



TOWN OF CONCORD, MASSACHUSETTS

PARKING STUDY EXECUTIVE SUMMARY



MARCH 2013

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EXECUTIVE SUMMARY

Concord is successful because it has the attractions, businesses, and recreational opportunities that many communities in greater Boston lack. Historic attractions, thriving retail, quality restaurants, passive and active recreation, and sports opportunities make Concord a regional attraction and national gem. This vibrancy brings visitors seeking to enjoy all that Concord's great downtown and villages, active main streets, and historic spaces have to offer.

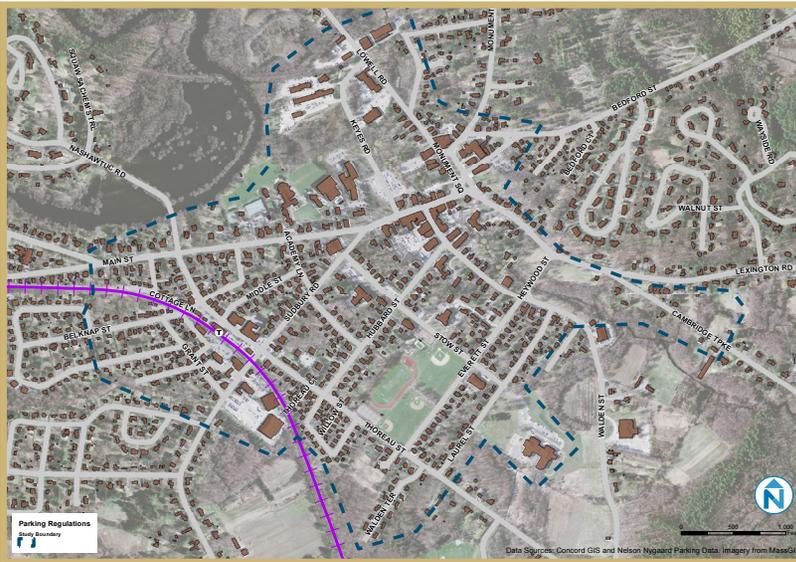
For years, Concord has managed parking demand with traditional methods, including parking meters, time-limits, and overtime enforcement. Where land was available, off-street parking was constructed. However, as regional growth and prosperity has advanced, the pressures on Concord have grown. This prosperity benefits from a stable, locally-focused residential community. However, the neighborhoods surrounding the commercial centers frequently bear the brunt of parking demand peaks. Ultimately, Concord has been playing a slowly-losing game with the automobile, one that ironically only becomes more acute as Concord works to become more walkable, bikeable, and transit-friendly. These amenities and their place-making characteristics also draw more visitors.

This document is the Executive Summary of the Town of Concord's Comprehensive Parking Study. The study establishes a broad, yet detailed, benchmark of current parking practice and use in Concord and provides an overview of parking within the context of public opinion and observed behavior. A series of interrelated parking recommendations is presented to help Concord Center and West Concord continue to be active, vital downtowns.

More study details are found in a series of Technical Memorandums; this document is a summary of the study's findings.

Study Areas

CONCORD CENTER STUDY AREA



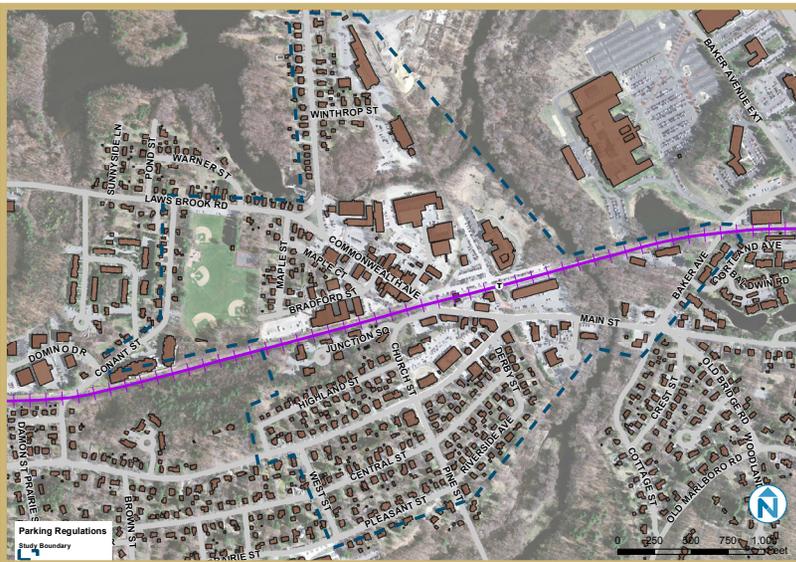
The study includes two primary neighborhood business districts: the Concord Center/Thoreau Street Depot area, which includes Monument Square and the Concord MBTA commuter rail station, and West Concord, including the West Concord MBTA station.

The Concord Center/Thoreau Street Depot (referenced here as “Concord Center”) study area covers a majority of parking spaces within about 350 acres in Concord Center and the Thoreau Street Depot, including Emerson Playground area.

The West Concord study area, a much smaller area of activity than Concord Center, includes about 150 acres, containing the retail centers of Commonwealth Avenue and Main Street, Rideout Playground, and the station area.

Both study areas center on the key areas of activity but also include one to two streets immediately adjacent to the primary areas of interest. Surrounding streets, often residential streets, are included in the study area to observe any spillover effect of the commercial, commuting, and recreational activity. The study areas’ boundaries were reviewed with Town staff and approved per the scope of this effort, as well as vetted through stakeholder interviews, to confirm that the major centers of activity were included.

WEST CONCORD STUDY AREA



Introduction

Concord understands that parking issues can only be addressed through a comprehensive program. This study captures the utilization patterns of various groups but also has sought input on the unique motivations, characteristics, and sensitivity to regulatory changes that will be critical to developing workable solutions.

Details of the study findings are documented in a series of Technical Memorandums available from the Town. The results of the study are a series of interrelated recommendations that when implemented in tandem, address the issues and concerns identified through the data analysis and public process.

The recommendations are organized using the following headers:

- » Parking Management
- » Signage and Wayfinding
- » Enforcement
- » Tourist and Tour Bus Parking
- » Commuter Parking
- » Pedestrian Access
- » Recreational Parking
- » Bicycle Parking and Facilities
- » Zoning and Shared Parking
- » Parking Technology
- » Parking and Transportation Fund

Background

The problem of visitor parking and traffic has been in Concord's public discourse for decades. The 1987 Traffic Plan and the 2000 Traffic Calming and Traffic Management report specifically point out many deficiencies—some of which have been addressed creatively by the Town. However, parking demand continued unabated and has come to the forefront of public concern. The 2005 Comprehensive Long Range Plan established a goal of creating a Comprehensive Town Parking Program, and the Comprehensive Parking Study fulfills that goal. The study presents a comprehensive and accurate picture of parking activity and issues in Concord Center, near the Thoreau Depot, in West Concord, and at several recreational destinations in town.

Principles

Daily visitors seek convenient access and may not be very price-sensitive, while long-term tourist stays may often benefit from clear opportunities to park more cheaply outside of prime areas in attractive lots. Meanwhile, employees of Concord businesses seek to minimize parking cost and maximize convenience but must be motivated to preserve availability of prime customer spaces. Commuters enter the mix with both urgency and a high sensitivity to short-term parking penalties. Residents, of course, deserve the right to park conveniently near their homes and have the least tolerance for inconvenience unless there is a clear benefit or reward that they do not see now.

All of these competing desires are considered using guiding principles throughout the study process:

- » Provide convenient parking for customers/clients
- » Establish clear Town and private employee parking areas
- » Accommodate commuter parking appropriately
- » Protect residential neighborhoods from spillover



Key Findings and Recommendations

ISSUES

Parking Management

- » Time limits hamper economic development
- » Enforcement is punitive and predictable
- » Variety of parking regulations causes confusion
- » Commuter parking demand is unbalanced
- » Overflow parking affects residential streets

Pedestrian and Wayfinding Improvements

- » Poor intersections and crossings limit access to parking
- » Directional parking signage is often not visible, not posted, or unclear
- » Parking information is not available for tourists and tour buses

Zoning and Parking Policy

- » Zoning code lacks clarity and specifics
- » Bicycle accommodations do not support current demand
- » Town parking and transportation initiatives will need funding

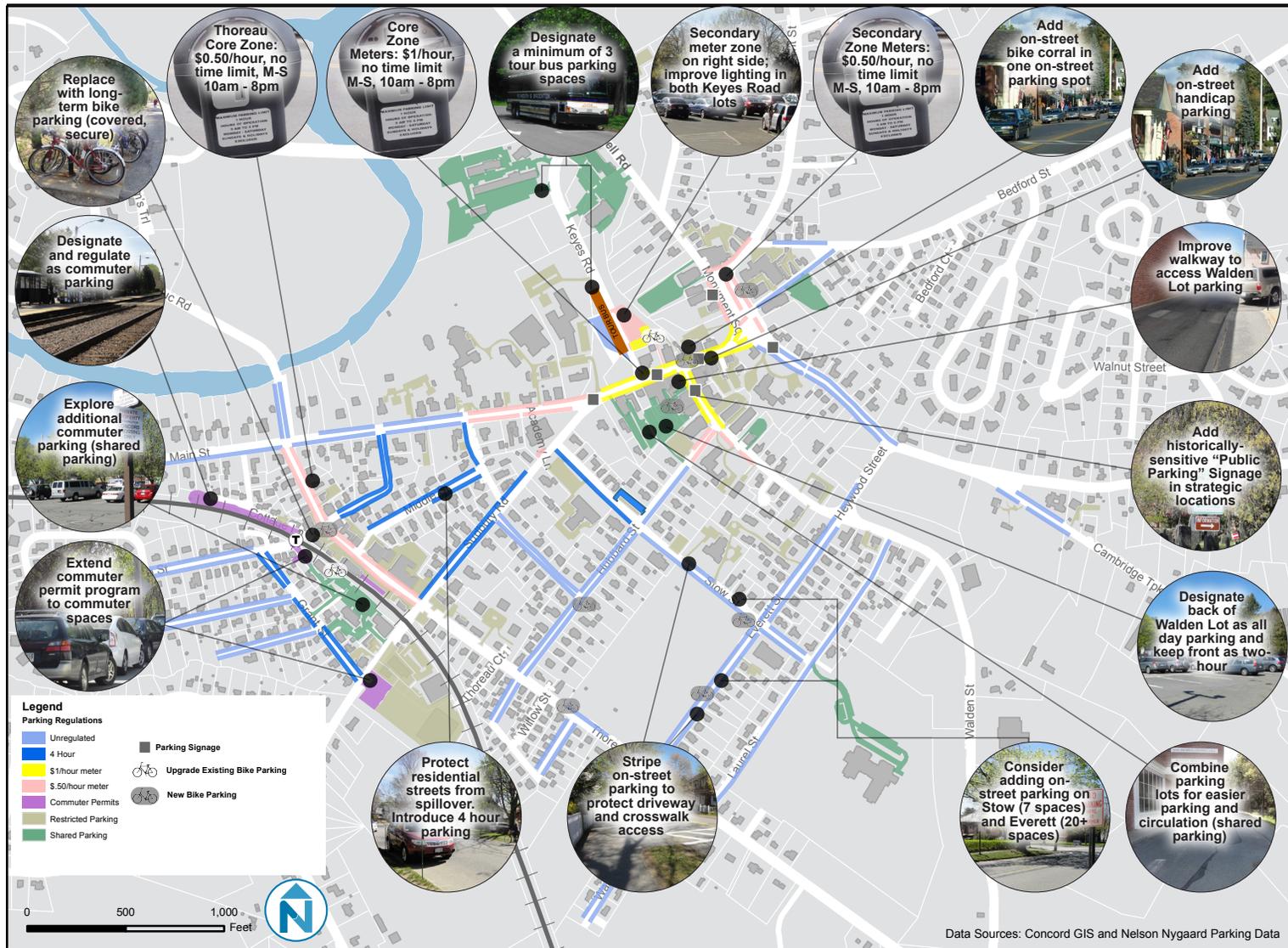
RECOMMENDATIONS

- » Eliminate time limits and use pricing to encourage availability, with higher meter rates in the core
- » Simplify parking regulations and expand meter coverage
- » Change span of meter hours to match demand.
 - Concord Center: 10am - 8pm
 - West Concord: 10am - 6pm
- » Charge for commuter parking in Concord Center; reduce rates in West Concord

- » Prioritize the improvement of intersections and crossings to encourage more pedestrian activity
- » Create signage to and in public lots (and coordinate with private lots)
- » Draft and publicize map of parking facilities.

- » 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

CONCORD CENTER RECOMMENDATIONS SUMMARY



WEST CONCORD RECOMMENDATIONS SUMMARY



WEST CONCORD OPEN HOUSE - PUBLIC COMMENTS



Public Participation Process

The consultant team undertook a multi-step public outreach process throughout this study to understand more about the preferences and behaviors of those who park in and frequent Concord.

- » **Surveys:** To collect data of parking needs and preferences, the Town posted a sixteen-question electronic survey on its website, local papers, and through email lists, generating more than 400 responses. The online survey was supplemented with a paper survey directed towards tourists in July 2012. Seventy tourist surveys were completed.
- » **Stakeholder Interviews:** The project team also conducted a multitude of stakeholder interviews in person, meeting with business owners and employees from a number of businesses in Concord Center and West Concord (see Tech Memo #2 for a full list).
- » **Open House:** Early in the study process, local residents, business owners, and employees were invited to participate in a hands-on “Parking Open House” designed to gather as much qualitative input as possible through interactive components.
- » **Public Meetings:** Two final presentations of initial ideas and strategies were presented to the public in October 2012. One meeting focused on Concord Center; the other on West Concord. Meetings were well attended with over 50 participants.

OVERALL KEY FINDINGS

- » A majority of the business community prefers two-hour on-street time limits for customers
 - 83% of business merchants report that one hour time limits are not enough
 - Most customers report staying for at least an hour
 - Parking tickets are a major deterrent for customer satisfaction

- » Customers seek convenience and ease in finding parking; however, employees really care about how close their space is to their job, and may be taking prime customer spaces before customers arrive
- » Most drivers to Concord Center and West Concord said they can find “convenient parking”. Half of customers report that “convenience” is the most important factor when parking in Concord Center.
- » Stakeholders report that price of parking is not an issue in Concord, and that \$0.50 an hour to park on-street is not a deterrent to visiting Concord
- » Most stakeholders did not identify major parking problems, including that finding a space in Concord Center or West Concord is easy, except during the December holiday season
- » The business community is interested in a parking management strategy that ties economic development to parking availability

83% of business merchants report that one hour time limits are not long enough for customer shopping, dining, and visiting.

The following pages show summary maps of public comments from the Open House. See Technical Memorandum #2 for more detail.



Open House participants provided valuable input on issues and opportunities.

CONCORD CENTER OPEN HOUSE - PUBLIC COMMENTS



Parking Inventory

The Town's parking study is a town-wide effort with an emphasis on Concord's two primary "sub-centers", Concord Center and West Concord. Data collectors documented each space and recorded it by type, regulation, and who is able to use it. The study areas include on-street parking on residential streets surrounding the downtown activity centers. Overall, the study captured more than 6,600 total parking spaces combined in Concord Center and West Concord.

Concord Center and West Concord both have distinct parking characteristics and several similarities:

- » Both areas have many more off-street parking spaces than on-street
- » Concord Center has a larger variety of distinct time regulations on its on-street parking spaces.
- » Both areas have single-head, coin operated meters with one hour time limits that cost \$0.50 per hour
- » 76% of the off-street parking in Concord Center is restricted to certain user groups while 91% of West Concord's off-street parking is similarly restricted.

Off-street parking has been generally categorized in two ways:

- » *General access* parking is available for public use and may be owned by a public or private entity
- » *Restricted access* parking is dedicated to a specific population, such as customers, tenants, or employees. Most off-street parking in Concord Center (73%) is restricted access parking.

CONCORD CENTER PARKING INVENTORY

Key Findings

- » The study area includes nearly 4,000 parking spaces; 74% of which are in off-street lots
- » The majority of the off-street parking supply is restricted to specific users, e.g. customer-only, employee-only, and tenant-only parking
- » Less than 5% of Concord Center's parking is priced

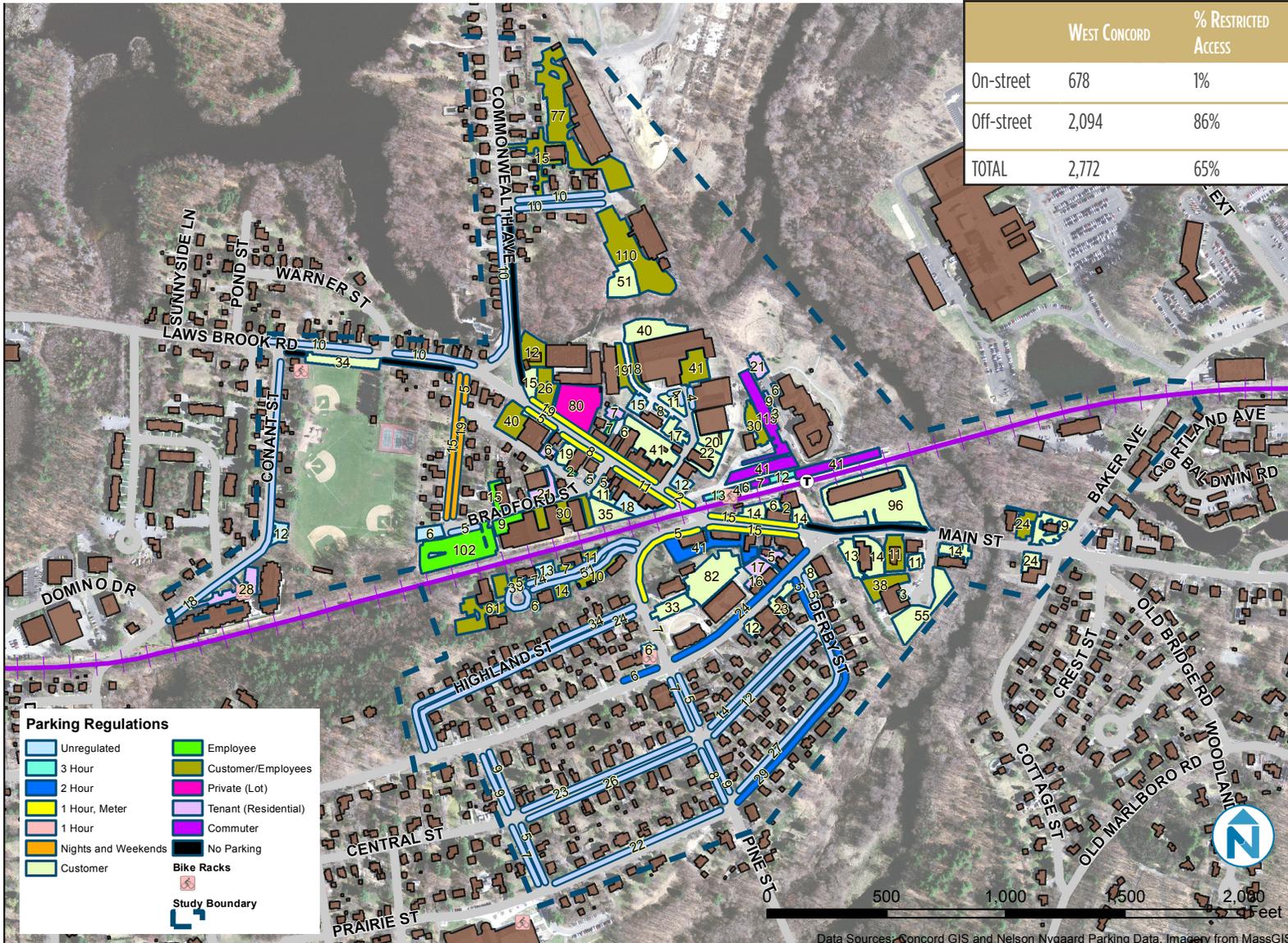
WEST CONCORD PARKING INVENTORY

Key Findings

- » West Concord has 2,772 parking spaces; 75% of which are in off-street lots
- » 91% of the off-street parking supply is restricted to specific users, e.g. customer-only, employee-only, and tenant-only parking
- » Less than 3% of West Concord's parking is priced
- » Of all the off-street parking in West Concord, 94% is privately-owned and 6% is publicly-owned.

WEST CONCORD PARKING REGULATIONS

WEST CONCORD PARKING SUPPLY



Parking Utilization

Parking utilization counts provide a time series of typical parking demand for a typical day in an area. By compiling parking utilization comprehensively, the study has been able to clearly identify patterns of high or low usage, the impact of regulations, comprehensively present, and assess how much of the parking supply is utilized throughout the day.

The project team conducted weekday and weekend parking utilization counts for both Concord Center/Thoreau Street Depot and West Concord. Weekday counts were conducted in mid-May 2012 on a Thursday when Concord Academy was in session. Data collectors captured weekday parking demand for 14 hours (7am to 9pm) with counts every two hours. Both sub-area weekend counts were conducted in mid-June 2012. Data collection began at 9am, since commuter activity is less prominent during the weekends, and ended at 5pm, as evening weekend parking demand was not identified as problematic by Town staff. In addition, the study area for the weekend counts is slightly smaller than the weekday study area, as activity is more concentrated in the heart of both commercial and recreational areas.

CONCORD CENTER UTILIZATION

Key Findings

- » For both weekdays and weekends, less than 60% of the total parking capacity is utilized at all times
- » Peak utilization occurs mid-day around lunch hour
- » Isolated parking challenges occur around the Concord Museum, Emerson Playground, and Concord Academy/Library
- » On-street metered parking demand spiked after 5pm (when the meters are free) while off-street parking peaked between 11am and 3pm

WEST CONCORD UTILIZATION

Key Findings

- » For both weekdays and weekends, less than 40% of the total parking capacity is utilized at all times
- » Peak utilization occurs mid-day around lunch hour on the weekdays and in the morning on weekends
- » MBTA commuter parking is underutilized, while Town resident commuter parking is heavily utilized
- » Off-street lots behind popular businesses are utilized heavily, while free parking spaces within one block away are not

UTILIZATION MAPS

The maps on the following pages show the **peak parking utilization profiles** for the weekday and weekend.

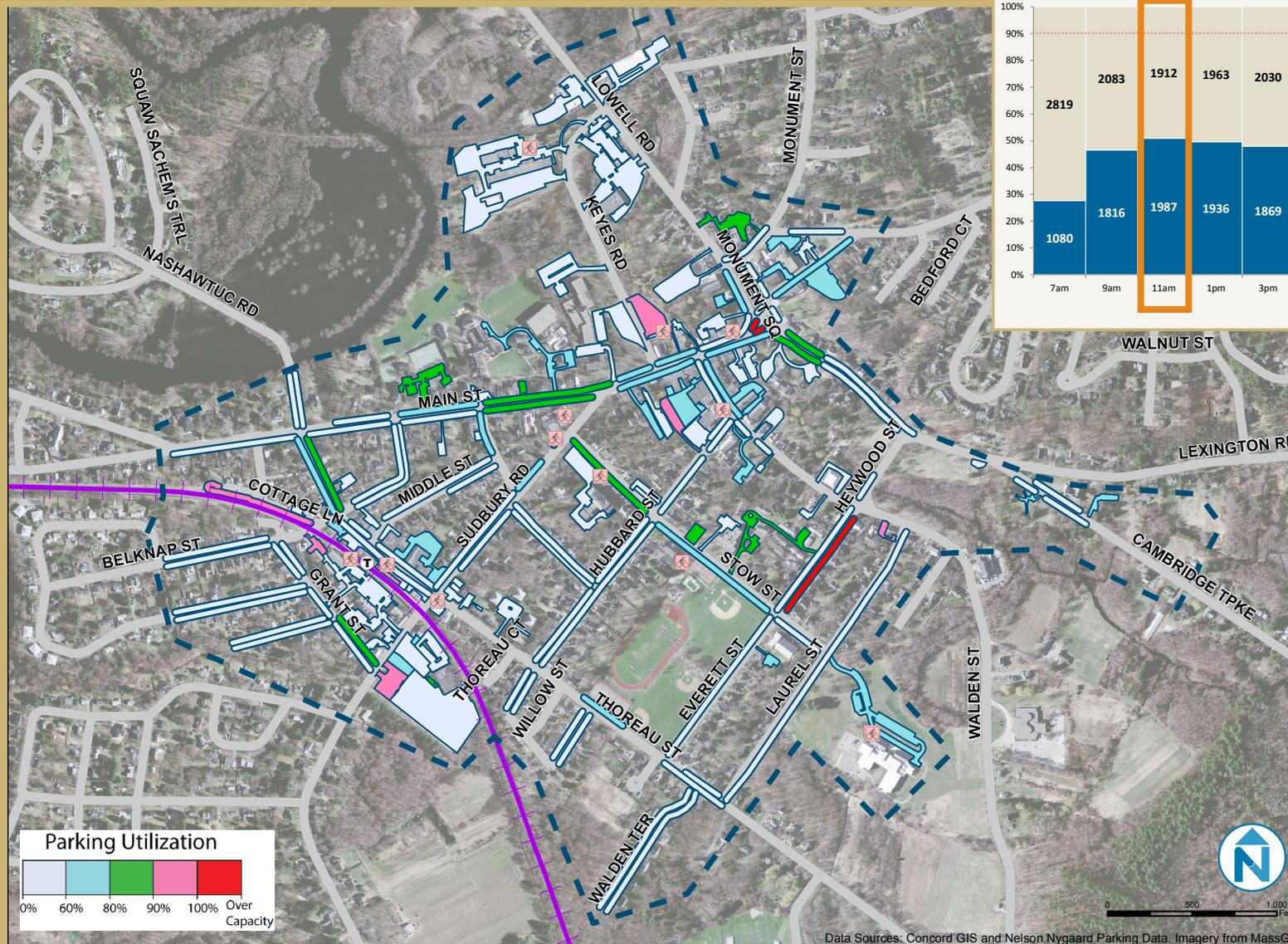
With each map is a utilization chart that shows overall demand throughout the day. The red lines indicate “functional capacity” of parking, i.e. a vacancy of 15-percent on-street, or about 1 out of 8 on-street spaces is available and 90% for off-street lots, a recognized national standard of when a parking area is effectively full.

Methodology

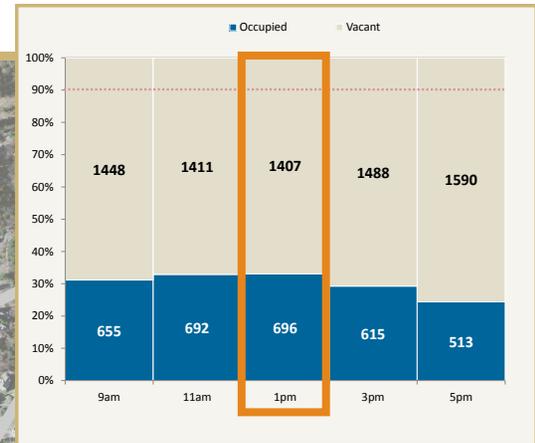
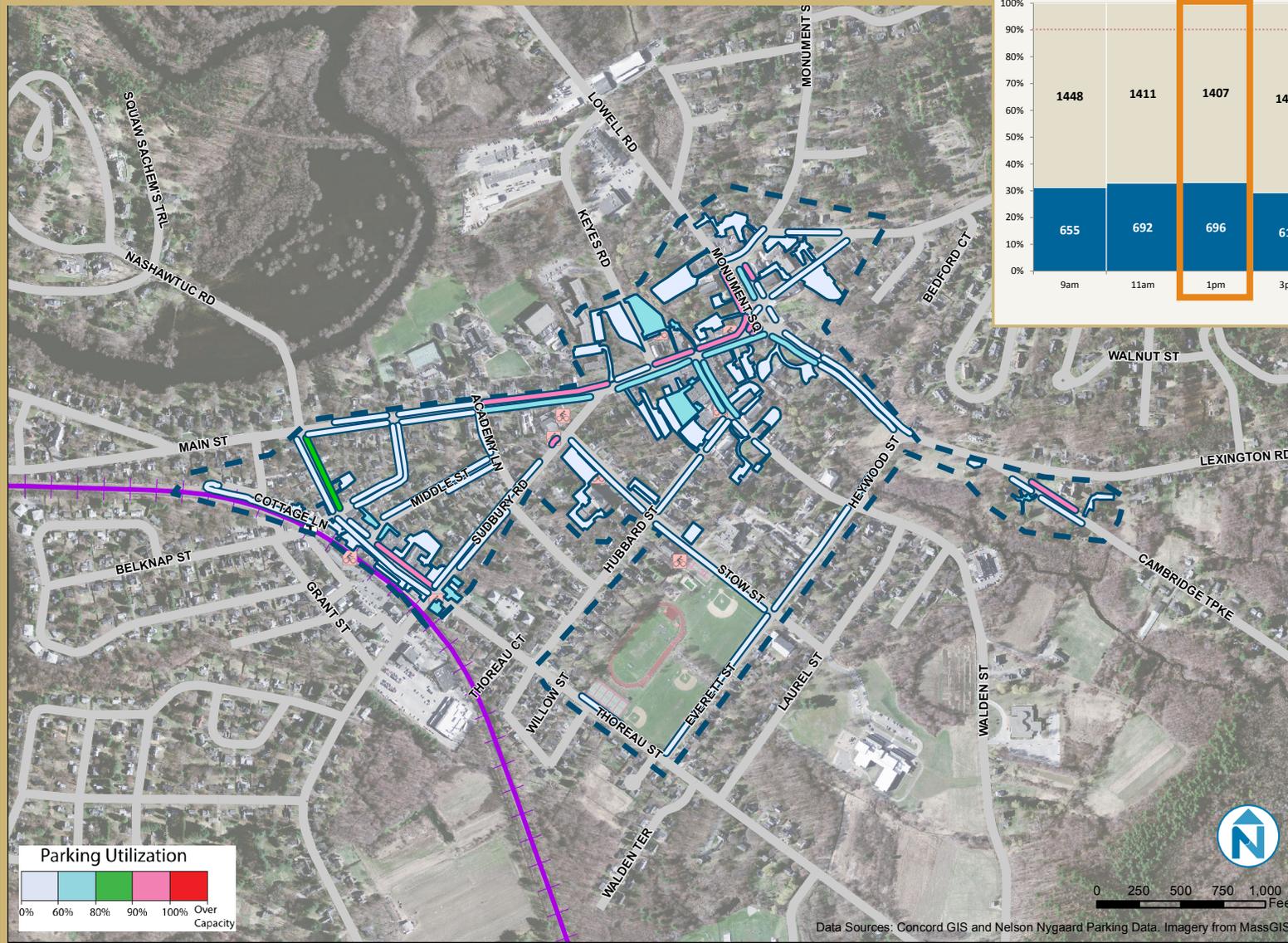
Individuals collecting data observed each on-street segment and off-street lot at exact intervals. For example, if the Sudbury Street commuter lot was counted at 7:05AM in the first loop, then it was counted at 9:05AM in the second loop, etc. This consistency ensured data accuracy to help draw conclusions about trends within two-hour windows.

The team coordinated in advance with the town planning, engineering, and police staff to ensure that there were no special events or construction that may influence parking utilization.

CONCORD CENTER WEEKDAY PEAK PARKING UTILIZATION: 11AM - 1PM

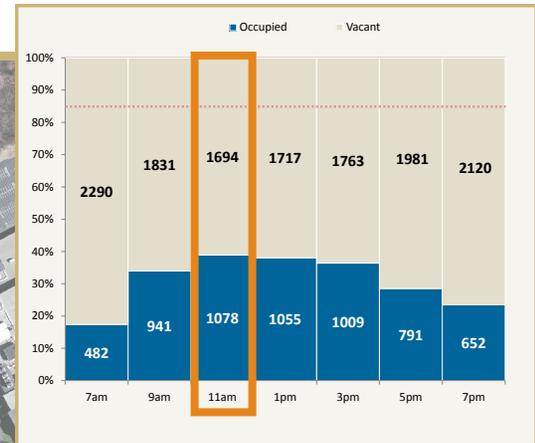
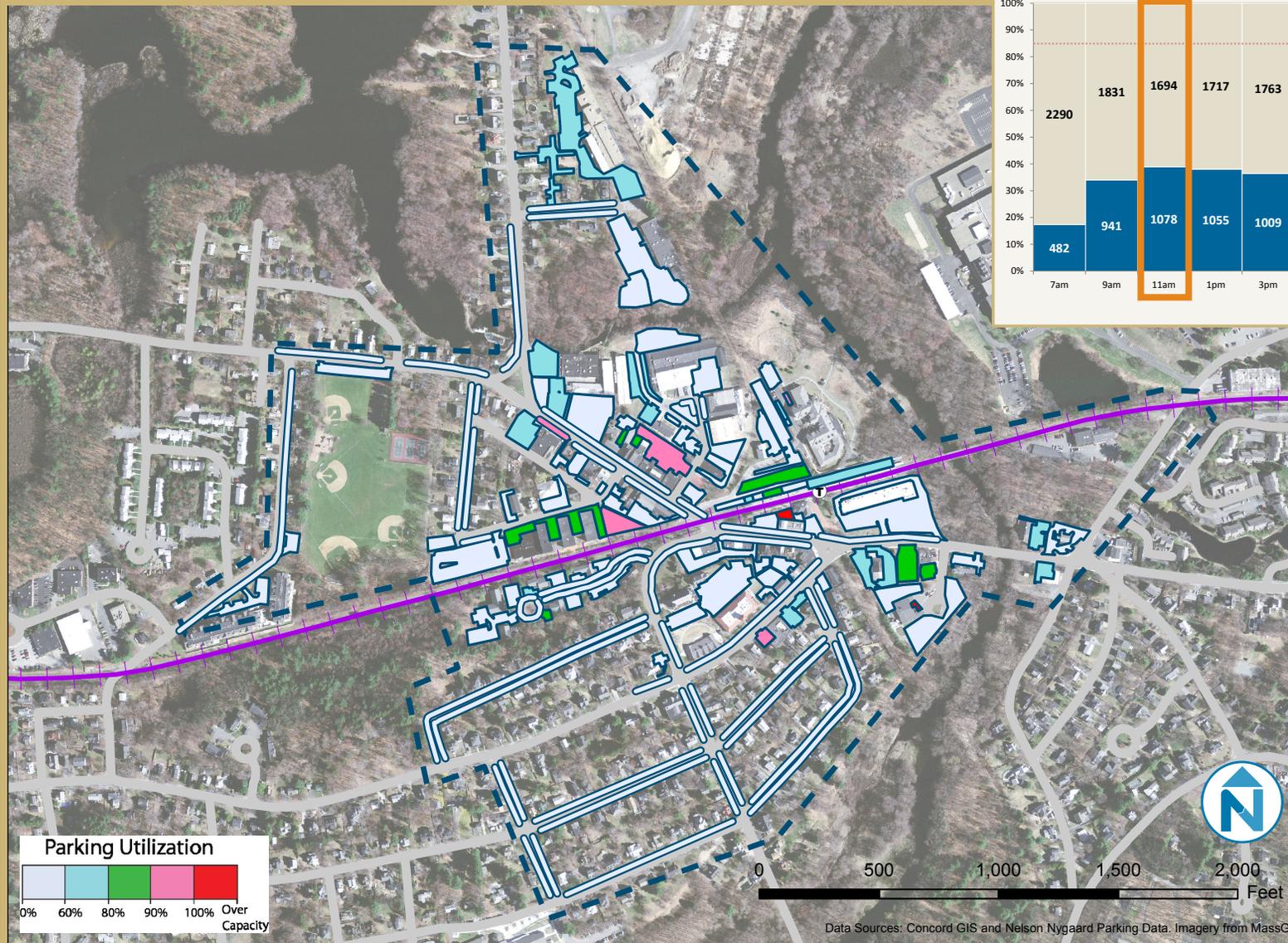


CONCORD CENTER WEEKEND PEAK PARKING UTILIZATION: 1PM - 3PM



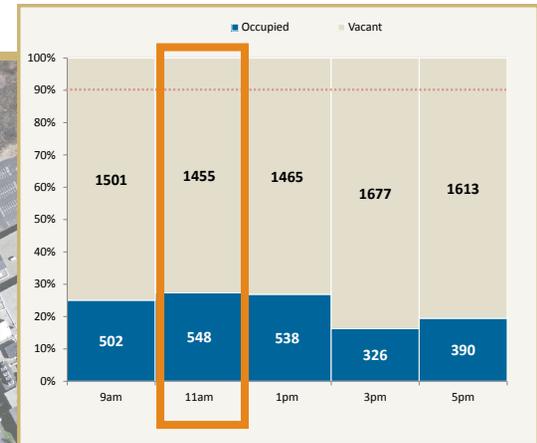
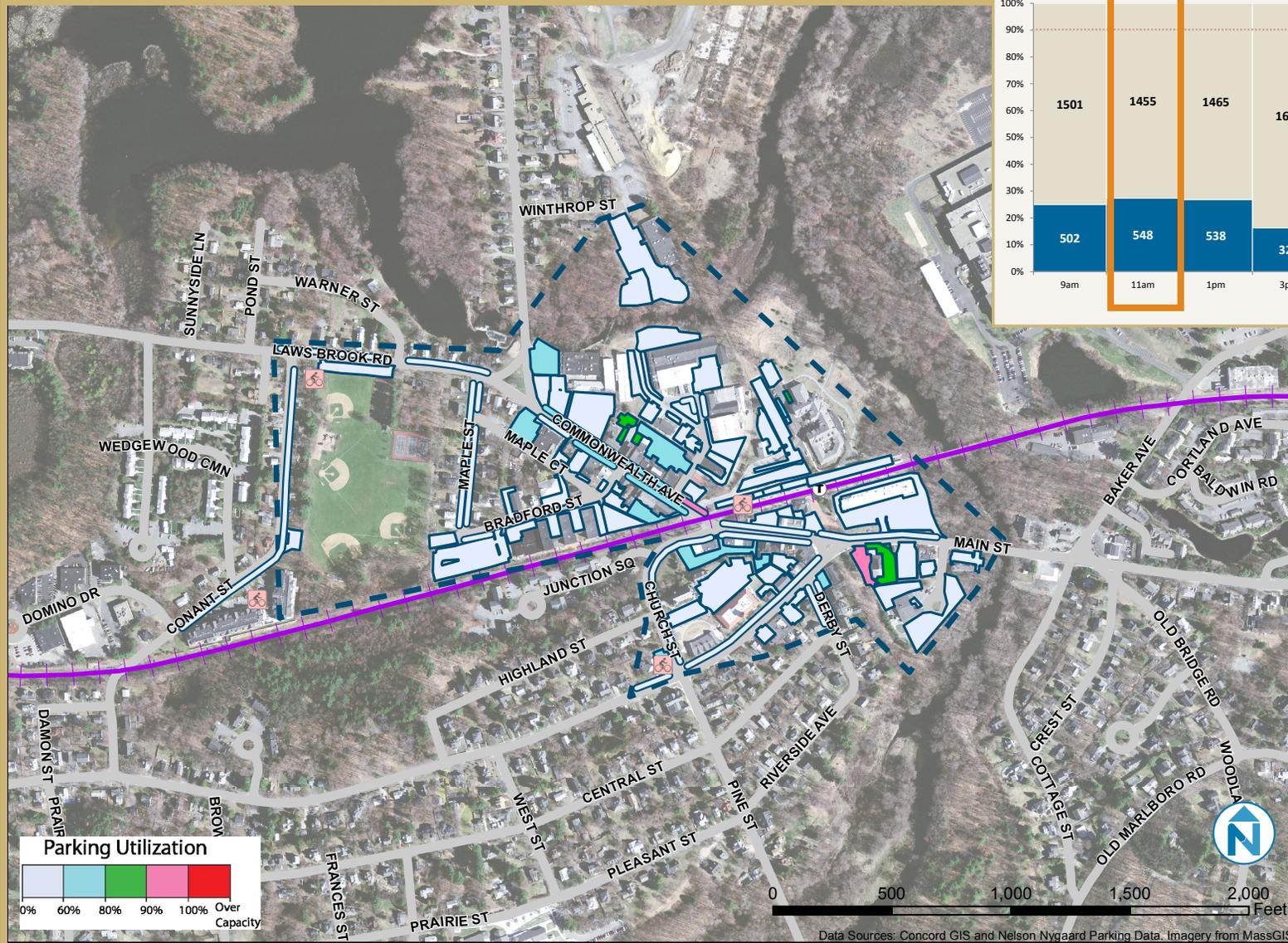
Data Sources: Concord GIS and Nelson Nygaard Parking Data. Imagery from MassGIS

WEST CONCORD WEEKDAY PEAK PARKING UTILIZATION: 11AM - 1PM



Data Sources: Concord GIS and Nelson Nygaard Parking Data. Imagery from MassGIS

WEST CONCORD WEEKEND PEAK PARKING UTILIZATION: 11AM - 1PM



Recommendations

The analysis for the Comprehensive Parking Study included a broad and thorough review of parking supply: how much is there, where is it, how is it regulated, and how well used are the various parking areas at different times of day. The scope of this analysis was broad enough to capture not just where parking is most contentious, but also the surrounding context showing where utilization drops off. It is as important to understand where people are NOT parking, as it is to understand where they are. Supply and utilization analysis was supplemented with several outreach efforts to get direct feedback about the parking system. Stakeholder interviews, public meetings, and online parking surveys helped the project team understand and analyze the quantitative and qualitative data we were seeing, while also framing many of the issues discussed in the Recommendations Technical Memorandum.

The Parking Recommendations build off the technical memos. Many of the specific recommendations are interrelated and were developed (and should be considered) in tandem. They include items not obviously parking specific - such as pedestrian improvements - that actually have a big impact on behavior and parking in Concord.

Key Recommendations

- » Eliminate time limits
- » Raise meter rates in core
- » Change span of meter hours
- » Invest in new meter technology
- » Create signage and map of parking facilities
- » Establish partnership with Cultural District and Chamber of Commerce to publicize parking locations and tour bus pick-up/drop-off/parking
- » Balance commuter parking with pricing incentives

- » Update zoning code
- » Create dedicated parking and transportation fund

The following pages explore each recommendation in more detail. For full details and more information, refer to the Recommendations Technical Memorandum. The recommendations are organized using these headers:

- » Parking Management
- » Signage and Wayfinding
- » Enforcement
- » Tourist and Tour Bus Parking
- » Commuter Parking
- » Pedestrian Access
- » Recreational Parking
- » Bicycle Parking and Facilities
- » Zoning and Shared Parking
- » Parking Technology
- » Parking and Transportation Fund

PARKING MANAGEMENT

Curbside and public parking are among the most important resources in Concord Center, the Thoreau Street Depot, and West Concord. The study's recommendations for regulatory adjustments are based on an analysis and understanding of several factors:

- » Data collection results that show consistent availability of general access parking in both Concord Center and West Concord.
- » Visitor survey results that indicate that a majority of Concord residents have a preference for longer term options, and more than 80% of the business community prefers on-street time limits longer than one hour.
- » Survey results show that people coming to Concord prefer a “park once” strategy.
- » Support of Town and Chamber of Commerce goals of promoting local business and fostering a strong economic climate in Concord.

Parking management recommendations will establish clear parking policy that matches and adapts to user demand and are focused on creating parking availability. High utilization of many prime, metered assets suggests that many Concord patrons would be willing to pay more, and the consistent availability of spaces in off-street lots could accommodate those that are not.

Parking should be priced highest in the areas of greatest demand, lower in areas of modest demand, and free in areas of little to no demand. Pricing zones can and should be refined through discussion, including extending the boundaries of the higher priced core, combining these into a single pricing zone, and stretching the pricing zone an additional block or so in each direction.

- » **Time Limits:** All paid parking should have no time limits. Price alone should regulate how long people stay. If a customer would like to stay in town to patron businesses, then they should be able to park on-street (and pay the meter) or off-street (for free) and spend as little or as much time as they'd like. If eliminating time limits entirely is too drastic, extending time limits to four hours should be the minimum alternative.

- » **Meter Rates:**

- In Concord Center, create two meter zones. Rates in the primary zone should be \$1/hour. This is the area of highest demand, and hourly rates should reflect the attractiveness and convenience of parking there.
- All other meters should remain at \$0.50/hour. *The proposed boundaries of the metered zones are suggested on the recommendations maps, but are open to refinement.*
- In West Concord, maintain the existing single meter zone with a rate of \$0.50/hour. Demand is not high enough to warrant a higher rate or multiple meter zones.
- Retain the “12 minutes free” feature. This enables quick trips without having to take the time to pay the meter.

The Town of Concord has maintained a metered rate structure of \$0.50 per hour, but with 12 minutes free, the price is effectively \$0.40 per hour and \$0.15 per 30 minutes since 2003.

- » **Meter Hours:**

- In Concord Center, shift meter hours from 9am - 6pm, Monday thru Saturday to start later (10am) and end later (8pm), Monday thru Saturday. This is to mitigate the rush to prime

on-street parking locations after the meters shut off during evening hours. This span extension is expected to markedly help maintain more available spaces for customers.

- In West Concord, alter the hours to start at 10am but still end at 6pm. Eliminate Saturday meter collection due to low demand; enforce 10am - 6pm hours M-F. Employees should be strongly discouraged by their employers from parking on-street on weekends. If needed, four-hour parking time limits could be instituted on Saturdays.
- » **Specific Regulation Changes:** Based on community input and observed behavior, regulations on several streets are recommended to change:
 - Thoreau Street between Main Street and Belknap: change from unregulated to core meter zone (no time limit, \$0.50/hour)
 - Grant Street: From unregulated parking to four-hour time limit
 - Belknap Street, Middle Street, and Sudbury Road from Thoreau Street to Main Street: Change from one-hour, two-hour, or unregulated to four-hour time limit
 - Walden Street Lot: Designate the back two rows of parking for unregulated, all-day parking (likely used by employees), and maintain the front rows of the lot as two-hour parking
 - Add metered spaces in right side of Keyes Road Lot
 - More (see Technical Memorandum #6)

Specific commuter parking changes are addressed in subsequent recommendations, including the addition of four hour parking on many residential streets near commuter rail stations.

SIGNAGE AND WAYFINDING

Concord has a healthy visitor and tourist trade, and having clear guidance for these patrons, unfamiliar with the area, is a crucial component of their experience.

Existing signage is difficult to understand, both on public and private property. Increased visibility and wayfinding will encourage the use of currently underutilized off-street lots and maximizes the utility of prime, on-street spaces. Overall, signage should work with enforcement design and policy to eliminate confusion and ensure that all users understand the rules and locations of parking.

Recommendations:

- » Provide visible signage for publicly available parking in West Concord (commuter lot, behind businesses on Commonwealth Ave, end of Winthrop Street, on-street parking regulatory signage)
- » Introduce historically sensitive signage in keeping with the overall streetscape in Concord
- » Provide signage templates and encourage privately owned and regulated parking lots to post readable signage in appropriate locations to avoid confusion from patrons
- » Provide parking information for visitors and tourists before and when they get to Concord
- » Have a parking map and information available on what parking regulations are (on-street and off-street) on the Town website and other complementary websites that visitors use
- » Provide a Concord Center parking map available at Concord tourism destinations that highlights the Keyes Road and Walden Street lots

ENFORCEMENT

A successful enforcement program should have to write fewer tickets, because the parking system will engender fewer violations. Parking enforcement operations, while continually necessary, should be designed to work in tandem with updated parking regulations and signage. Ultimately, enforcement should transition to less of a punitive and more of an ambassadorial role, focusing on information provision, especially for commuters and visitors.

Recommendations:

- » Vary enforcement hours throughout the day and week so patrons cannot evade regulations, and match new regulatory changes
- » Provide information to violators on printed parking citations, e.g. unregulated, free parking opportunity locations
- » Work with downtown businesses to ensure adherence to and satisfaction with regulations
- » Monitor impacts of parking management changes, and make recommendations for further adjustments as appropriate
- » Integrate enforcement & ticketing with upgraded technology, as installed

TOURIST AND TOUR BUS PARKING

Concord attracts tourists year-round, with seasonal peaks in the spring and fall. While Concord has several groups that work to attract and manage the tourist trade, there is little integration into the parking management system.

Recommendations:

- » Establish a more formal partnership with tourist and business groups to provide information and in town accommodations for tourist needs.
- » Establish tour bus drop-off and parking sites in Concord Center, coordinating with MMNHP and business community.
- » Include parking information when marketing Concord as a designated Mass Cultural District.
- » Add bicycle parking and directions from regional facilities
- » Provide signage from Concord historical/visitor destinations to Concord Business Districts



Specific tour bus drop-off, pick-up, and parking locations should help to avoid backups on Main Street and confusion about tour buses in town.

COMMUTER PARKING

Parking utilization analysis, backed up by community acclimation, clearly shows that at least with regards to commuters, parking pricing works to impact behavior. Commuter parking in Concord Center is free and experiences near complete utilization. West Concord commuter parking is much more abundant but either permitted to residents or available at a \$4 cost. The residential permitted spaces are parked full while the daily pay spaces (MBTA) lie empty. The table below shows the current number of spaces, regulation, and peak weekday utilization of each commuter lot. It is clear that the higher the price, the lower the utilization, and the closer the walking distance to the station, the higher the utilization.

Yet, commuter parking at Thoreau Street Depot and in West Concord has been a source of conflicting regulations and community concern. To date, Concord has taken a reactive approach to commuter parking, with many regulatory and pricing decisions driven by outside factors, property ownership or block by block decisions. The Town of Concord should take a proactive role in managing and accommodating commuter parking, explicitly balancing parking demand between its two stations to maximize utility of its resources, and minimize the impacts in the surrounding station areas.

Recommendations:

- » Expand the existing resident commuter parking permit program to Concord Center:
- » Require permits at Crosby’s Market lot (resident preference, shared revenues with Crosby’s), on Cottage Lane, and in the Love Lane lot.
- » Install daily pay spaces at Depot lot (\$4/day, share revenues with the Depot)
- » Investigate additional shared parking arrangements, such as Concord Crossing

- » Increase resident permit fee in West Concord (~\$1/day)
- » Subsidize MBTA parking spaces (keep \$4/day in front; make spaces in back \$1-2/day)

COMMUTER PARKING SUPPLY AND UTILIZATION

LOCATION	# OF SPACES	REGULATION/PRICE	WEEKDAY UTILIZATION (PEAK)
Concord Center			
Crosby’s Market	56	First-come, first-served, Free.	100%
Depot Lot (Thoreau Street)	20	First-come, first-served, Free.	100%
Cottage Lane	45	First-come, first-served, Free.	98%
Love Lane Lot	16	First-come, first-served, Free.	100%
West Concord			
MBTA (at tracks)	52	\$4/day	93%
MBTA (back of lot)	115	\$4/day	34%
Resident permits	41	\$75/six months, equivalent of \$0.60/day. Residents only.	66%

PEDESTRIAN ACCESS

Concord Center and West Concord are generally blessed with walkable, connected town centers, organized near MBTA stations and adjacent to pleasant residential streets. However, there are hidden, and not-so-hidden areas in both centers which act as pedestrian barriers, effectively becoming points which pedestrians, and even parkers avoid. These points are seen to affect parking utilization and availability, and it is important to understand that these barriers have different affects on different user groups.

Customers are most likely to want to park close, or in view of their destination. Employees may be willing to park further away, but may have concerns about safety and visibility. Tourists need clear direction as motorists, and once parked, as pedestrians to featured locations. Commuters typically find the shortest walk from where they can park to the train station. Fixing the pedestrian barriers is one of the most important recommendations for improving parking access, enhancing connectivity, and furthering economic development.

In general, systematic improvements and funding are necessary to implement the physical changes identified below. Many of the overall recommendations in the Comprehensive Parking Study will raise additional funds -higher meter rates, eliminating time limits, payment in lieu of fees, commuter parking - as a by-product of updating the parking system. Capturing some of this additional revenue to design and construct physical improvements is one of the best uses of this revenue in terms of impact on the business districts.

Recommendations:

- » Conduct accessibility audits to review sidewalks, crossings, pedestrian ramps.
- » Improve lighting in Keyes Road lots and Walden Street lot. Upgrade ingress/egress to accommodate pedestrians.

» Better sidewalks/pedestrian safety:

- Narrow intersection, complete sidewalks, provide better crosswalks at railroad crossing in West Concord
- Connect the Harvey Wheeler parking lot in West Concord with steps to Commonwealth Avenue; continue pedestrian connection across Commonwealth Avenue to sidewalk near commuter rail
- Improve intersection at Commonwealth and Laws Brook Road to encourage safer and more convenient circulation patterns through Town
- Review the width and layout of Hubbard Street by the Post Office, eliminating the grass area, and widening the sidewalk and the street.



When a person gets out of their car, they are a pedestrian. Uninviting pedestrian access to and from parking lots discourages people to park in the lots.

RECREATIONAL PARKING

Stakeholders and residents have reported that the parking situation around Emerson and Rideout Playgrounds gets very busy around game times, particularly in the evenings. Parking clusters near field entrances and many resident complaints are focused on blocking streets, and especially driveways.

Note that despite the many protestations about parking at the playground areas, many residents did not seek specific changes. To address the issue, the recommendations primarily relate to a formalization of the parking that exists and reinforcing, through signage and pavement markings, the areas where either parking is not allowed, including clearly marking driveways.

The Town could also consider allowing parking on both sides of streets where applicable with > 30' width. These would need to be designed carefully, with driveways marked. Most residents attending the public meetings were not supportive of this idea.

Recommendations:

- » Formalize parking by adding signage allowing/preventing parking on block faces around playground
- » Stripe around driveways and “do not park areas”, e.g. fire hydrants and crosswalks, adjacent to facilities (as shown on the next page), to avoid driveways being blocked
- » Consider adding sidewalks around the playground on Thoreau and Everett Streets
- » The parallel spaces in the Rideout Lot should be designated as formal parking
- » Users of the Rideout Playground should be provided information about additional parking options along Conant and Bradford Streets

BICYCLE PARKING AND FACILITIES

Concord as a town is poised to be a great bicycling community – with an abundance of recreational and commercial destinations, adjacent residential neighborhoods, and connections to regional bicycling facilities. However, there are few bicycle treatments and infrastructure in Concord Center and West Concord.

Expanding bicycling can reduce the need for vehicle parking, and greatly contribute to the health and vitality of Concord’s business and residential districts. Already in Concord Center and West Concord, there are many types of cyclists - from families, to commuters, to elite cyclists, that all need a safe and secure place to park their bikes.

Recommendations:

- » Bicycle parking and access need to be integrated into the business districts.
- » Build upon initial work prepared by the Town of Concord to add more racks in West Concord and bike lockers at West Concord train station. Add bike parking in locations that complement the Bruce Freeman Trail.
- » Signage and directions connecting bicyclists from regional trails and Concord destinations to Concord’s business districts.
- » During non-winter months, install an on-street bike corral in both Concord Center and West Concord, converting an existing on-street parking space to bicycle parking.



Bicycle corrals take up one on-street parking space, providing parking for 10-12 bikes.

ZONING AND SHARED PARKING

In many cases, Concord has upheld its zoning code as relates to parking, which has resulted in an observed surplus of parking spaces in town. The results of this Comprehensive Parking Study show that many of these spaces are underutilized, with the result that valuable assets (land, parking, economic development potential, open space) sit unfulfilled in Concord's business districts. This existing surplus of parking spaces gives the Town an opportunity to absorb significant development, as shown in the Technical Memorandum on Shared Parking.

Most of Concord's required parking minimums are higher than national standards typically indicate. There is flexibility built into the code via special permits, which offer room for interpretation, analysis, and exemptions, but there still are limitations, and a lack of clarity.

Meanwhile, on-the-ground observations of parking demand in Concord indicate that in Concord Center, the general peak parking generation rate is 1.67 spaces per 1,000 square feet of land use. In West Concord, the peak parking generation rate is 1.50 spaces per 1,000 square feet. Since Concord has high minimum parking requirements, much of this required provided parking goes unused, opening the opportunity to allow infill or new types of development to better utilize existing resources.

Recommendations:

Concord's zoning code should be updated as relates to parking, as the current zoning has led to an overabundance of parking in its centers. In Technical Memorandum #3: Zoning Code, several best practices and opportunities are outlined that could be implemented in Concord. The list below includes a list of zoning code updates and recommendations that could be incorporated into zoning overlays for the Concord Center/Thoreau Street Depot and West Concord

downtown areas.

- » Parking minimums should either be eliminated entirely or converted to parking maximums within the business districts
- » Allow developers to build less than the required or desired number of spaces by making a payment (annual or one-time) in-lieu of providing parking to the Town. The code should include a rate schedule for an in-lieu fee option.
- » Remove change of use parking requirements for uses under 20,000 square feet and encourage flexibility (including shared parking with uses within 1,000 feet) for new uses rather than require new minimums.
- » Broaden shared parking language to cover all uses. Zoning should allow for shared parking between properties (parking must be within 1,000 feet). Guidelines should be established for combining offstreet parking facilities between multiple properties.
- » The curb cut provision should be updated to include commercial districts, plus include design standards that the sidewalk should be level across the driveway, which necessitates a slower-speed raised entry/exit, as opposed to a dropped curb.
- » Bicycle parking requirements should be included in relation to the scale and type of development (not tied to vehicular parking requirements), as well as bicycle rack standards included.

PARKING TECHNOLOGY

Concord's parking technology works well with the existing parking management system, but as parking management expands and evolves, investments in added parking technology will become more worthwhile. Concord should develop a long-term strategy to replace current meter heads with smart meters or pay stations, mostly for ease of customer use. However, an immediate change is unnecessary, and may not be cost effective. The Technical Memorandum on Parking Technology includes more information on technology types and general applicability.

Recommendations:

- » Upgrade or reprogram the existing McKay meters to implement the change in hours, time limits and price in the Parking Management Recommendations.
- » For added areas of regulation, employ reserve McKay meters to the extent possible. Lease or purchase pay stations in parking facilities and Monument Square as appropriate.
- » Develop a capital plan to phase in smart meter heads and pay and display kiosks throughout Concord based on fiscal analysis. An initial emphasis should be placed on Concord Center.
- » Integrate pay by phone technology into new technology for smart meters and pay stations
- » Purchase hand held enforcement devices that communicate with upgraded meters and pay stations



Smart single-head meters accept credit cards and fit into existing meter bases.

PARKING AND TRANSPORTATION FUND

All recommendations, including the basic parking management changes, will require some measure of additional funding. Several, such as the intersection improvements, and long-term shared parking arrangements require substantive funding, while others that are programmatically based require ongoing funding streams. Though not designed for revenue enhancement, additional revenues generated could fund public improvements that benefit Concord's transportation infrastructure.

A parking and transportation fund is a revolving account that is funded by parking revenues, less Town expenses, and dedicated to local improvements that promote Town goals related to parking and transportation.

If parking revenues seem to disappear into the General Fund, where they may appear to produce no direct benefit for downtown businesses, there will be little support for parking policies that may ultimately benefit business, such as increased permit fees, upgrading parking meters, or adjusting regulations. When Concord's merchants and residents can clearly see that the monies collected are being spent for the benefit of their centers, on projects that they have helped to choose, they become willing to support parking policies that generate revenue for the Town. If experience from other cities is any guide, many will become active advocates for the concept.

To develop support for parking regulation changes, and to build support for charging fair market rates for permits, local stakeholders should have a strong voice in setting policies for the Town, deciding how Fund revenues should be spent, and overseeing Concord investments to ensure that the monies collected from employees and customers are spent wisely.



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