaces available per housing unit is the single biggest factor associated with parking demand per housing unit. The analysis seems to indicate that "if you build it, they will park." Continued research may document other important factors, but preliminary results suggest that local parking regulations can (and should) do more than *respond* to parking demand; they may actually be able to *influence* vehicle ownership and the resulting VMT and traffic congestion. Ultimately, there is an opportunity cost to excess parking. Figure 2 below demonstrates the financial impact of the unnecessary construction of parking spaces.

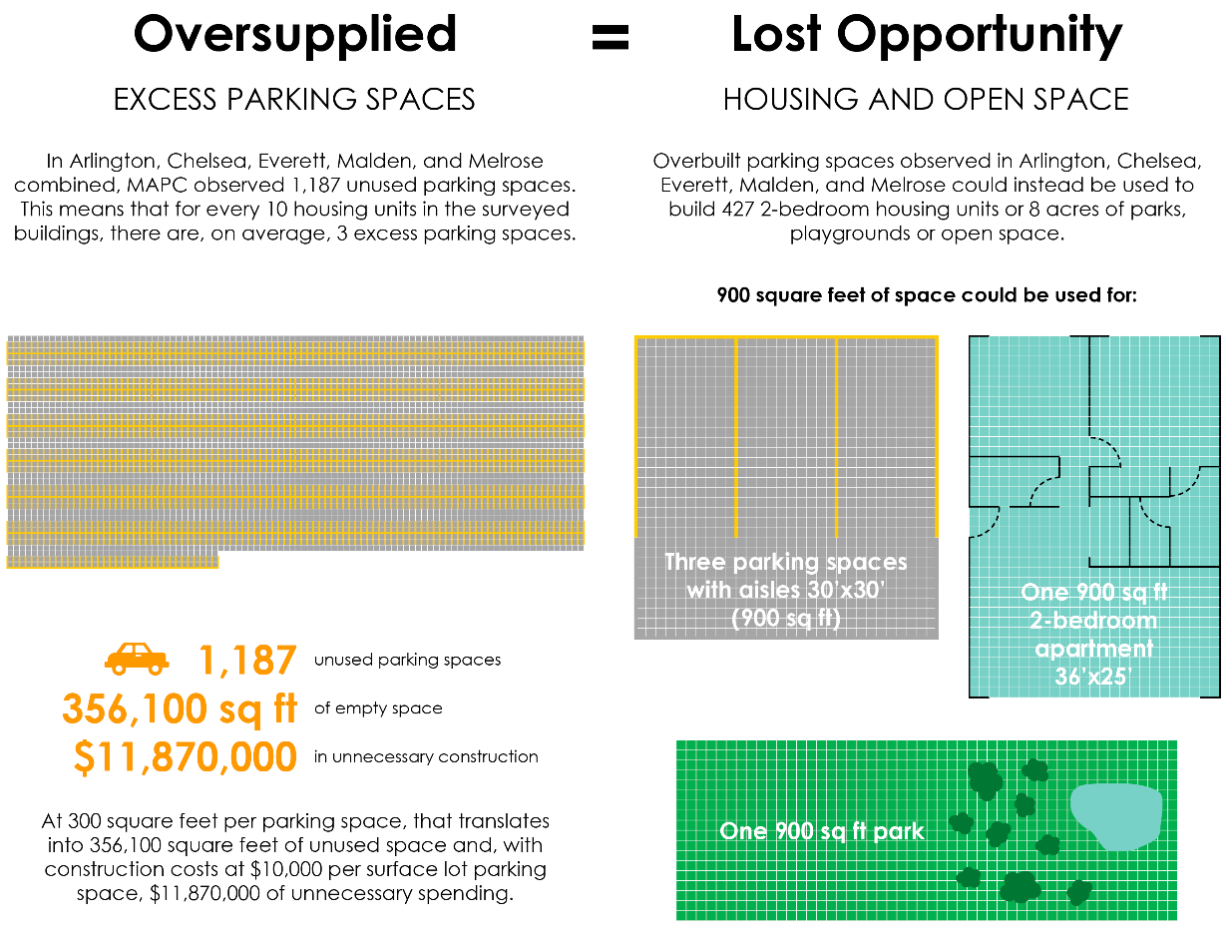

Figure 2: Implications of Excess Parking

The purpose of this report is to serve as a first step in addressing the lack of reliable and up-to-date data around parking utilization at multifamily residential developments. The upcoming phases of MAPC's work will include collecting data from additional multifamily developments in different communities, using that data to create a more robust statistical model, and working with cities and towns to create parking requirements and parking polices that are better aligned with actual parking demand.

A more data-driven approach to developing parking requirements could facilitate more housing in walkable, transit-oriented neighborhoods. It could also lower housing costs, create more space for housing, amenities, or open space, and reduce traffic congestion in the neighborhoods where housing is built – all good reasons to look seriously at changing parking policy.