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# Concord Parking Policy Analysis

## Final Report

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## Overview

Good parking management is a critical component of minimizing congestion, enhancing downtown economic development opportunities, and promoting housing affordability. Regularly revisiting local policies and regulations around parking is a valuable best practice to adopt, particularly as technology innovates and best practices evolve over time. Recently, the Town of Concord completed another important element of a good parking management strategy—taking stock of existing parking supply and monitoring utilization patterns. In 2013, Nelson/Nygaard completed a comprehensive downtown parking study for Concord Center and West Concord, two dense business districts. Some of the main recommendations included increasing payment options, directing parking toward areas of demand, and allowing parking for a longer period of time so people could park once and make multiple stops. Two years later, \$250,000 for implementation of these and other recommendations was approved. The Town has made great strides implementing these recommendations, purchasing new meters and adopting pay by phone technology, as well as modifying parking pricing in Concord Center and West Concord.

Furthermore, the Town has made good parking management and enhancing multimodal connections a priority in the recently completed comprehensive plan titled “Envision Concord: Bridge to 2030.” The plan anticipates an increase in parking demand in the Town’s village centers, and zoning should reflect these expected changes in demand. In the Mobility and Transportation chapter of this plan, Goal 5 discusses the need to balance the principles of sustainability and the Town’s economic goals in an approach to parking management. Action Item 3 under this goal, “Reduce parking requirements near village centers and other specific areas while requiring multimodal features,” will be crucial for limiting traffic congestion, supporting the economic vitality of Concord’s village centers, and improving quality of life through increased mobility options.

To further this Goal and Action Item and hone in on additional recommendations that can be pursued through policy change, the Town of Concord requested that MAPC assess the Town’s current parking policies in light of best practices recommended today, and develop recommendations for zoning and policy changes to ensure the most efficient and effective use of existing parking resources, particularly around village centers. To this end, MAPC has evaluated the Town’s zoning bylaw in comparison to industry standards (namely the Institute for Transportation Engineers, or ITE), policies in neighboring towns, and best practices for parking management. Vehicle ownership and commute mode share data for Concord and neighboring towns, as well as parking assessments completed for recent development projects in the Town, supplements this analysis to inform recommended policy actions.

## Previous Parking Studies in Concord

In 2013, Nelson/Nygaard completed a comprehensive parking management plan that focused in particular on the Town’s two village centers—Concord Center and West Concord.<sup>1</sup>

The parking study highlighted four parking policy principles for the Town that have been critical in informing recommended implementation steps and policy changes. These principles, and the strategies that support them, are:

- 1. Provide convenient parking for customers/clients**
  - a. Create more on-street availability through pricing
  - b. Extend time limits on and off street
  - c. Easier payment with new technology

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<sup>1</sup> Town of Concord Massachusetts Parking Study, Nelson Nygaard, 2013.  
<https://concordma.gov/DocumentCenter/View/1500/Parking-Final-Report-March-2013-PDF>.

- d. Install new signage and provide information
  - e. Create additional off-street supply
  - f. Disabled parking protocol
- 2. Establish clear Town and private employee parking areas**
    - a. Maintain some free off-street parking
    - b. Promote parking outside of core
    - c. Easier payment with new technology
    - d. Explore “shared parking” agreements
  - 3. Accommodate commuter parking appropriately**
    - a. Refine commuter parking program
    - b. Protect residential streets from spillover commuter parking
  - 4. Protect residential neighborhoods from spillover**
    - a. Protect residential streets from spillover commuter parking
    - b. Extend time limits on and off street

It should be noted that not all of these goals and strategies can be addressed effectively through policy and regulations; the Town has already made progress updating their parking management strategies by purchasing new meters and introducing pay-by-phone technology, adjusting parking pricing to align with demand, updating their signage and parking information, and expanding their commuter parking program. In the spring of 2018, the Town demonstrated through follow up data collection how parking behaviors changed in response to pricing changes, and is continuing to modify how the implementation steps are pursued in order to direct parking to desirable areas. The Town is monitoring the impact these improvements have on parking demand, and new strategies may be employed as parking behaviors evolve in response.

The report also developed recommendations to address specific zoning and parking policy changes that may be impeding good parking management practices. These recommendations include:

- Convert parking minimums in zoning to parking maximums
- Broaden shared parking and change of use zoning language
- Allow for existing off-street parking lots to be combined among multiple properties
- Expand bicycle facilities and introduce bicycle requirements into zoning
- Create dedicated parking and transportation fund using meter fees, commuter permits, and other revenues to fund projects. This may include a parking benefit district, which is a specific geography in which the parking revenue raised are reinvested back into the district for transportation-related improvements.

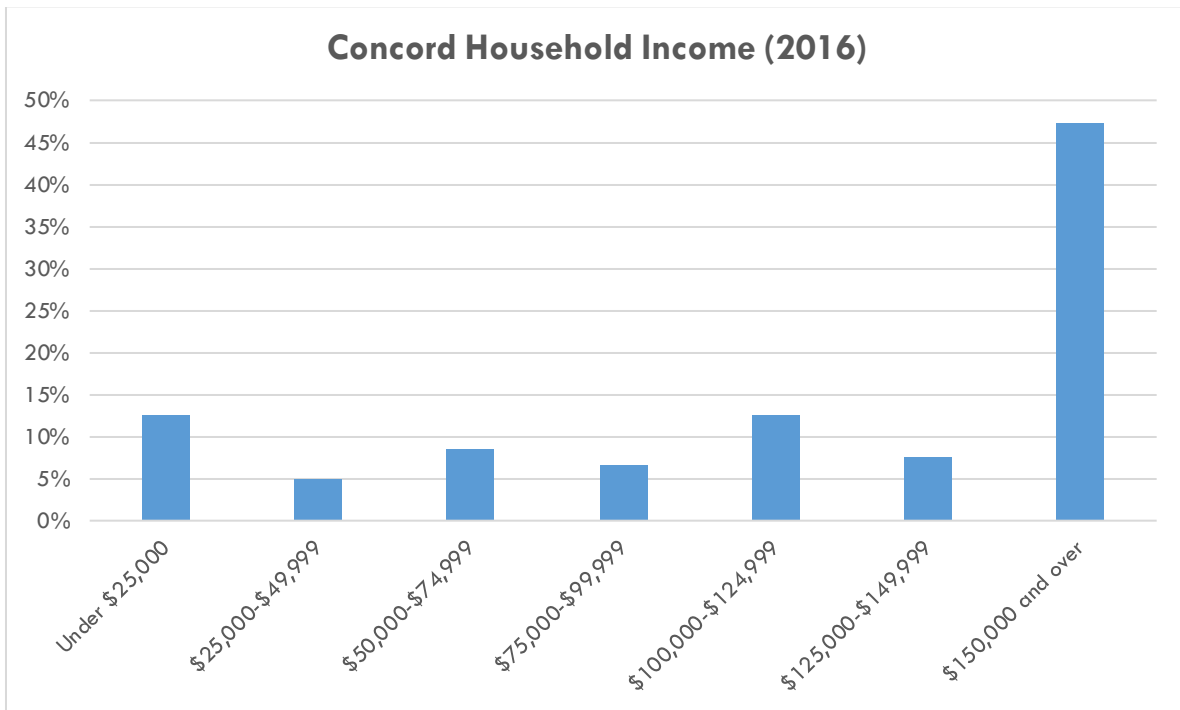
Given the existing recommendations for zoning and policy changes, as well as the mobility and transportation goals outlined in Envision Concord, MAPC assessed these suggested actions in the context of parking management strategies already pursued by the Town (noted above), data about vehicle ownership and commute mode share, as well as the current zoning bylaw.

## Concord Community Profile

### Demographics

The Town of Concord is located about twenty miles outside of Boston and, as of 2018, has a population of around 16,777 residents.<sup>2</sup> The majority (74%) of the housing stock is single-family homes, with most residents (77%) residing in a homeownership unit. The median household income for the Town is \$138,661, with homeowners bringing home significantly more (\$163,958) than Concord residents who rent (\$65,388) (see Figure 1 and 2 on page 4). By contrast, the median household income for Massachusetts homeowners is \$95,052 and \$39,116 for renters.<sup>3</sup>

**Figure 1: Concord Household Income<sup>4</sup>**

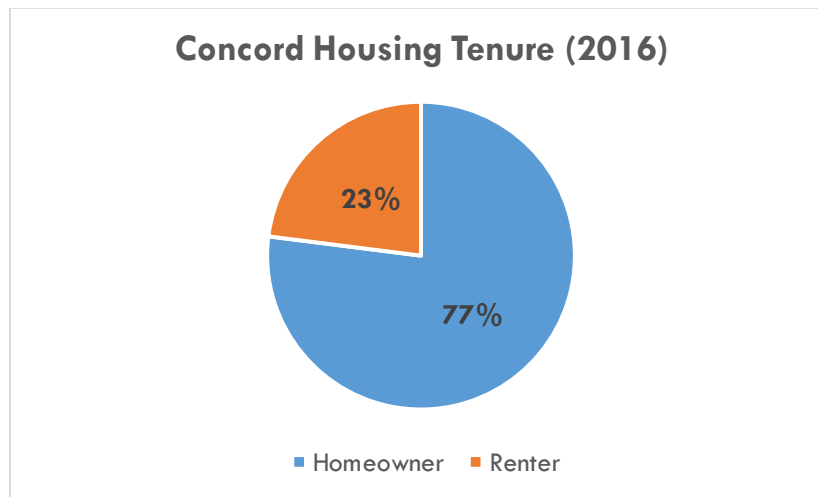


<sup>2</sup> Town of Concord Town Clerk Census Data.

<sup>3</sup> Median Household Income by Tenure for Occupied Housing Units, American Community Survey 2012-2016.

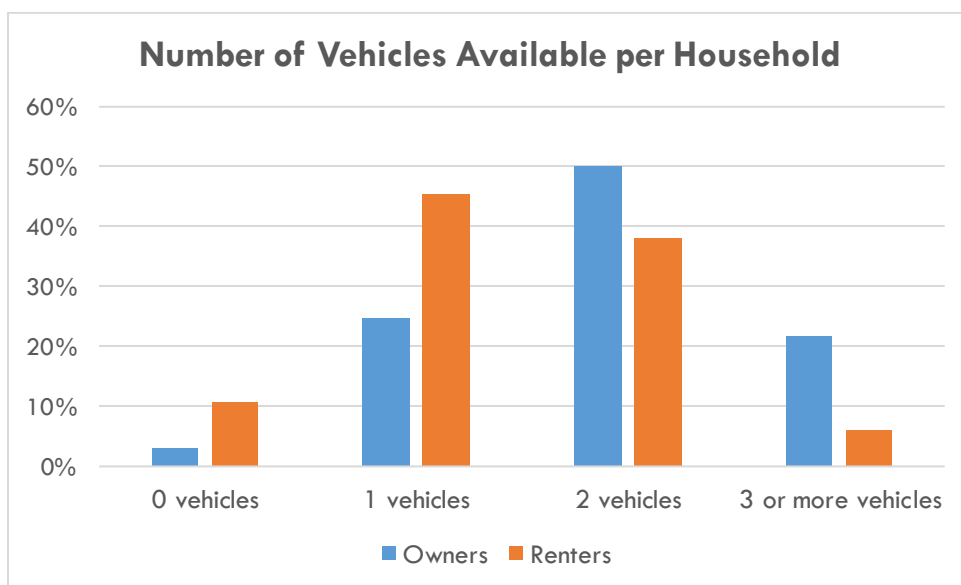
<sup>4</sup> Household Income, American Community Survey, 2012-2016.

**Figure 2: Concord Housing Tenure<sup>5</sup>**



This data is not necessarily surprising, as those with higher incomes are generally more likely to be able to afford to own a home. Residents' income and homeownership rates can help better predict trends in vehicle ownership, which has direct implications for developing context-specific parking policies. While most of the residents of Concord live in ownership units, it is worth noting that vehicle ownership rates vary significantly between owners and renters. Figure 3 below demonstrates how renters are more likely to have fewer vehicles available at home—45% of renters own only one vehicle, compared to 25% of homeowners. By contrast, 22% of homeowners have three or more vehicles, in comparison to 6% of renters. Understanding these dynamics is important when considering parking requirements for different household types.

**Figure 3: Number of Vehicles Available per Household<sup>6</sup>**



<sup>5</sup> Housing Tenure, American Community Survey, 2012-2016.

<sup>6</sup> Number of Vehicles Available per Household, American Community Survey, 2012-2016.

It is worth noting that, according to the Town's Census data, the population is growing, with a 7.3% increase in population from 2012 to 2018.<sup>7</sup> Also noteworthy, the number of renters increased in 19% to 23% over the same time period. This may be indicative of demand for additional housing options suitable for renters and homeowners alike in Concord, each of which come with their own parking challenges.

### *Downtown Commercial Activity*

A welcoming downtown is marked by a variety of desirable commercial activities, and sufficient transportation options to access them easily. Providing the right amount of parking, in the correct location, enables residents and visitors alike to park once and walk to multiple destinations. Too much parking wastes valuable land that could otherwise be put to higher and better uses, is generally not aesthetically pleasing, and can make it more challenging to travel to the downtown on bike or on foot. Similarly, too little parking can hinder access for those driving, and cause shoppers to take their business elsewhere. For these reasons, aligning parking supply with demand is critical. Alleviating parking demand by installing bicycling and pedestrian infrastructure, and promoting shared parking by diversifying commercial uses towards those with different peak demand times can help make the most efficient use of parking resources. In order to assess the economic vitality of Concord Center and West Concord, the Town's two village centers, MAPC used information from CoStar, a commercial real estate data and analytics platform, to gather more details on how market rent, market sales, and commercial vacancy rates have evolved in recent years. This information, in light of previous parking data collected, can help illustrate the economic development impacts of existing parking policies.

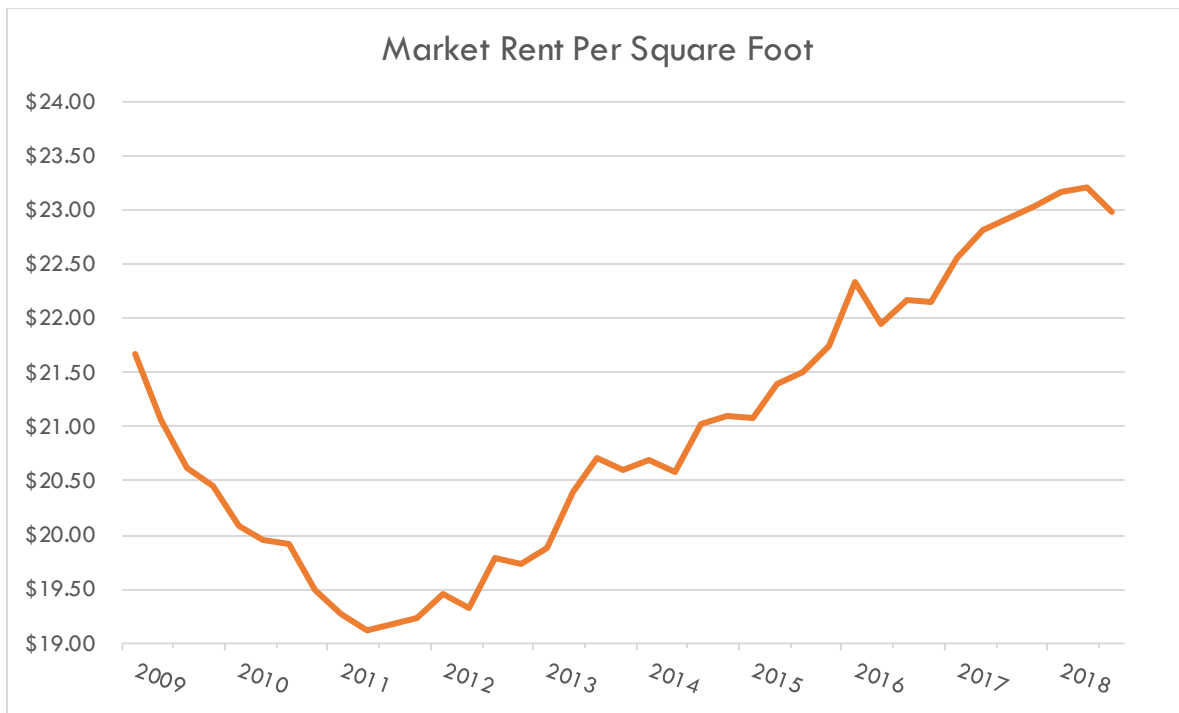
Concord Center: More than 50 businesses are located between Main Street in Concord Center and the Concord MBTA station. CoStar reports that rental prices per square foot have steadily increased from \$19 to \$22, nearly 16%, in the past seven years (see **Figure 4**). As evidenced in **Figure 5**, over the same time period, sale prices per square foot have risen 82%, from \$150 to \$273. Concord Center's vacancy rate has remained stable, fluctuating between 2% and 5% in the past ten years (see **Figure 6**).

Rising rents and sale prices, coupled with relatively low vacancy indicate that Concord Center is an economically thriving downtown. If parking is not well managed, this can have adverse traffic implications, particularly if there is not sufficient access by alternative transportation modes or if parking supply cannot sufficiently meet demand. Enacting transportation demand management policies and practices can help ensure Concord Center remains accessible by multiple modes, and drivers are readily able to park once to visit multiple destinations.

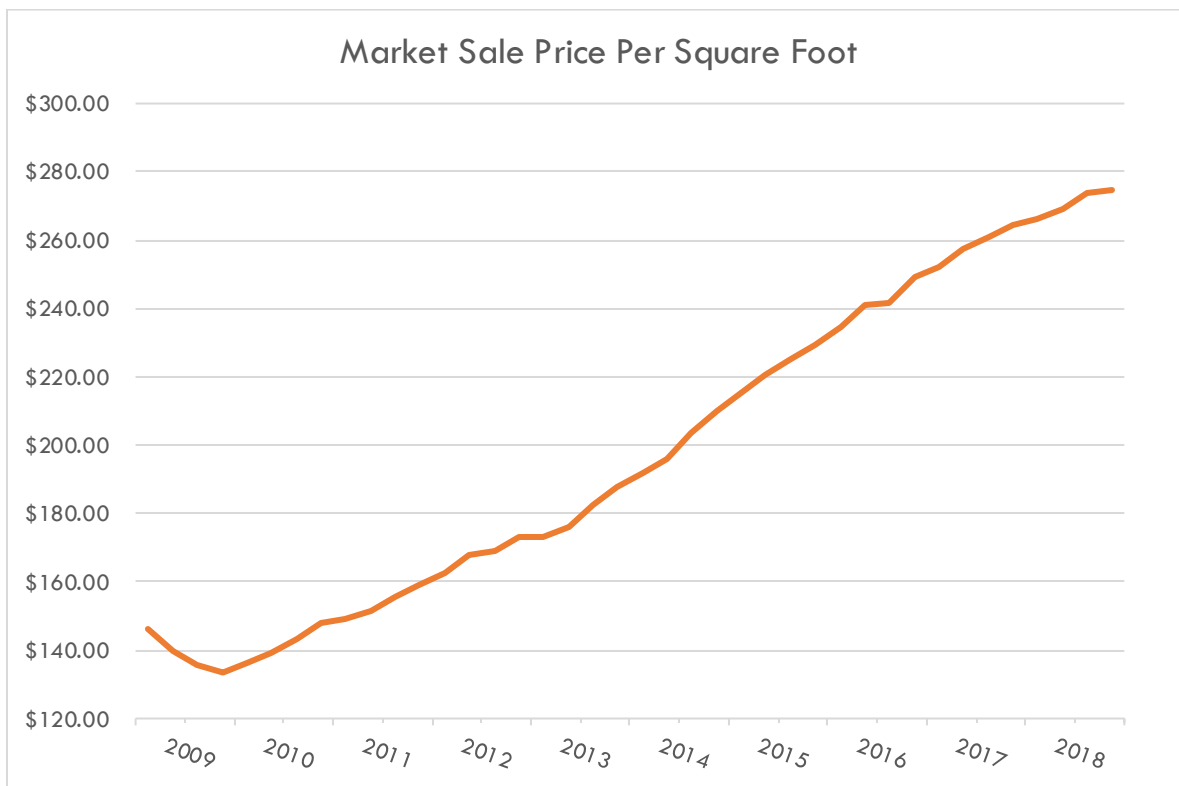
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<sup>7</sup> Town of Concord Town Clerk Census Data.

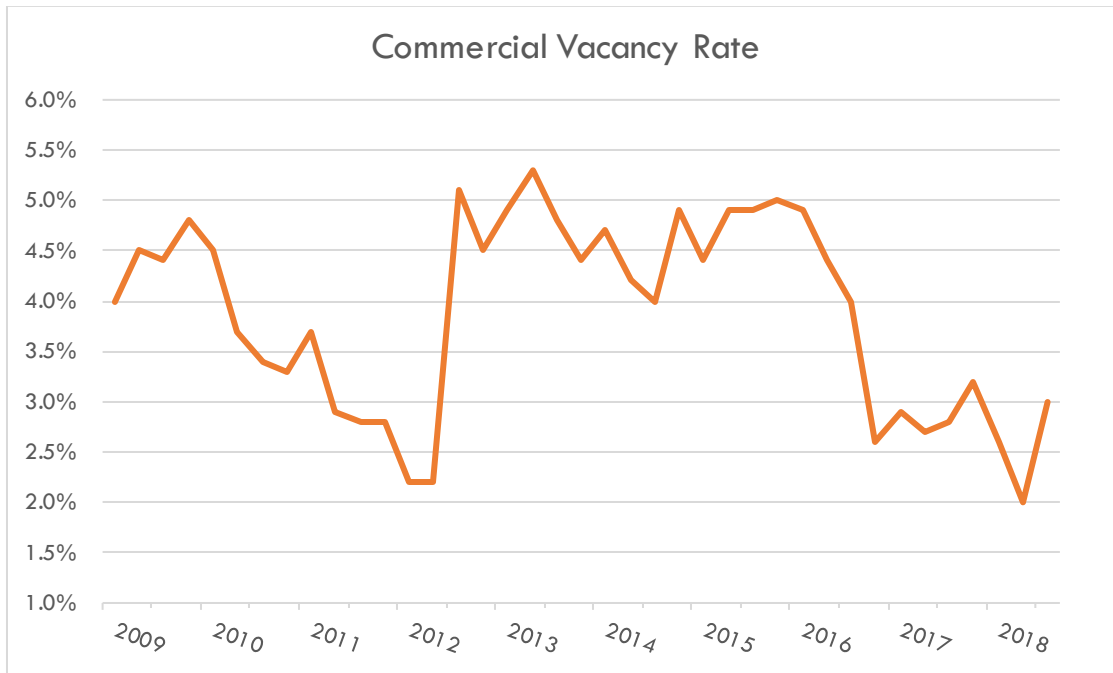
**Figure 4: Concord Center Market Rent Per Square Foot (2009 – Present)**



**Figure 5: Concord Center Market Sale Price Per Square Foot (2009 – Present)**



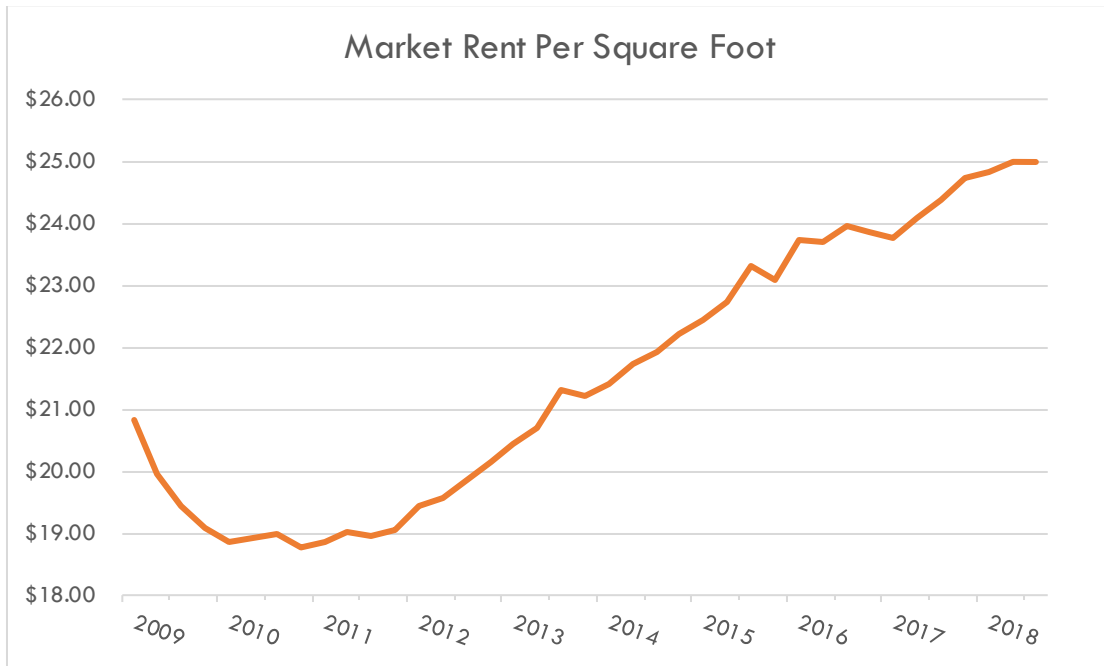
**Figure 6: Concord Center Commercial Vacancy Rate (2009 – Present)**



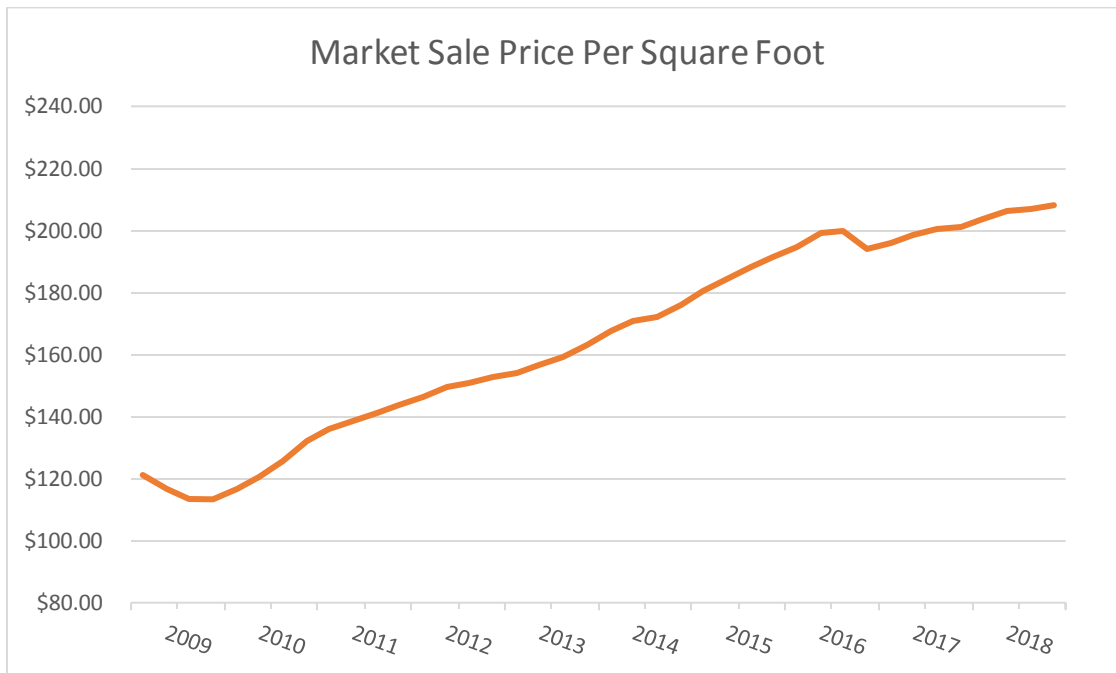
West Concord: Similar to Concord Center, West Concord is home to more than 50 businesses, ranging from offices to religious buildings and restaurants to manufacturing spaces, and also hosts multiple multi-family apartment complexes. In **Figure 7** below, CoStar reports that rental prices per square foot have steadily increased from \$19 to \$25 in the past seven years. Over the same time period, sale prices per square foot have risen 54%, from \$135 to \$208 (see **Figure 8**). As seen in Concord Center, these trends signal a strong and growing commercial base in Town.



**Figure 7: West Concord Market Rent Per Square Foot (2009 – Present)**

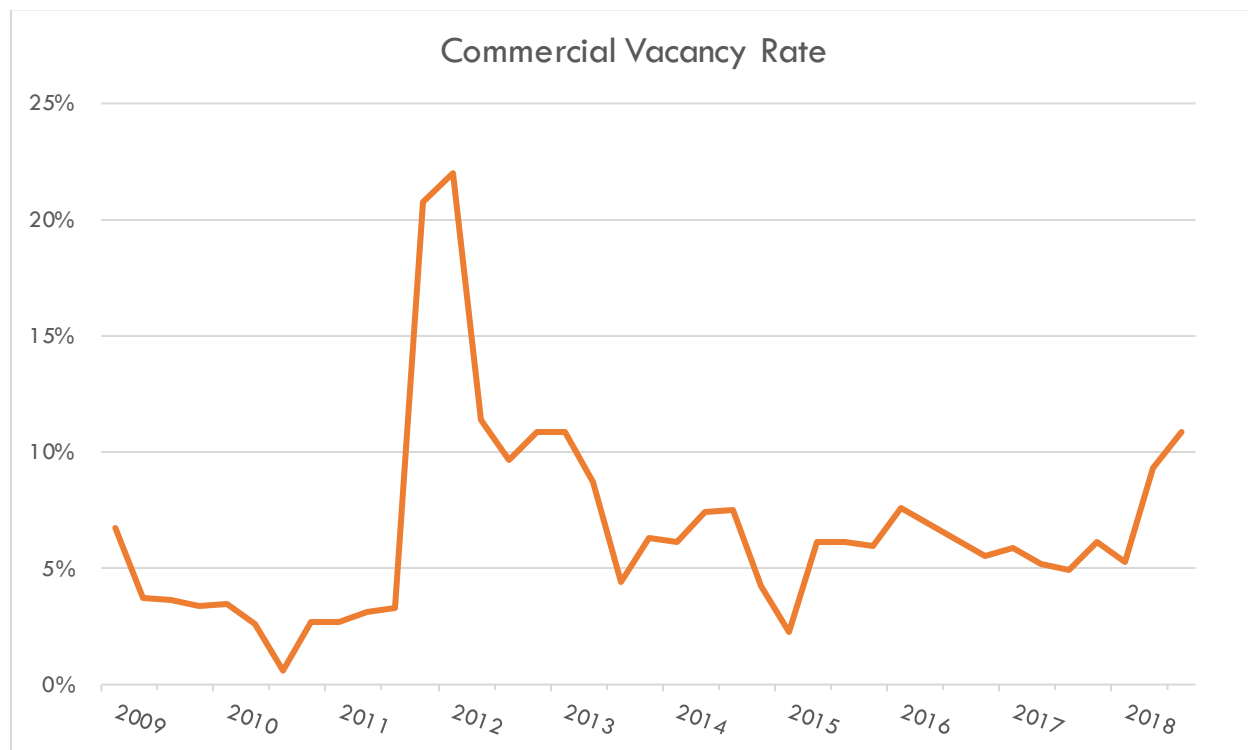


**Figure 8: West Concord Market Sale Price Per Square Foot (2009 – Present)**



While commercial rents and sale prices have increased, West Concord’s commercial vacancy rate has been quite variable— **Figure 9** demonstrates that the district’s vacancy rate spiked to 22% in 2012<sup>8</sup>, and while the vacancy rate has otherwise generally remained at 10% or lower, it has increased about 5% in the past year. Given that these are both relatively small districts, it is important to note that a small number of businesses turning over will have a larger impact on vacancy rate than that of a larger business district with more commercial tenants.

**Figure 9: West Concord Commercial Vacancy Rate (2009 – Present)**



In summary, it appears that parking is not posing any hindrance to economic vitality in Concord Center and West Concord at this time. Continuing to monitor how these trends change over time is important when considering new parking policies. If policies are developed using data collected when the commercial vacancy rate is higher, the data may not accurately reflect the total potential parking demand in a given district. Understanding these dynamics and factoring them into parking assessments that are conducted with new development proposals can help ensure any new parking construction is advancing, not hindering, the economic vitality of the district.

*Existing Vehicle Ownership and Commute Mode Share*

The wealth of data collected as part of the 2013 parking management study, along with demographic information and commercial real estate data about Concord Center and West Concord, set the scene for current parking demands and needs in the Town. To provide additional context, it is valuable to consider trends in vehicle ownership and commuting mode share among Concord residents and those of its neighboring communities. Evaluating zoning and parking policy through the context of how Concord

<sup>8</sup> This brief spike in the vacancy rate was potentially due to the construction of the Brookside Square development, and the subsequent vacancy of the new commercial spaces as they were leased over time.

residents are getting around today can help ensure recommendations are practical based on existing travel behaviors.

**Table 1: Commute Mode Share by Town<sup>9</sup>**

	Drive <sup>10</sup>	Public Transportation	Walk or Bike	Work from Home	Other <sup>11</sup>
Maynard	91.3%	3.8%	2.1%	2.8%	0%
Bedford	87.5%	1.9%	2.8%	7.7%	0%
Acton	85.2%	6.3%	1.5%	6.6%	0.4%
Sudbury	84.6%	3.5%	1.3%	10.6%	0.1%
Wayland	82.2%	3.8%	1.5%	12.3%	0.2%
Carlisle	80.2%	1.8%	1.9%	15.2%	0.9%
Lincoln	76.8%	8.1%	3.4%	11.3%	0.4%
<b>Concord</b>	<b>74.2%</b>	<b>7.3%</b>	<b>3.8%</b>	<b>13.6%</b>	<b>1.1%</b>
MAPC Region	68.9%	17.2%	7.9%	4.9%	0.4%

Among neighboring towns, Concord has the lowest rate of residents driving to work (74.2%) and the highest rate of residents walking or biking to work (3.8%). Not surprisingly, Lincoln, Concord, and Acton, the three towns served by the commuter rail, are the communities with the highest percentage of commuters taking public transit to work. The rate at which Concord residents work from home is also notable—13.6% is only second to residents of Carlisle. Despite the fact that the majority of residents drive to work, it's clear that Concord residents are seeking out alternative options, including eliminating their commute altogether.

**Table 2: Vehicles per Household<sup>12</sup>**

	Average Number of Vehicles per Household
<b>Concord</b>	<b>1.71</b>
Lincoln	1.84
Maynard	1.90
Acton	1.94
Bedford	2.06
Wayland	2.08
Sudbury	2.21
Carlisle	2.55

According to 2014 data from MAPC's Motor Vehicle Census, Concord residents, on average, own fewer vehicles than residents in neighboring towns, with an average of 1.71 vehicles per household. If parking requirements are above the actual vehicle ownership rate, developers run the risk of spending money to construct and maintain parking that sits vacant. Furthermore, if the developer is spending money constructing parking that will go unutilized, they are presumably using funds that could support other building amenities (such as open space), and potentially drive up housing costs. This is especially important to consider when thinking about multifamily development, not only because of the amount of parking

<sup>9</sup> American Community Survey 2012-2016.

<sup>10</sup> "Drive" includes drive alone and carpool.

<sup>11</sup> "Other" includes motorcycle, taxi, and other.

<sup>12</sup> MAPC Motor Vehicle Census, Massachusetts Registry of Motor Vehicles. Average number of vehicles registered per household in 2014.

typically constructed at these kinds of sites, but also because residents in these building tend to be renters, who generally own fewer vehicles than homeowners. Interestingly, as indicated in **Table 3** below, while vehicle ownership rates range widely between Concord and neighboring towns, there are many similarities among their parking requirements.

**Table 3: Comparison of Local Parking Requirements**

	Office	Retail	Restaurant	Residential
<b>Concord</b>	<b>1 per 250 sq. ft.</b>	<b>1 per 250 sq. ft.</b>	<b>1 per 3 seats</b>	<b>2 per unit</b>
Acton	1 per 250 sq. ft.	1 per 300 sq. ft.	1 per 3 seats	2 per unit
Bedford	2.5 per 1,000 sq. ft.	4 per 1,000 sq. ft.	1 per 4 seats	2 per unit
Carlisle	6.6 per 1,000 sq. ft.	6.6 per 1,000 sq. ft.	6.6 per 1,000 sq. ft.	2 per unit
Lincoln		1 per 250 sq. ft.	1 per 250 sq. ft.	1 per unit
Maynard	1 per 225 sq. ft.			2 per unit
Sudbury	1 per 200 sq. ft.	1 per 180 sq. ft.	1 per 3 seats	2 per unit
Wayland	1 per 200 sq. ft.	1 per 140 sq. ft.	1 per 4 seats	Subject to site plan review

Particularly among residential parking requirements there is significant alignment of parking requirements among Concord and adjacent towns. However, as evidenced by the data above, Concord residents own vehicles at lower rates than residents of neighboring communities, and make greater use of alternative modes of transportation to get to work. 2 spaces per unit is not only high for industry standards proposed by ITE, but it also does not necessarily reflect the context-sensitive nature of travel behavior and vehicle ownership. Evaluating the Town’s parking requirements as part of a holistic review of zoning and parking policies can help ensure parking is managed in a way that is reflective of current demand but also does not thwart the ability to travel by other modes.

### Existing Parking Policies and Regulations

Through the lens of previous parking studies as well as vehicle ownership and commuter mode share data, MAPC evaluated the Town’s zoning bylaw to assess how parking is currently regulated today. MAPC also evaluated parking assessments conducted for recent developments in the Town to better understand how the relationship between parking and development is playing out in the Town today.

The Town’s zoning bylaw (as amended through April 2018) already includes certain provisions that are generally supportive of right sizing the amount of parking provided to meet actual parking demand. These elements are highlighted below, and the full language is included in **Appendix A**.

**Joint parking**<sup>13</sup>: In section 7.7.2.4, the Town allows for up to 50% of the required parking spaces to be provided and used jointly between different uses not normally open, used, or operated during similar hours, if approved by the Planning Board. Additionally, section 4.2.3.4 indicates that for a combined business/residential building where more than 10% of the units are affordable, the Zoning Board of Appeals may grant a special permit to allow for a decrease in the number of parking spaces constructed.

**Parking reserves**: The Planning Board may allow for up to 50% of the required parking spaces to be reserved, dependent on use of the site. This means that the parking spaces are not constructed at the time of the development, but the land needed to construct those additional parking space is reserved and used

<sup>13</sup> While the Town’s zoning bylaws refer to “joint parking,” the terms “joint parking” and “shared parking” may be used interchangeably.

in a different way, such as open space or undeveloped land. After the certificate of occupancy is issued, the Building Inspector may determine additional parking spaces from the reserve need to be constructed, at which point they must notify the Planning Board.

**Off-site parking:** While parking must generally be provided on the same parcel of land as the building it is serving, the Planning Board may authorize an alternative location for nonresidential parking if providing the parking on-site is not practical, would present public safety concerns, or if an alternative location would be more convenient. In order for the Planning Board to make such an authorization, the following conditions must be met:

1. The off-site parking shall be in the same possession as the facility served either by deed, by easement, or by long-term lease.
2. The distance between the use or building and its parking area shall not be more than six hundred (600) feet.<sup>14</sup>
3. The separated parking area shall not create unreasonable traffic congestion or create a hazard to pedestrians or vehicular traffic.
4. The parking area shall be located on property zoned for the same or less restrictive use as the principal use being served by the parking.

**Relief from parking requirements:** The Zoning Board of Appeals, upon advice of the Planning Board, may grant relief from parking requirements provided that the Board finds that actually building all of the required spaces would be unreasonable, and not building would not be to the detriment to the neighborhood and still in line with the intent and purpose of the zoning bylaw. The applicant must submit a report from a qualified parking consultant.

To guide decision-making around whether a development should be granted relief from parking requirements, the Planning Board has developed six criteria for the Zoning Board of Appeals to consider when evaluating special permit applications. These include:

- 1) *Has the Applicant provided documentation from parking studies and/or transportation industry publications that show the parking ratios required in the Zoning Bylaw for the proposed use is not in-line with current industry standards.*
- 2) *Has the Applicant provided information on how the proposed use is beneficial and/or contributes to the other businesses, village center and neighborhood?*
- 3) *What is the distance and availability of on-street parking, public parking facilities and alternative transportation?*
- 4) *What is the intensity of the use and the number of employees required?*
- 5) *Are alternative provisions being made for off-site parking for employees?*
- 6) *Is there currently, or is the Applicant proposing bicycle parking?*

While joint, or shared, parking, off-site parking, parking reserves, and relief from parking requirements are all good strategies for aligning parking construction with demand and limiting excess parking spaces, it may be valuable to provide applicants with more guidance on how best to determine shared parking totals based on use. The Urban Land Institute's Shared Parking model can be a good resource to consider incorporating more explicitly into the zoning bylaw.

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<sup>14</sup> For reference, 600 feet is approximately a two to three minute walk.

## **Parking Assessments for Recent Developments**

Parking assessments for two recent developments in Concord help further illuminate potential zoning and policy changes that could support efficient and effective parking management. First is the Millbrook Tarry redevelopment site, which is spread across three parcels, with buildings located on two of the three parcels. One includes the Millbrook Tarry building, which houses the 140-seat Trail's End Café, a convenience store, a bank, a gas station, and over 23,000 square feet of office space. The other parcel includes a building with a pharmacy on the first floor and nail salon on the second. The developer was previously granted parking relief for the café, avoiding the construction of 36 parking spaces (50% of the required spaces for that site).

In 2015, the developer proposed constructing the Concord Market, a 15,000 square foot grocery store, in front of the pharmacy at the Millbrook Tarry site. While the developer's plan included the construction of 196 additional spaces, the zoning bylaw would have required 276 spaces in total for all uses on the site. For this Concord Market development, the developer requested relief from the parking requirements for 44 parking spaces. Bayside Engineering, the firm that conducting the parking assessment for the site, completed multiple rounds of data collection in the fall and the summer, as demand at the Café increased. The Town's traffic consultant validated the study, and ultimately the developers was granted relief from constructing the 44 spaces. With the 36 space reduction previously granted for the café, the site ultimately reduced the parking required by 29%, or 80 spaces.

As part of this special permit, the developer must implement an employee parking sticker program at the pharmacy, and require employees to park in the rear of the building to maximize use of desirable parking spaces for customers. Additionally, it was anticipated that customers would "combine trips with other trips to the site," which speaks to the reduced parking needs at mixed use facilities and benefits of shared parking. Also of note from the special permit decision was discussion of on-site bicycle parking, proximity to the commuter rail (0.6 miles away), and the developer's willingness to financially contribute to the Town's membership to the local Transportation Management Association, CrossTown Connect.

Another more recent development was the new Caffe Nero site in Concord Center, in a vacant toy store. In 2018, the developer applied for a special permit for change of use, off-site parking, and relief from parking requirements. The total required parking for the site is 56 spaces, however, no parking exists on-site. The previous use is legal nonconforming for 47 parking spaces. This leaves a difference of 9 parking spaces. For the past 10 years, the developer has been leasing 4 parking spaces for employees at 79-81 Main Street, which is approximately 430 feet away from the proposed Caffe Nero site. This would mean the relief requested was for 5 spaces above the previous legal nonconforming use.

The six criteria the Planning Board developed for consideration of granting relief from parking requirements made clear that the construction of 56 new parking spaces would be impractical. The developer submitted a parking assessment that not only demonstrated that peak demand would be lower than ITE's predictions, given the shared use nature of the site, but also indicated that there were ample public parking spaces available within a reasonable walking distance to the site. Vanasse and Associates, the consultant that completed the parking assessment for the site, determined that during peak parking demand time, there were over 250 available parking spaces within a 2.5 minute walking distance of the site. Furthermore, from 9am-10am, just after peak demand time, there were over 100 available spaces on a weekday and over 60 available on a Saturday.

Ultimately, the Town's outside consultant evaluated the special permit application and supplemental parking assessment and determined that there was sufficient parking in the area during peak hours of operation for the proposed use, so no new parking was constructed. The developer must maintain the lease for the 4 employee spaces, and has also agreed to purchase a public bicycle rack for the Walden Street municipal lot.

These developments highlight how the Town's existing parking requirements and policies can inadvertently burden mixed use downtown development. The Millbrook Tarry example demonstrates the need for clearer shared parking requirements, particularly those that are informed by more up to date data and best practices. Integrating transportation demand management measures (TDM) more formally into the zoning bylaw may also be of use, as the developer used certain TDM measures to help make the case for reduced parking demand. The case of the Caffè Nero site demonstrates how parking requirements can make development nearly impossible if followed to the letter. Furthermore, it could dissuade smaller businesses that don't have as many resources to invest in navigating a complex special permit process. The Planning Board's criteria for evaluating relief from parking requirements can provide helpful guidance for future development that may encounter similar logistical challenges in the future.

## **Recommendations**

Based on previous parking studies conducted for the Town, existing parking policies and regulations, and parking assessments completed for recent development in Concord, below are a series of recommended parking related changes and additions to the zoning bylaw. The intent of these recommendations is to not only make it easier for the Town to pursue its principles for good parking management, but also to better align parking policies with how Concord residents are owning and utilizing vehicles today.

### **Expand on Section 7.7.2.7 *Location* to allow off-site parking facilities to help meet parking requirements for residential as well as nonresidential uses, and offer additional flexibility by offering a fee-in-lieu option.**

Allowing residential uses to also utilize off-site parking to meet requirements can offer additional flexibility for developers and prevent the construction of new parking spaces when sufficient parking is already available nearby. This is particularly of use in districts like Concord Center and West Concord, where parking has already been constructed to serve commercial uses. Should any residential uses be added in these areas, the existing commercial parking spaces could possibly meet a portion of those parking requirements, given the different peak parking demand times.

Another option for developers is to allow for a fee-in-lieu of parking. Instead of constructing all required parking spaces on-site, developers can pay the municipality a fee in order to utilize a certain number of public parking spaces, which would count toward the parking requirement. This is a particularly useful strategy when the development's presumed peak parking occupancy is different from that of the off-site public spaces, such as a residential development having residents park overnight in public parking spaces typically occupied by municipal employees during the day. If the Town pursues this strategy, the Town should determine a per-space fee for developers and property owners to utilize public parking spaces instead of parking spaces on the development site, and those funds could be designated for transportation-related improvements such as bike racks, lighting, and parking lot maintenance. This fee is generally in the ballpark of \$10,000-\$20,000 per space, but the amount varies considerable based on the community. A fee-in-lieu could apply to new construction as well as existing structures that are modified in a manner that would require additional parking spaces to be constructed.

Ultimately, enhancing the ways in which developers can meet their parking requirements, and ensuring those requirements are reasonably based on demand, can help limit the construction of excess parking spaces downtown districts, which has aesthetic as well as mobility benefits.

**Add to Section 7.7.2.12: Relief from parking requirements the six criteria the Planning Board developed when assessing whether to grant relief from parking requirements to offer greater clarity to developers and ensure the appropriate information is submitted during the special permit process.**

The Planning Board has already developed six criteria for the Zoning Board of Appeals to consider when evaluating special permit applications that include requests for relief from parking requirements (noted on page 13).

If these criteria are codified in zoning, developers can plan to address these questions expressly during the special permit process. This not only provides developers with more clarity as to what factors the Zoning Board of Appeals considers in decisions around granting relief from parking requirements, but also helps ensure that the Zoning Board of Appeals can receive the exact information needed from the developer in order to make an informed decision.

**Adopt a transportation demand management bylaw in conjunction with instituting parking maximums in the Concord Center and West Concord business districts. Together, these strategies can help mitigate the traffic impact of new development by providing resources for residents, employees, and others to travel more easily by other modes.**

Residents of Concord already travel by several modes. New development should recognize these patterns and actively take steps to not only alleviate the traffic associated with building new parking, but better accommodate residents that prefer to walk, bike, or take public transit. Furthermore, the Town also passed a Complete Streets policy in 2018, which outlines the Town's commitment to incorporate Complete Streets design recommendations in to all publicly and privately funding projects in all phases.

Transportation demand management (TDM) is a suite of policies and programs that are designed for reducing single occupant vehicle trips and instead encourage other modes of transportation. Examples of TDM strategies include providing free or discounted transit passes, providing bicycle rooms and amenities such as showers and lockers, and allowing car sharing (such as Zipcar) parking on-site. The Town of Arlington allows for a parking reduction in business, industrial, and multi-family residential zones provided that the developer employs at least three TDM methods, such as charging for parking on-site, providing a stipend for residents or workers without cars, or providing preferential parking for carpools.<sup>15</sup>

Pairing a TDM strategy with a parking maximum in downtown districts is a good mobility strategy, as it forces action around accommodating the transportation needs for those who are not parking a vehicle on-site. Parking maximums are particularly suitable strategies for downtown districts, where walkability is more desirable. Large swaths of parking, especially if many spaces are sitting unutilized, are not particularly aesthetically pleasing nor are they pedestrian-friendly. Additionally, both of these districts are served by commuter rail stations, indicating not all visitors to and employees of the districts may arrive by vehicle.

Parking maximums are a good alternative to minimums, particularly in downtown districts that can struggle with traffic congestion and space for development is limited. By requiring 2 spaces per units, while Concord residents own on average 1.7 vehicles per household, developers may be constructing excess parking spaces, driving up the cost of development and occupying space that could go toward higher and better uses. This situation may be exacerbated in areas like Concord Center and West Concord, which are well served by transit and do not require residents, employees, and visitors to be as reliant on a vehicle to

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<sup>15</sup> See Town of Arlington Zoning Bylaw, Section 6.1.5: Parking Reduction in Business, Industrial, and Multi-Family Residential Zones. <https://www.arlingtonma.gov/home/showdocument?id=43413>.



get around. Instituting parking maximums of less than two spaces per unit in these two local business districts can help ensure accessibility by a variety of modes, limit traffic congestion, and continue to promote the vibrancy of these neighborhoods.

**Build on the existing joint parking bylaw to allow developers to build less on site if they can demonstrate how parking demand varies over the course of the day.**

A vibrant downtown district contains a range of uses, and limiting the construction of excess parking can help ensure the area is walkable and accessible to users of multiple modes, as well as alleviate local traffic congestion. To that end, shared parking should be required at new mixed use sites and actively encouraged among private owners of different buildings that experience different peak demand times, particularly in West Concord and Concord Center, as users here will likely want to park once and visit multiple destinations.

The Town currently allows for up to a 50% reduction in the number of parking spaces required on-site with approval of the Planning Board. As evidenced in the Millbrook Tarry case, there may be value in indicating what methodology the developer may use to order to calculate demand, and adding more specificity to this provision.

There are a range of approaches cities and towns have taken when it comes to allowing for shared parking. In some communities, such as the Town of Maynard, shared parking is actively encouraged, and while the bylaw notes that “the Urban Land Institute Shared Parking Report, ITE Shared Parking Guidelines, or other generally accepted studies” are all acceptable resources to use, the determination for how parking needs can be met is largely at the discretion of the project proponent.<sup>16</sup> Similarly, the Town of Dedham’s shared parking bylaw also requires the applicant to demonstrate how parking demand will be met if parking supply is shared among different uses. It also allows for off-site spaces to count toward the shared requirement. Because no specific methodology for determining peak demand across multiple uses is required, it may require more time and conversation to determine how much parking is considered suitable for each site. However, this approach allows for greater flexibility from the municipality’s and the project proponent’s perspective.

Alternatively, some communities have opted to adopt a parking credit schedule chart for determine the number of parking spaces to build across shared uses. Essentially, the project proponent would determine the minimum parking requirement for each use and multiply that use’s requirement by the peak demand percentage for each designated time period in a parking credit schedule. The number of required spaces for each use would be added together for each time period, and then the highest total would be the number of spaces required.

The City of Waltham has adopted a simpler schedule with some of the most common kinds of uses, including residential, office, and commercial uses.<sup>17</sup> The City of Lowell has a very detailed table that includes many more uses and a greater level of detail.<sup>18</sup> While this structure is very clear and

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<sup>16</sup> See Town of Maynard Zoning Bylaw, Section 6.1.7: Mixed Use Requirements and Shared Parking.

<https://www.townofmaynard-ma.gov/wp-content/uploads/2018/11/maynard-zoning-bylaws-201805.pdf>.

<sup>17</sup> See City of Waltham’s Zoning Code, Section 5.2: Off-street parking requirements.

<https://ecode360.com/26938091?highlight=parking,shared%20parking&searchId=1230112152112377#26938091>

<sup>18</sup> See the City of Lowell’s Zoning Code, Section 6.1.4: Table of Parking Requirements.

[https://www.lowellma.gov/DocumentCenter/View/1007/Zoning-Code-PDF?bidId=.](https://www.lowellma.gov/DocumentCenter/View/1007/Zoning-Code-PDF?bidId=)

straightforward, it may sometimes yield a parking supply that is still higher than demand, and does not offer the flexibility of the less prescriptive alternatives.

MAPC has developed sample bylaw language for both of these approaches as part of the SWAP Parking Bylaw Project.<sup>19</sup> This document includes review of several best practices as it relates to local parking regulations, and includes sample bylaws that address a range of parking issues. Another useful resource is the Smart Parking Model Bylaw included in the Massachusetts Office of Energy and Environmental Affairs' Smart Growth/Smart Energy Toolkit.<sup>20</sup> Some of the best practices for shared parking highlighted in these model bylaws include:

- Allowing for shared parking across competing as well as non-competing uses, with a greater reduction in the number of parking spaces required allowed for the non-competing uses
- Including off-site parking spaces as part of the shared parking requirement
- Allowing for a fee-in-lieu of parking within a shared parking bylaw

**Pilot a program that would allow owners of private commercial spaces to rent some of their excess parking spaces to the public for a fee.**

To create another opportunity for private owners to make excess parking spaces available either to other nearby property owners or the public, the Town can facilitate a pilot program that would allow for these owners to rent their excess parking spaces. As an incentive for maximizing the efficiency of existing parking spaces, the owners would be permitted to keep the revenue generated from these rentals.

This effort is currently being piloted in Newton, and is restricted to parking in business, mixed use, or manufacturing districts.<sup>21</sup> The parking put on the public marketplace cannot be already part of a shared parking agreement with another property, and parking spaces currently utilized by customers or employees cannot qualify. After being approved by the City to participate in the pilot, the private owner can rent spaces out directly to interested parties, or post spaces on an app that connects users to private parking spaces available for rent, like SpotHero.

Should the Town pursue such a pilot, the initial participants could be limited to specific private owners that have a demonstrated excess of parking spaces renting their spaces to nearby property owners that have a demonstrated need. For example, if a church has an excess of 10 parking spaces during weekday evenings, and a nearby restaurant has limited on-site parking available for employees, the Town could facilitate a short-term parking space rental agreement between the two parties. For the purposes of a pilot, this approach would provide predictability in terms of when the parking spaces will be utilized by individuals not affiliated with the building.

Looking ahead, a pilot of this nature could inform potential zoning changes to *Section 7.7.2.3: Use of required parking as commercial or public lot*, which currently prohibits parking constructed as a requirement for a specific building from being provided as public parking.

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<sup>19</sup> See MAPC SWAP Parking Bylaw Project, [http://www.mapc.org/wp-content/uploads/2017/10/SWAP\\_Delta\\_Final\\_Report\\_Revised\\_TAGGED.pdf](http://www.mapc.org/wp-content/uploads/2017/10/SWAP_Delta_Final_Report_Revised_TAGGED.pdf)

<sup>20</sup> See Smart Growth/Smart Energy Toolkit, Smart Parking Bylaw, <https://www.mass.gov/files/documents/2017/11/03/Smart%20Parking.pdf>.

<sup>21</sup> See City of Newton's Shared Parking Pilot, [http://www.newtonma.gov/gov/planning/transportation\\_planning/\\_initiatives/shared\\_parking.asp](http://www.newtonma.gov/gov/planning/transportation_planning/_initiatives/shared_parking.asp).

### **Consider implementing bicycle parking requirements for large scale developments.**

As bicycle infrastructure improves throughout the region and the share of people bicycling to work increases, the Town can take additional measures to help further encourage cycling. One relatively easy and low-cost way to do so is to require bicycle parking be provided on site at new developments. Requirements generally range from one bicycle parking spaces for every 10-20 vehicle parking spaces, or could be structured based on the number of residential units (i.e.: one bicycle parking space per 2-3 residential units). The Town of Acton requires one bicycle space per 20 vehicle spaces, although there is a minimum of two bicycle spaces per site.<sup>22</sup> Furthermore, if the developer constructs up to six bicycle parking spaces, parking requirements are reduced by one space. Requiring bicycle parking on site can encourage more cycling in the town and enhance use of regional trails, including the Bruce Freeman Rail Trail just north of West Concord.

### **Supplemental Recommendations**

#### **If the Town increases parking fees in West Concord or Concord Center, consider implementing a parking benefit district to raise additional revenue for local transportation improvements.**

A parking benefit district is a specific geography in which the parking revenue raised may be reinvested back into that district for a range of transportation related improvements. These can include improvements to the public realm, such as signage, lighting, benches, street trees, as well as infrastructure investments, such as bicycle lanes, bicycle racks, and bus accommodations. To establish a parking benefit district, the Town would need to define the geography of the district, determine what body would oversee the district (either a new entity or an existing one), and create a special revenue fund to hold the parking revenue. For context, in FY2017 and FY2018, the Town raised around \$400,000 in parking meter revenue. Though a parking benefit district requires no changes to zoning, this is a worthwhile recommendation to consider when exploring both new parking management strategies as well as parking-related policy changes.

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<sup>22</sup> See Town of Acton Zoning Bylaw, Section 6.3.7: Bicycle Parking. <https://www.acton-ma.gov/DocumentCenter/View/659/2017-Zoning-Bylaws?bidId=>.

## Appendix A: Concord Zoning Language- Joint Parking, Parking Reserves, and Relief from Parking Requirements

4.2.3 *Combined business/residence*: A dwelling unit or units may be located on the same lot where commercial uses are conducted provided that:

4.2.3.4 Except in Limited Business District #2, in a combined business/residence building where more than ten percent of the dwelling units are available as affordable housing, the Board may grant a special permit to allow less than the required amount of open space, an increase in the height of the building to forty (40) feet and/or a **decrease in the number of parking spaces** if the Board finds that the proposed combined business/residence development is in harmony with the general purpose and intent of this section and that it will not be detrimental or injurious to the neighborhood in which it is to take place.

7.7.2.4 *Joint parking facilities*: Off-street parking facilities for different buildings or uses may be provided and used collectively or jointly in any zoning district in which the separate uses would be permitted, subject to the following provisions:

(a) Up to fifty (50) percent of the parking spaces required for educational, religious, lodge and club, indoor amusement, and restaurant uses may be provided and used jointly by banks, offices, retail stores, repair shops, service establishments, and other uses not normally open, used, or operated during similar hours if specifically approved by the Planning Board. The approval may be rescinded and additional parking shall be provided by the owners in the event that the Planning Board, after notice and public hearing thereon, determines joint use is resulting in a public nuisance or other adverse effects on the public health, safety, and welfare.

(b) A written agreement, assuring the continued joint use of the common parking area, executed by all parties concerned and approved as to form and length of time by the Planning Board, shall be filed with and made part of the application for a building or occupancy permit.

7.7.2.7 *Location*: All required parking or loading spaces shall be provided on the same parcel of land occupied by the use or building to which it is appurtenant; provided, however, that where, in the opinion of the Planning Board, there are practical difficulties in satisfying the requirement for parking spaces and/or if the public safety and convenience would be served better by another location, the Planning Board may authorize an alternative location for nonresidential parking subject to the following provisions:

(a) The property to be occupied as parking shall be in the same possession as the facility served either by deed, by easement, or by long-term lease. If the property is leased, the terms of the lease shall be subject to Planning Board approval as to form and length of time and a copy of the lease shall be filed with and made part of the application for a building or occupancy permit.

(b) The distance between the use or building and its parking area shall not be more than six hundred (600) feet.

(c) The separated parking area shall not create unreasonable traffic congestion or create a hazard to pedestrians or vehicular traffic.

(d) The parking area shall be located on property zoned for the same or less restrictive use as the principal use being served by the parking.

**7.7.2.8 Reserved parking spaces:** The Planning Board may, based upon documentation of the special nature of the use, or building, authorize a phased development of required offstreet parking with the following provisions:

(a) The total number of spaces required to be shown on the site plan shall be determined in accordance with the standards set forth in subsection 7.7.2.1, Table IV.

(b) The spaces that are not intended for construction immediately shall be labeled "Reserve Parking" on the site plan and shall be properly designed as an integral part of the overall parking layout, located on land suitable for parking development and in no case located within area counted as buffer, setback, or open space under other provisions of this Bylaw.

(c) No more than fifty (50) percent of the total number of required spaces may be reserved for later construction.

(d) If, at any time after the certificate of occupancy is issued for the building or use, the Building Inspector determines that additional spaces may be needed, he shall notify the Planning Board concerning his finding and that Board may require that all or any portion of the spaces shown on the approved site plan as "Reserved Parking" shall be constructed.

**7.7.2.12 Relief from parking requirements:** The Board may, upon advice of the Planning Board, grant relief from the parking and loading requirements in Section 7.7.2 provided the Board finds that a literal application of such requirements would be unreasonable and that the desired relief may be granted without substantial detriment to the neighborhood and without derogating from the intent and purpose of this Bylaw. The Board may require the applicant to submit a written report, prepared by a qualified parking consultant, defining and evaluating the nature and impact of the requested relief.