# BELMONT CENTER COMPREHENSIVE PARKING MANAGEMENT PLAN

**FINAL REPORT** 

PREPARED FOR THE TOWN OF BELMONT



**MARCH 2012** 

# **Table of Contents**

Executive Summary	E-1
Chapter 1. Introduction	
Report Structure	
Comments Welcome	1-1
Project Goals	1-2
Chapter 2. Civic Engagement	2-1
Public Open House	
Final Public Meetings	
Chapter 3. Current Parking Conditions	
Study Area and Key Findings	
Parking Supply & Demand	
Enforcement	
User Perception and Experience	
Summary of Current Parking Conditions	
Chapter 4. Parking Management Program	4-1
Recommendation 1: Revise Employee Parking Permits	
Recommendation 2: Establish More Convenient Customer Parking	
Recommendation 3: Introduce Commuter Parking	
Recommendation 4: Improve Pedestrian Connections	4-6
Recommendation 5: Create a Signing Program	
Recommendation 6: Use Modern Payment Technology	4-10
Other Strategies	
Chapter 5. Parking Action Plan	

Appendix A - Survey Form

Appendix B - Parking Utilization Maps - Weekday and Weekend

Appendix C - Technology Review

Page

# **Table of Figures**

		Page
Figure 1	Priority Voting Results	2-2
Figure 2	Needs & Opportunities Map	
Figure 3	Study Area for Belmont Center Parking Plan	3-2
Figure 4	Parking Inventory	3-2
Figure 5	Parking Regulatory Map	
Figure 6	Publicly Available (Public) vs. Restricted (Private) Parking	
Figure 7	Weekday Utilization Profile – All Spaces	
Figure 8	Weekday Utilization Profile - Publicly Available Spaces	
Figure 9	Weekday On-street and Off-Street Inventory	
Figure 10	Origins of Vehicle Registration Parked on Royal Road	
Figure 11	Weekend Utilization Profile – All Spaces	
Figure 12	Weekend Utilization Profile – Publicly Available Spaces	3-8
Figure 13	Leonard Street Utilization	
Figure 14	Claflin Lot Two-Hour Free Parking Utilization	3-9
Figure 15	Claflin Lot Paid Parking Utilization	
Figure 16	Public Parking Peak Weekday Utilization - 12PM	3-11
Figure 17	Public Parking Peak Weekend Utilization – 12PM	
Figure 18	Survey Respondents by User Group	
Figure 19	Parking Choice	
Figure 20	Proximity to Destination	
Figure 21	Summary of Initial Parking Management Program	
Figure 22	Recommended Starting Pricing Tiers	
Figure 23	Potential Expanded Commuter Parking Areas	
Figure 24	Starbucks as a Gateway between Leonard Street and the Claflin Lot	4-7
Figure 25	Sidewalk Access to the Claffin Lot	
Figure 26	Intersection of Leonard, Concord, and Channing	4-9
Figure 27	Current and Recommended Improved Streetscape Plan	
Figure 28	Entrance to Claflin Lot	4-10
Figure 29	Parking Signs in Framingham	4-10
Figure 30	In-Car Meter Sample	4-11
Figure 31	Re-Striping Configuration of the Claflin Lot	
Figure 32	Evaluation of Initial Parking Management Program	4-13
Figure 33	Recommended Implementation Plan	5-1

# **Executive Summary**

## Parking is a Part of Belmont Center

Belmont Center has great existing resources in its existing transportation network, and if efficiently managed in a coordinated and multi-modal fashion, these previously untapped resources can become the key to improving mobility and convenience in the Center. Belmont Center is directly connected to Boston through commuter rail, to Cambridge through bus service, and to Route 60 and Route 2. Belmont Center has hundreds of on- and off-street parking spaces. While the lack of signage and modern technology pose a challenge, new approaches to coordinating assets and improving the management system can bring much greater efficiencies while benefiting all parties.

# **Key Questions**

The consultant's approach focused on collecting as much existing use information as possible to come up with a profile of existing parking activity in Belmont. Key questions the data was intended to answer included:

- How much parking is available for different user-groups, including residents, employees, commuters, and shoppers?
- How much parking is short-term vs. longterm?



Belmont Center, looking north on Leonard Street

- How are motorists directed to parking?
- To what extent is the existing parking being utilized?
- Who utilizes the most convenient parking spaces?
- How much spillover is occurring in surrounding residential neighborhoods?

# **Public Workshop and Surveys**

The Town and consultant led several public parking workshops, met with business owners, and aggregated public input using an online survey.

Key Findings:

- Most commonly noted problem areas are on Leonard Street, around Town Hall, and in free public parking lots.
- Plenty of availability on Cross Street, Channing Road, and Concord Avenue, but some unregulated residential streets are currently experiencing employee overflow that disrupts day-to-day residential life
- A pathway is needed to connect between the Claflin Lot and Leonard Street.
- There is off-street availability in the middle of the Claflin Lot and in the pay-for-parking section of the Claflin Lot.

- Most prefer to "park once": they are willing to park a little further away and walk to multiple destinations without moving their car.
- Many would like it to be easier to walk, bike, or take transit to the Center.
- Belmont residents, employees, and business owners are open to ideas about onstreet pricing to encourage availability, as long as there is some easily-accessible free parking available. Almost half of participants would be willing to pay to park to ensure better availability.

### **Parking Inventory and Utilization**

The consultant and Town staff completed a parking inventory and conducted parking utilization in Belmont Center on a representative weekday and weekend from 8am - 8pm.

Key Findings:

- Of the 1,000 spaces in the study area, no more than 700 are utilized at the busiest time of a normal week (a utilization rate of 67%). This includes private spaces. For the publicallyavailable supply of nearly 700 spaces, peak utilization reaches 68% on the weekdays and 75% on the weekends.
- Utilization of prime curbside spaces on Leonard Street often approach capacity.
- The spaces on Royal Road at the commuter rail station are heavily used every weekday.
- Spaces in the front of the Claflin Lot (closest to the stores) are well-utilized; spaces in the middle are not as well used; and the permit and paid spaces in the back of the lot are not well-utilized.
- Parking on residential streets is not well-utilized.

### Recommendations

Improved management of the parking supply will help ensure that even at peak demand, there is availability for both short and long-term parking without causing any spill-over parking onto residential streets. Strategies to encourage the use of underutilized public spaces will help to improve availability of core spaces, reducing the perception that parking is undersupplied.

Parking management strategies include:

- Revise employee parking permits, including availability and rate structure.
- Establish more convenient customer parking, including pricing in prime spaces to maintain 15-percent vacancy on each block face. Invest surplus revenue back into the Center for needed improvements.
- Introduce limited commuter parking with modest pricing and permits.
- Create an **optional residential parking benefit program** to let neighbors decide if they want to generate revenue from commuter/employee permits.
- Improve walking connections from Leonard Street to the Claflin Lot, plus improved crosswalks, sidewalks, and lighting
- Create a signing program with wayfinding signs for motorists and pedestrians
- Use modern payment technology such as pay stations that take debit/credit cards, payby-cellphone, and in-car meters

# **Chapter 1. Introduction**

The Town of Belmont Comprehensive Plan 2010-2020 presented by the Belmont Planning Board and Belmont Office of Community Development provided guidance for future redevelopment of Belmont Center. The Report recommended that the Town develop a parking management plan to better serve the needs of Center shoppers, employees, Belmont residents, and out-of-town visitors.

Recognizing the growing pressure on the Center parking supply, the Town of Belmont has sought to develop a comprehensive strategy for addressing parking needs. In addition to addressing the physical requirements for parking, the Town's Comprehensive Plan calls for creation of a vibrant, urban, pedestrian-friendly environment that can only exist in an area with sufficient parking.

# **Report Structure**

The following report documents the existing parking conditions in Belmont and presents recommendations that will both assure an appropriate level of parking development/capacity as well as encourage Belmont's residents, visitors and commuters to use alternatives to the single-occupant-vehicle to the maximum extent possible. The recommendations also include demand management strategies to help the Town accommodate new economic development without being overwhelmed by new traffic.

The report is divided into five sections:

**Chapter 2**, <u>Civic Engagement</u>, presents the outreach efforts and level of involvement the public and key stakeholders have had throughout the parking planning process.

**Chapter 3**, <u>Current Parking Conditions</u>, documents existing parking conditions, management practices, and regulatory controls.

**Chapter 4**, <u>Parking Management Plan</u>, documents a group of strategies that are intended to be implemented to address current parking problems. Some are short-term recommendations, and others are longer-term or more capital-intensive strategies that can be pursued.

**Chapter 5**, <u>Parking Management Implementation</u>, presents more detailed and specific steps for implementation of a comprehensive parking strategy in Belmont Center.

**Technical Appendices,** includes survey data and full utilization maps from the data collection effort, as well as an overview of parking management technologies.

# **Comments Welcome**

The Town and Nelson/Nygaard welcome input and comment from the public – especially those who utilize the Center as a place to visit, work or live. The recommendations presented in this report are by no means the final set of actions the Town will take. Good planning is a community process, and continued public input helps refine a vision into reality. Comments on this report can be addressed to the Jay Szklut, <u>iszklut@belmont-ma.gov</u>, Town of Belmont, Planning & Economic Development Manager, Town Hall, 455 Concord Avenue, Belmont, MA 02478.

# **Project Goals**

Previous studies in Belmont identified the overall goals for parking:

- Retain neighborhood character
- Sustain vibrant businesses
- Attract business customers from outside Belmont
- Promote the use of public transit

This study works to achieve these goals and considers recommendations from previous parking studies in Belmont. This parking study uses original data collection and multiple public input methods to identify issues and trends in Belmont. It makes recommendations to improve parking availability and access while promoting Belmont Center as a distinct local and regional destination.

# **Chapter 2.** Civic Engagement

The development of a Belmont Center parking strategy needs the input of various stakeholders to arrive at a mutually agreeable solution. A critical component of this effort was community involvement. In addition to discussions with key stakeholders – including two in-person meetings with the Belmont Center Business Association plus ongoing feedback throughout the project – the team also posted an online survey on the Town's website, and the survey link was emailed to several Town mailing lists and the business community. The Town also hosted three public workshops that were facilitated by the consulting team. The first workshop at Town Hall was oriented at gaining a better understanding of the public's issues and ideas as they relate to parking and circulation in downtown. The second workshop at the Womens Center was to present the study findings and to gather input on the preliminary recommendations. A final workshop in the Town Hall auditorium also sought input in the draft final recommendations.

# **Public Open House**

On the evening of June 16, 2011, 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 several interactive components:

- Parking priorities voting exercise
- Parking needs & opportunities map mark-ups
- Background information presentation and discussion

More than a dozen concerned stakeholders participated in response to flyers and email invites distributed by the Town and articles in local papers.

# **Parking Priorities Voting Exercise**

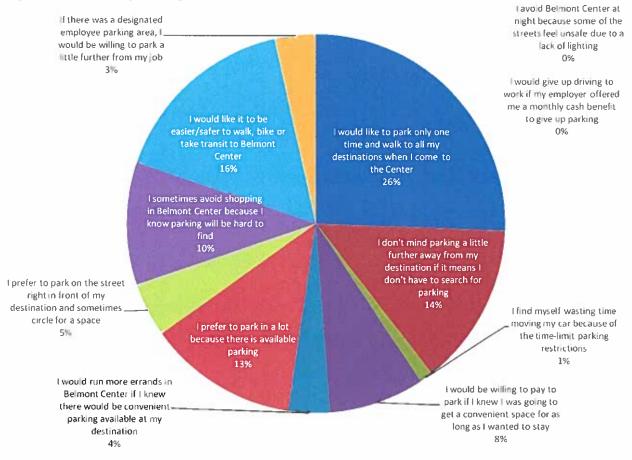
Open house participants were invited to "vote" for the parking-related priorities that were of greatest concern to them. Faced with over a dozen typical parking issues, participants were allotted six "votes" that could be used to prioritize one or more issues (see results in Figure 1).





### Key Findings from the Public Open House

- Participants prefer to "park once": they are willing to park a little further away and walk to multiple destinations without moving their car.
- Participants agreed that they would like it to be easier to walk, bike, or take transit to the Center.
- Participants are open to ideas about on-street pricing to encourage turnover, as long as there is some easily-accessible free parking available.



### Figure 1 Priority Voting Results

# Needs & Opportunities Map Exercise

Open House Participants also were welcomed to share specific comments about what works and does not work in Belmont Center around any one of several identical maps. Participants and facilitators marked up maps (shown in Figure 2) directly to indicate parking problem areas, where parking is easy to find, and also add additional comments and suggestion for change.

### General issues

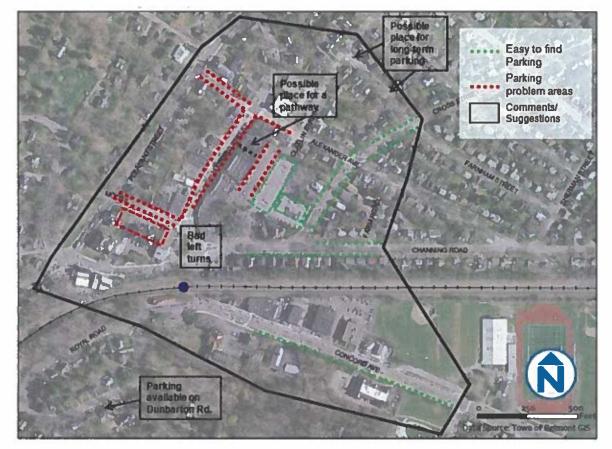
- Parking problem areas are concentrated on the core on-street spots and free public parking lots
- On-street availability is limited on Cross Street, Channing Road, and Concord Avenue

### Belmont Center Parking Plan · Civic Engagement

Town of Belmont, Massachusetts

- Off-street parking is more available in the middle of the Claflin Lot and in the pay-forparking section of the Claflin Lot
- Dangerous left turns at the intersection of Leonard Street and Channing Road
- Farnham Street and Dumbarton Road identified as a possible places for long-term parking
- Pathway needed from the Claflin Lot to Leonard Street

### Figure 2 Needs & Opportunities Map



# **Final Public Meetings**

On December 12<sup>th</sup>, 2011, a dozen local business owners and area residents listened to the preliminary recommendations of the project team and discussed the merits and issues with each. These comments were taken into consideration by the consultants and a final public meeting was held on February 2<sup>nd</sup>, 2012. Several dozen residents, business owners, employees, public officials, and Center landowners met at the Town Hall Auditorium to hear about the study to date and discuss the draft final recommendations. Although there was general consensus on the long-term strategies presented by the consultant team, some immediate concerns were brought up by residents. These issues are addressed in this plan through a series of short and long-term steps outlined in the final chapter.

# **Chapter 3. Current Parking Conditions**

This chapter documents the current conditions of Belmont Center's parking facilities based on extensive data collection conducted in the spring and fall of 2011. This includes identifying the existing parking assets, how they are used today, and how parking is perceived by motorists.

# Study Area and Key Findings

The study area (shown in Figure 3) covers a majority of parking spaces within a 60 acre area in Belmont Center, bounded by:

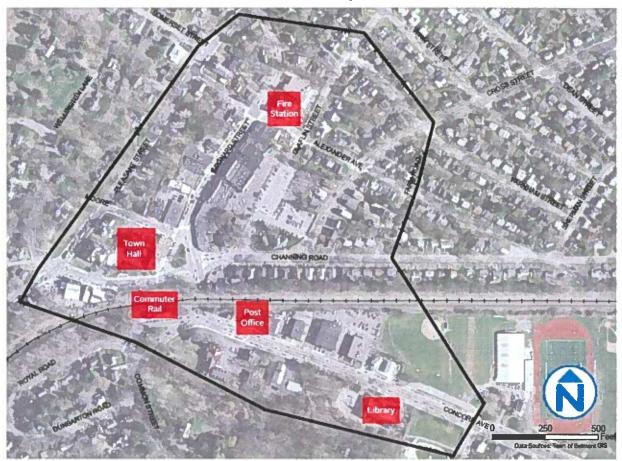
- Pleasant Street from Concord Avenue to Leonard Street to the east
- Residential streets east of Belmont Center, including Farnham Street and Channing Road
- Royal Road at the commuter rail station
- Concord Avenue southeast of the commuter rail station to Cottage Street

### **Parking Supply**

- 1,000 public and private spaces in the Belmont Center study area
- 689 spaces are publically available (357 are off-street, 332 are on-street)
- Almost 270 private off-street spaces are dedicated to employee/customer parking
- 145 public spaces are paid/permit parking
- There are six distinct on-street regulatory categories (i.e. 15-minutes, 2-hours, permitonly, etc.), plus unregulated spaces
- More than half of the public parking is for two hours or less
  - o 117 (12% of all spaces) are for short term parking (one hour or less)
  - o 256 spaces (26% of all spaces) are for two hours
- There are 44 unregulated spaces (4% of all spaces)

### **Parking Demand**

- Overall, Belmont Center's parking supply is under-utilized, with peak utilization at 67%
- Peak utilization occurs mid-day on weekdays (2PM)
- Public customer spaces (on- and off-street) reach a peak utilization of 68% during the week (lunchtime) and 75% on the weekends (late morning)
- Leonard Street reaches 94% on weekdays and 96% on weekends
- Two-hour spaces in the Claflin Lot are fully-used during the weekend peak (95% peak utilization) but have availability during the weekdays (78% peak during the day)
- Paid parking in the Claflin Lot averages 61% utilization on the weekdays and only 30% on the weekends
- Two-hour on-street parking adjacent to the Claflin Lot is under-utilized, peaking at 50%
- Unregulated on-street spaces directly in front of the commuter rail station (Royal Street) are full on weekdays; however, unregulated on-street parking on Concord Avenue to the east of the station only reaches 65% full at peak.



### Figure 3 Study Area for Belmont Center Parking Plan

# **Parking Supply & Demand**

The parking inventory (see Figure 4) includes all on-street spaces and any off-street spaces in lots, garages, or driveways that contained more than three spaces. Single-family residential driveways were excluded. This inventory included a total of 1,000 spaces, of which about 689 are public and 311 spaces are private.

rigure 4	Parking inventory		
	Public	Private	Total
Off-Street	357	301	658
On-Street	332	10	342
Total	689	311	1000

### Figure 4 Parking Inventory

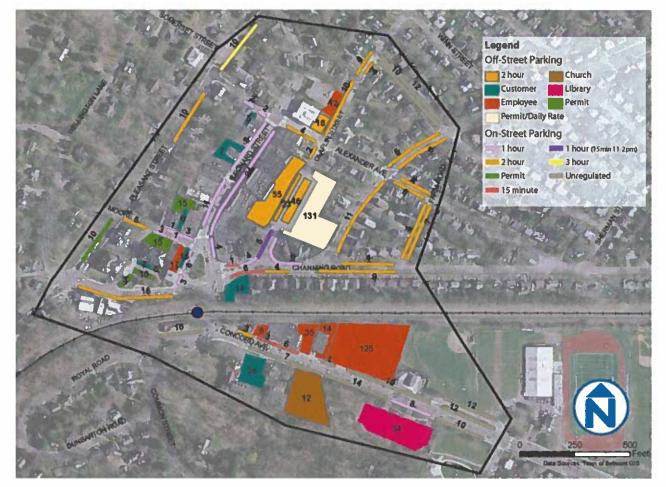
# Regulations

The ownership, use category, and regulation were recorded for all spaces. Six on-street regulations (plus unregulated spaces) were noted, as well as several off-street regulations, including customer-only, employee-only, two-hour parking, paid daily parking, permit only, and parking for other specific uses (i.e. church, library). More than one-third of all parking spaces in the study area are two-hours or less. There are also 37 handicap spaces available in the study area, 30 of which are off-street.

The full parking inventory is depicted in the parking regulatory map below (Figure 5). The black numbers represent the total number of spaces in each on-street segment, lot, and garage.

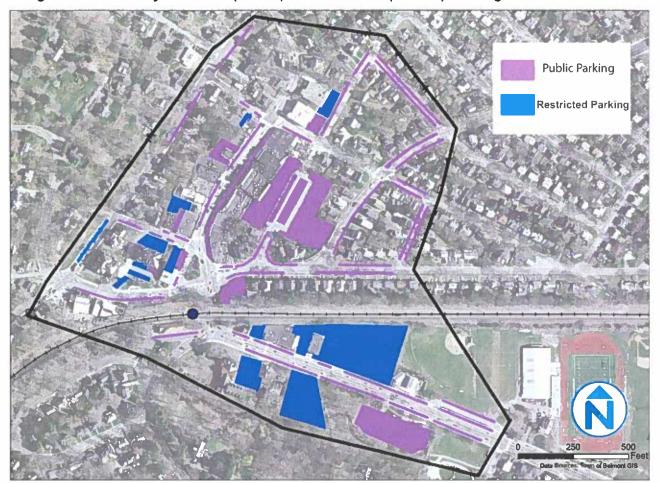
The only paid parking that exists in Belmont Center is in the back of the Claflin Lot (131 spaces). Hourly, daily, and monthly rates are available. Monthly permits are for purchase (\$60 per month) or visitors may pay either \$0.60 per hour or \$3 per day to park.

### Figure 5 Parking Regulatory Map



### **Publicly Available vs. Restricted Parking**

As noted in Figure 4, a majority of the on-street and off-street spaces are available to the public, meaning that they are not restricted to particular users. Spaces that are restricted to designated users only (typically privately held) are not publicly available, such as customer-only or employee-only parking. Figure 6 depicts the location of both publicly available and restricted parking. There is a substantial amount of public parking supply, both on- and off-street, in the core of Belmont Center.





### **Parking Utilization Patterns**

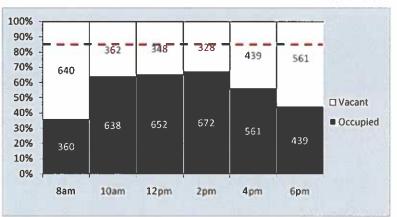
In order to eliminate the perception that parking is not available, it is ideal to have at least one empty space per block face in a downtown, ensuring easy customer access to businesses. This typically equates to about 1 out of 8 on-street spaces free, or a target of 15-percent vacant per block face. Similarly, a goal of at least 10-percent vacancy in off-street lots should be adopted. If any facility has less availability, it is effectively at its functional capacity.

To determine average availability of parking in Belmont Center, consultants conducted parking utilization counts in May 2011. On a typical weekday (Thursday) and typical weekend (Saturday), all parked cars were counted in the study area every two hours between 8AM and 8PM.

Results from the parking utilization counts are shown graphically below.

### Weekday Utilization Profiles

As shown in Figure 7, of all 1,000 spaces in the Belmont Center study area, the maximum utilization is 67-percent (672 spaces) – which occurs around 2PM. This includes all inventoried spaces – both public and private. Compared to the ideal 85-percent ideal occupancy (shown by the red dotted line), these results indicate that Belmont has more than adequate parking supply to satisfy its demand.



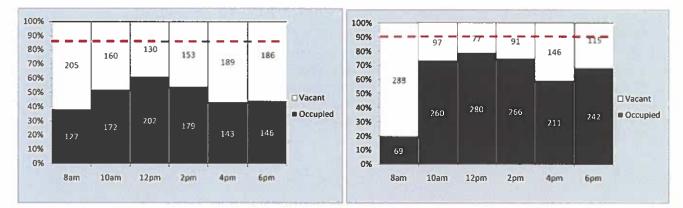
### Figure 7 Weekday Utilization Profile – All Spaces

Figure 8 shows the weekday utilization profile for publicly available on-street and off-street spaces. For the on-street time-limited and unregulated spaces, the peak utilization of 60-percent (202 spaces) occurs around 12PM, well-below an ideal utilization rate of 85-percent. Meanwhile, 75-percent (280 spaces) of spaces in off-street lots are utilized during the same peak period. Even at peak utilization, there are still over 150 empty publically-available spaces.

### Figure 8 Weekday Utilization Profile – Publicly Available Spaces

Publicly Available On-Street Parking Space Utilization

Publicly Available Off-Street Parking Lot Space Utilization



On-street spaces are regulated by time-limits, by Town permits, or unregulated. Figure 9 is a breakdown of the on-street regulations by supply and peak weekday demand. This data indicates that very short term spaces (under an hour) and longer-term spaces (three hour and permit) have the highest demand. Figure 9 also shows the off-street regulations by supply and peak weekday demand. Off-street 2-hour spaces and paid spaces have the highest demand.

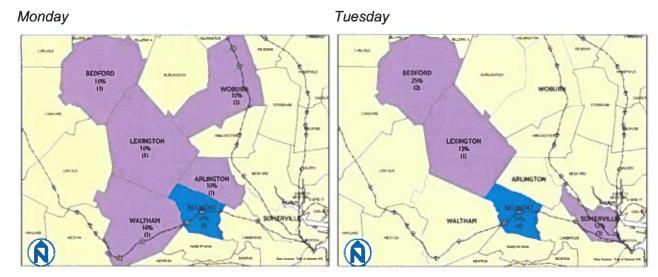
ON-STREET		
Regulation	# of Spaces	Peak Demand
1 hour	87	95%
1 hour + 15 minute (11AM – 2PM)	5	80%
15 minute	16	87%
2 hour	116	38%
3 hour	10	80%
Permit	10	80%
Unregulated	98	62%
TOTAL	342	

### Figure 9 Weekday On-street and Off-Street Inventory

### **Royal Road** Utilization

The spaces directly in front of the inbound platform of the commuter rail station (10 spaces) are unregulated. These spaces fill up in the morning and remain full all day. A random license-plate check by the Belmont Police Department revealed that on most days, about 50% of the spaces are used by Belmont residents, and the others come in from out of town to park and take the train. Figure 10 shows the origins of vehicles parked on Royal Road on a typical Monday, Tuesday, and Wednesday.

### Figure 10 Origins of Vehicle Registration Parked on Royal Road

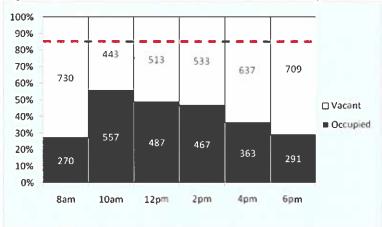


Wednesday



### Weekend Utilization Profiles

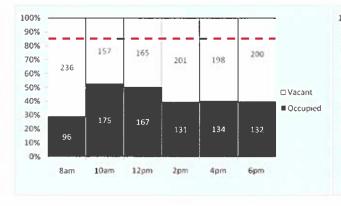
As shown in Figure 11, the peak utilization of 55-percent (557 spaces) occurs around 10AM. Of the public time-limited and unregulated spaces in the core of the Center (Figure 12), on-street utilization peaks at 53-percent around 10AM (175 spaces). Meanwhile, the Center's public lots peak at 68-percent (248 spaces) at 10AM. Even on the weekends, plenty of publically-available parking remains available to customers.



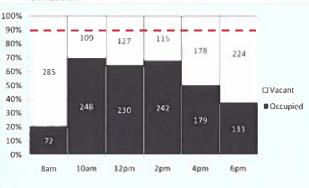


### Figure 12 Weekend Utilization Profile – Publicly Available Spaces

Publicly Available On-Street Parking Space Utilization



Publicly Available Off-Street Parking Lot Space Utilization

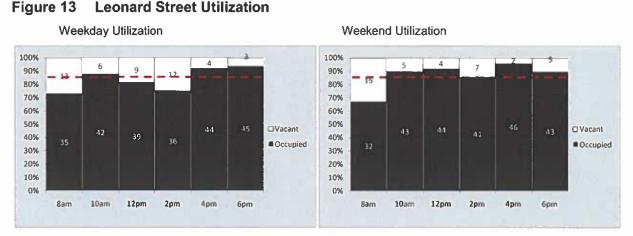


Weekday and weekend time-series utilization profiles are relatively similar: weekdays experience the most parked cars around lunchtime (12PM - 2PM), and the weekend peak is slightly earlier, around 10AM. Late afternoons and evenings are also substantially busier during the weekdays rather than the weekends.

### **Core** Utilization Profiles

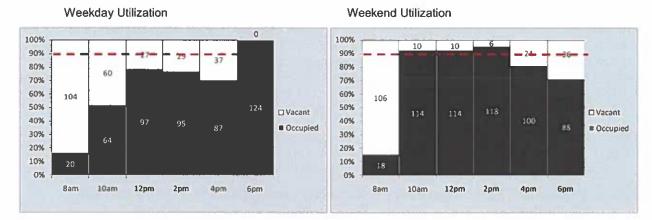
Although utilization across all of Belmont Center demonstrates that there is plenty of parking available, a snapshot of the entire study area does not accurately represent a visitor's actual parking experience. Most customers come to Belmont Center to patronize the shops along Leonard Street, so they are likely to park on Leonard Street or in the Claffin Lot.

Figure 13 shows the utilization of Leonard Street on the weekdays and weekends, which reaches more than 85% occupied. This indicates that as a customer coming to shop in Belmont Center, trying to park on Leonard is difficult, and some customers may get discouraged. In addition, the one-hour time restriction limits the duration of a customer experience - this is not enough time to have a meal or go in and out of several shops.



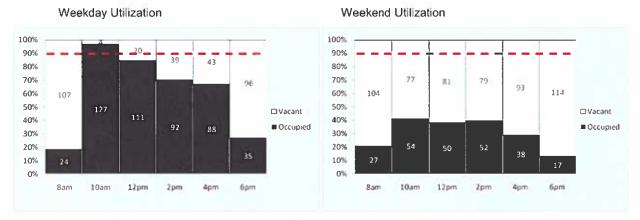
Customers that know about the free two-hour parking in the Claflin Lot may decide to circle around back to park after they find that the spaces on Leonard Street are full. On the weekdays, customers are able to find a free two-hour parking space quite easily (with the exception of the evenings after 6pm). On the weekends, the free spaces are in effect full (Figure 14).





For longer-term parking for employees and those that wish to be in Belmont Center for more than two-hours, the back of the Claflin Lot is available for all-day parking. Monthly permits are available for purchase (\$60 per month) or visitors may pay either \$0.60 per hour or \$3 per day to park. On average, about 60 permits are sold per month (almost half of the lot). Utilization of the paid parking spaces is the opposite of the free two-hour spaces in the lot: on the weekdays, the paid lot is full during the day and empty at night (the opposite of the free spaces) and on the weekends, the paid spaces have plenty of availability (not even 50% full) and the free spaces are effectively full all day.

The utilization of the paid parking in the Claflin Lot is shown in Figure 15.



### Figure 15 Claflin Lot Paid Parking Utilization

The entire Claflin Lot's peak utilization is 78% on the weekdays and 63% on the weekends. When analyzing the Claflin Lot's utilization as a whole, rather than by existing zones, it is clear that there is substantial vacancy and more than enough spaces to satisfy demand if regulations are modified.

### **Spatial Analysis of Parking Utilization**

An important part of understanding how parking is managed in any downtown is being able to describe how various parking facilities and segments of on-street parking interact with each other throughout the course of a day. A chart of hourly utilization rates for one specific location is valuable, but seeing how that location behaves among others located nearby can reveal patterns and trends not evident in numbers alone. The lot which is completely full may be right around the corner from another lot that has plenty of availability at that same time.

Using the utilization data, a series of maps was developed based on the parking inventory map above. Colors have been assigned for the percentage of spaces utilized at each location based on notable breaks used to evaluate the adequacy of a parking facility:

"Cool" light blue/blue refers to 0-80% utilization, a point at which parking is considered underutilized

"Ideal" green refers to 81-90% utilization

- "Warning" pink refers to over 91% utilization
- "Critical" red denotes parking beyond the marked capacity

### Weekday Utilization Mapping

The following map shows the demand for parking midday (12PM), the period of highest demand for public parking on a typical weekday. As can be seen in Figure 16, while demand for parking is high on a few core streets and parking lots, there is ample opportunity for public parking within a 60-second walk of the heavily utilized spaces. For example, the two hour customer spaces in the Claflin Lot directly behind the stores is effectively full; however, more two hour spaces directly behind the full spaces have a number of available spaces. Similarly, street parking on Leonard Street, Moore Street and segments of Concord Avenue and Channing Street closest to Leonard Street are full; however, many spaces a block further down Concord Avenue, Channing Road, and Pleasant Street are available.

It is worth noting that the unregulated spaces on Royal Road in front of the MBTA commuter rail station remain full all day.



### Figure 16 Public Parking Peak Weekday Utilization – 12PM

### Weekend Utilization Mapping

On the weekends, public parking demand peaks around 12PM (Figure 17). Overall, weekend utilization of parking is lower than on a typical weekday. The only consistent exceptions are the core public on-street spaces on Leonard Street, Alexander Avenue, Moore Street and segments of Channing Road, as well as the privately owned lots on Concord Avenue. The Claffin Street lot, both paid and free sections, has high availability.

### Figure 17 Public Parking Peak Weekend Utilization – 12PM

# Enforcement

The Belmont Police Department manages parking enforcement in Belmont Center. One parking control officer patrols Belmont Center on weekdays, walking on foot around the Center and surrounding residential streets. Officers use handheld devices to issue violations, which topped more than 1,800 from January to June 2011. Belmont's violation fees range from \$15 (meter expiration) to \$100 (parking in a bus stop, blocking a handicap ramp, or in a handicap space). Officers also ticket cars if they "shuffle" from one spot to another on the same street. Town-wide, Belmont collected over \$130,000 in parking violations in 2010 (Belmont Center likely comprises at least one-third of these revenues). In addition, town-wide, there is about \$400,000 worth of outstanding parking fines (as of June 30, 2010), which is substantial in terms of uncollected parking revenue for the town.

Enforcement in Belmont is visible and active. Officers are not patrolling to generate as much revenue as possible, but as ambassadors in Belmont. Officers will explain the parking regulations and assist those that are unfamiliar on where to park. However, enforcing time-limited parking is tedious: a license plate and time of day must be documented and compared to a new list generated one hour earlier. With different types of regulations and/or enforcement technology, officers would be able to cover a larger area and be more effective.

# **User Perception and Experience**

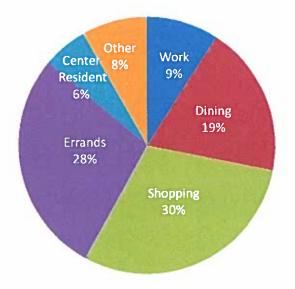
The parking utilization data is important to quantitatively document the parking trends in Belmont. However, utilization data does not tell the story of the experiences of users of the system - the customer that continues to circle for a spot, the employee that shuffles his car every couple of hours, the resident impacted by long-term parkers out front, and the commuter that gets to Belmont early to ensure a spot at the station.

This section documents input from parkers in Belmont Center regarding their parking activities, experiences, perceptions, and preferences. To collect this data, the Town posted a sixteenquestion electronic survey on its website, generating nearly 250 responses. Survey respondents included Belmont Center residents, employees, customers (shoppers, diners and those running errands/going to appointments) and others (Figure 18).

### **Parking Surveys**

- Most respondents come to Belmont Center to run an errand, shop, or dine
- Customers park for an average of 57 minutes; employees stay between 4 and 5 hours
- 95-percent do not have a permit to park
- 85-percent search to find a place to park, rather than park in the same space
- 89-percent walk four-minutes or less from their car to their destination
- 49-percent report to have failed to find parking in the Town Center at least once (and have left)
- 65-percent responded that ease of finding a space is the most important priority when finding a place to park, while only 20% report that location is a top priority
- 68-percent of respondents park in free parking spaces
- Almost half of respondents said that they would be willing to pay to park in order to ensure they would have a convenient space to park. The average amount they were willing to pay is as follows:
  - o Commuter rail: \$3
  - Work day: \$3
  - o 2-hour meal: \$2
  - o 1-hour errand: \$1.25
  - o 15-minute coffee run: \$0.50

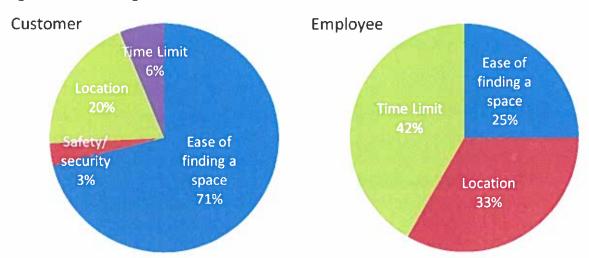




Most survey respondents are customers that come to Belmont Center to shop, run errands, or dine.

# **Reasons for Choosing a Parking Space**

Belmont Center customers consider ease of finding a space to be by far the most important factor in where they choose to park. For employees the most important factor is time-limit, and the second most important factor is location.



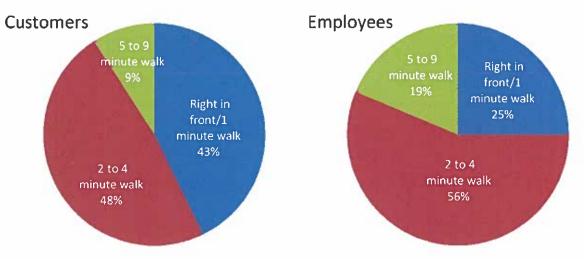
### Figure 19 Parking Choice

Customers want to find a space easily, while employees are most concerned with finding a space with an appropriate time limit.

# **Proximity and Length of Stay**

Almost all (91-percent) of all Belmont Center customers – shoppers, diners and errand runners – are able to find "convenient" parking (within four minutes of their destination) – and almost half of the customers park right in front or within a one minute walk. Having a short walk to a destination is key in Belmont Center, as most customers stay for a short time (around 1 hour). 80-percent of all employees find parking within four minutes.

### Figure 20 Proximity to Destination



Customers generally park closer to their destination than employees, which should be the case: parking adjacent to stores should not be taken up by employees, but rather left open for customers. In addition, many customers only stay for a short time, while employees are parking for longer periods.

# **Summary of Current Parking Conditions**

On a typical day in Belmont Center, there are over 300 empty parking spaces at the busiest time of the day, all within a 5-7 minute walk of the shops of Leonard Street. This indicates that there is ample supply to meet parking demand. However, the core of Belmont Center – particularly Leonard Street and the Claflin Lot, which are the parking areas in highest demand – have peaks throughout the day when they are at capacity.

Improved management of the parking supply will help ensure that even at peak demand, there is availability for both short and long-term parking. Strategies to encourage the use of underutilized spaces will help to improve availability of core spaces, reducing the perception that parking is undersupplied.

### Parking Challenges in Belmont Center

• Employees are occupying prime on-street spaces, as suggested by heavy daytime utilization of core streets that is inconsistent with the amount of daytime retail activity. This is particularly evident during the 8AM time period when parking is full but most stores are not open for business. This is a natural inclination of people wanting front-door convenience that will not change with passive signing and encouragement to use more remote spaces. Aggressive enforcement measures will likely change some behavior; however, there are some employees that will still try to trick the system by "shuffling" (plus, more aggressive parking enforcement than exists already is not a welcoming activity or positive sentiment that is appropriate for Belmont Center). In addition, there is

feedback from employees that cite the lack of convenient and affordable long-term parking.

- Prime customer spaces are more difficult to find. This lack of available front-door spaces for customers may be hurting Belmont's businesses. Although there are spaces available, there appears to be limited desire by customers to use rear parking lots.
- Belmont does not have designated commuter parking. With more than a dozen inbound trains running through Belmont Center per day, the average daily boarding is only about 150 people, which is almost the lowest number of people to board at any stop on the Fitchburg/South Acton line. Dedicated commuter parking would help to increase the number of people that take the commuter rail. While there is not the parking supply to accommodate hundreds of new commuters, there are under-utilized parking areas that would serve some commuter needs well.

A recommended parking program to best manage existing supply is outlined in the next chapter. Rather than addressing individual block faces or user groups, the strategies are designed to work in tandem to maximize their benefits and aggregate as a comprehensive strategy for the Center.

# Chapter 4. Parking Management Program

This section addresses the identified challenges and issues identified in the previous chapter: how can Belmont maximize its under-utilized parking supply and improve the availability of core spaces? The strategies recommended focus on changes that can be made in both the short and long-term timeframes. They also address the needs of various user groups: employees, customers, commuters, and residents.

Strategies for managing parking in the Center go beyond just parking. Policies and approaches that help maintain Belmont Center's small town feel, promote the thriving retail corridor, and capitalize on the Belmont Center commuter rail station are all important in building a successful downtown. Empowered by data collected in 2011, the consultant attempted to identify clear parking patterns in the Center that could be extracted reliably.

Based on input from downtown customers and business association members, a key objective of this effort was to improve customer parking availability and convenience in the Center. This was closely followed by the objective of ensuring a clear supply of parking for downtown employees and commuters that discouraged long-term parking in key customer locations, such as on-street and close to the front door of businesses. Finally, it was clear that a strategy to protect surrounding residential neighborhoods from spillover should be reinforced.

The following principles were adhered to when developing strategies for Belmont:

- Provide convenient parking for customers / clients
- Establish clear employee parking areas
- Accommodate commuter parking appropriately
- Manage residential neighborhoods from spillover
- Make it easier to get from lots to destinations

The initial recommended parking management strategies are summarized in Figure 21. Although listed separately, the strategies are not independent of one another; in fact, success of one is directly linked to the success of another. The management strategies comprehensively address parking issues in town, and a piecemeal approach will not be as effective as a complete package.

Program	Description
Revise parking permits	<ul> <li>Provide a business permit available to Town residents and non-residents employed in the Town Center. Permit holders would be able to park in designated on-street areas and some pay lots.</li> <li>Offer monthly rate discounts.</li> <li>Offer more convenient technology, including pay stations, pay-by-cell phone, and in-car meters.</li> </ul>
Establish more convenient customer parking	<ul> <li>Institute pricing in prime spaces.</li> <li>Have first 15 minutes free for short stops.</li> <li>Manage prices to maintain 15-percent vacancy rates (the ideal target).</li> <li>Invest surplus revenue back into the Center for needed improvements.</li> <li>Institute an ongoing utilization monitoring program to inform price adjustment.</li> </ul>
Introduce commuter parking	<ul> <li>Initiate modest pricing (on Royal Road and Concord Avenue).</li> <li>Expand commuter parking up Royal Road.</li> <li>Create optional program for residents to allow employee and/or commuter permit parking on their streets and dedicate surplus revenues to neighborhood improvements.</li> <li>Reduce barriers to walking from more remote spaces to the station.</li> </ul>
Improve walking connections	<ul> <li>Explore a more permanent easement from Leonard to the Claflin Lot, paid for by parking revenues.</li> <li>Install improved crosswalks and narrow wide roadways and intersections with curb extensions.</li> <li>Improve lot lighting and sidewalks.</li> </ul>
Create a signing program	<ul> <li>Install pedestrian wayfinding signs.</li> <li>Help reveal existing connections to drivers on how to get to Claflin Lot and other available parking.</li> </ul>
Use modern payment technology	<ul> <li>Install pay stations that accept credit card payment and pay-by-cellphone.</li> <li>Offer in-vehicle meters to employees and residents.</li> </ul>

### Figure 21 Summary of Initial Parking Management Program

# **Recommendation 1: Revise Employee Parking Permits**

A significant amount of employee parking occurs today in the "public parking" downtown core. Many employees will move their cars amongst time-restricted spaces throughout the day to avoid getting a ticket. Currently, employees are encouraged to park in the back of the Claflin Lot for \$3/day (exact change needed) or pay \$60/month for a permit. With an average month having 20 work days, there is little incentive for an employee to purchase a monthly permit. To incentivize the use of permits and the underutilized parking assets, pricing adjustments to the existing permit program are needed. It is recommended that the price drop at least 25-percent if not 50-percent to incentivize the use of the back of the Claflin lot by employees.

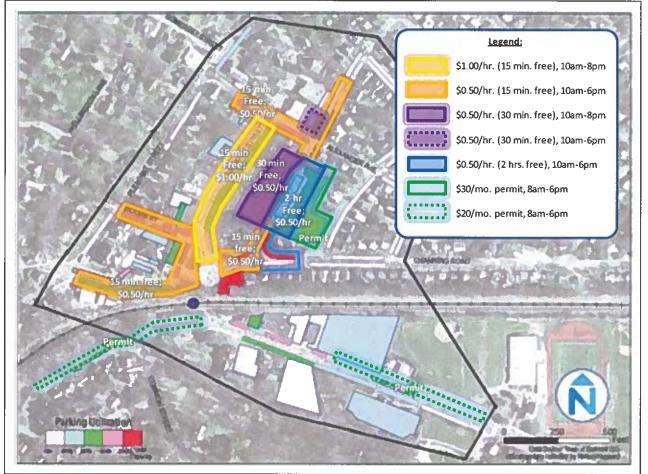
Keeping the current practice of reserving the back of the Claflin Lot for permit parking is ideal. Long-term parkers – specifically employees – should not be parking directly behind retail entrances. Making it easier for employees to obtain and display permits in the Claflin lot can be facilitated through the use of modern in-car meters.

# **Recommendation 2: Establish More Convenient Customer Parking**

Within the core public parking area, strategies to ensure availability for short-term visitors should be instituted, including introducing on-street pricing to maintain vacancy and extending time-limits.

### A) Implement Demand-Responsive Peak Pricing On-Street

Demand-responsive pricing helps to put customers first in the "public parking" area by creating vacancies and turnover of the most convenient "front door" curb parking spaces to ensure availability for customers and visitors. Parking rates should be introduced that will create a 15% vacancy rate on each block - or roughly one space free for every 7 parked cars - rather than relying on arbitrary time-limits. Rates in some places may be zero. Rates in other areas may be subsequently raised or lowered based on future occupancy counts. A likely first set of pricing tiers for Belmont is suggested in Figure 22 below.



### Figure 22 Recommended Starting Pricing Tiers

Likely initial pricing zones, based on observed peak utilization.

After an initial trial period, occupancy rates for each block should be reviewed and then adjusted down or up to achieve the 85% occupancy goal, as described earlier. To ensure that this happens on a regular schedule, promptly, and with clear assurance to policymakers, citizens, and the downtown community that the goal of parking prices is to achieve the desired vacancy rate, the following procedure for adjusting parking meter rates and hours is recommended:

1. **Set Policy:** By ordinance, the Board of Selectmen should establish that the primary goal in setting parking rates and hours for each block and each lot is to achieve an 85% occupancy rate. Additionally, the ordinance should both require and authorize Town staff to raise or lower parking prices to meet this goal, without requiring further action by the Board of Selectmen. A Parking Manager<sup>1</sup> should be charged with the responsibility of running the district, including monitoring occupancy rates and adjusting rates. A bi-annual or annual report to the Board of Selectmen should demonstrate adherence to the policy or seek authorization for new methods to support it.

2. **Monitor occupancy:** Utilization should be evaluated at least quarterly with a full-day sweep of prime parking areas. The goal is to ensure that there is about one free parking space on each block face. If installed, wirelessly-networked multi-space parking meters are capable of instantly transmitting current information on the number of spaces in use on each block where the meters are installed, giving the Parking Manager the ability to constantly monitor parking usage in the system. Reports can also be generated to track occupancy by the hour over the course of a day, weeks, or months.

3. Adjust rates: Armed with good information on recent parking occupancy rates, the Parking Manager should adjust the rates (and hours of operation) up or down on each block, to achieve the policy goal (an 85% occupancy rate) set by the Board of Selectmen. Typically, rates should be adjusted quarterly (four times per year), but in the case of major changes in the Center, such as the opening of a new development, it may be advisable to adjust rates in response to particular events. To provide additional input to the process, an advisory board (such as the Belmont Center Business Association) should review the proposed rate changes and provide feedback to the Parking Manager.

Revenues collected by on-street pricing should be directly invested into Belmont Center through the Town and Business Association. When people feed the meters, they should be aware through simple signage that their payment is being invested into Center improvements, such as benches, street trees, crossings, sidewalks, and more.

# B) Adjust Existing Time-Limits to Discourage Longer-Term Parking in Customer Areas

Once a policy of market rate pricing is adopted with the goal of achieving an 85% occupancy rate, then time-limits need not be instituted. With no time-limits, much of the worry and "ticket anxiety" for downtown customers disappears. In Redwood City, California, where this policy was recently adopted, Dan Zack describes the thinking behind the City's decision in this way:

Market-rate prices are the only known way to consistently create available parking spaces in popular areas. If we institute market-rate prices, and adequate spaces are made available, then what purpose do time limits serve? None, other than to inconvenience customers. If there is a space or two available on all blocks, then who cares how long each individual car is there? The reality is that it doesn't matter.

<sup>&</sup>lt;sup>1</sup> Initially, this can be an existing Town staff person, such as the Planning and Economic Development Manager, a new part-time manager, or a short-term consultant/contractor. In the long-term, the Town will have sufficient revenue to pay for a dedicated parking manager.

Given the concerns about some employees and commuters being capable of paying for a full day at prime spots, an interim time-limit of at least 4-hours can be implemented, though the Town should experiment with complete removal of time-limits in some areas to help demonstrate the turnover effect of pricing alone. The only places in the Center that could retain time-limits and not implement pricing would be the streets further away from Leonard Street where utilization is low today. Most of these are residential streets that could alternately benefit from Recommendation 3.

# **Recommendation 3: Introduce Commuter Parking**

Today, Belmont Center has no designated commuter parking at or around its commuter rail station. There are ten on-street spaces on Royal Road that are directly adjacent to the inbound tracks that have no regulations. As expected, these ten spaces are used to capacity at weekdays, filling up before 8am by residents and out-of-towners. The other nearby unregulated on-street parking spaces on Concord Avenue are not fully utilized; however, if there was designated commuter parking, it is believed that there would be an increased demand for park and ride.

# A) Initiate Modest Pricing on Royal Road and Concord Avenue

Commuter permit parking on Royal Road and Concord Avenue would designate specific areas (Monday – Friday, 8AM – 6PM) as commuter permit parking only. Modest pricing would be enough to cover administrative time but low enough to attract commuters to park near the station and not in the Claflin lot. An initial price might be \$20 per month. Belmont's relatively low number of boardings (154 on an average weekday)<sup>2</sup> could be increased by adding more dedicated parking nearby the station. Royal Road can accommodate 10 cars, and Concord Avenue (south of the tracks) can accommodate anywhere from 12-50 cars. New spaces could also be made available for commuters on upper Royal Road (25+) and Dumbarton Road (20+).





<sup>&</sup>lt;sup>2</sup> MBTA Ridership and Service Statistics, 12th edition. 2009.

# **B)** Commuter Permits in Residential Areas

As documented in the utilization data, on-street parking in the residential areas around the commuter rail station does not experience spillover parking - in fact, besides a few on-street parkers and repair vehicles (contractors, painters, etc.), the streets are empty<sup>3</sup>. Since general patterns indicate that residences do not need parking during the weekdays when they are at work, and commuters only need parking during the weekdays, it is logical that the on-street spaces in residential neighborhoods could be used for commuter parking. It is recommended that Belmont begin a voluntary program that allows residents on a block-by-block basis to opt in and have any amount of commuter permits they choose to be sold for parking on their street between the hours of 8AM and 6PM (residents would have free permits for themselves). The residents in return would reap the net income of the permit fees to invest in the neighborhood. This program would be advertized town-wide but only available if a majority of residents on the subject block agreed to opt in and agreed on the number of spaces, which could be amended at a later date with majority input.

Besides allowing commuter rail to potentially see greater ridership and take cars off the roads, the proceeds for sidewalk cleanup, street trees, pavement improvements, block parties – anything the neighbors decide – can be substantial. As an example, with 20 permits sold on Dumbarton Road at \$20 each per month, residents of that block could have a fund of nearly \$4,800 per year for improvements of their choosing.

# **Recommendation 4: Improve Pedestrian Connections**

Belmont has long sought to make key improvements to walking connections throughout the Center. However, the southern row of commercial properties along Leonard Street acts as a barrier to the Claflin Lot, and key large intersections limit pedestrian connections - especially to under-utilized remote spaces. Several possible strategies include:

# A) Better Connectivity Between Leonard Street and Claflin Lot

In the short term, better wayfinding signage should be provided to better direct customers where they are able to cut-through (explored in more detail in Recommendation 5). In the longer term, other businesses may provide access, such as Starbucks (Figure 24). Another option would be to investigate the potential of a more permanent easement to the Claflin Lot, paid for by parking revenues, that would provide a permanent, clear pathway. For example, access through Citizen's Bank, which likely has high security for offices and other areas of the bank, may sell an easement to the Town for 24-hour access through the building. This approach has worked to great success through the Marriott at the Kendall Station in Cambridge as well as through a number of business in Pi Alley in Boston.

<sup>&</sup>lt;sup>3</sup> With the exception of the end of Farnham Street at Claffin Street, which is impacted by long-term parkers intruding on residential driveways. This issue is addressed in the short-term implementation matrix in Chapter 5.

Figure 24Starbucks as a Gateway between Leonard Street and the Claflin LotRear Exit of StarbucksPatio Fence that Blocks Exit to Lot



View from Lot of Possible Starbucks Rear Exit



Possible area for expanded access from the Claflin Lot to Leonard Street (Starbucks)

# B) Improve Lighting and Sidewalks in the Claflin Lot

Improving the lighting would increase the utilization of the back of the lot in the evenings. The front of the lot fills up at night, but the back remains empty. Poorly lit off-street parking is a major impediment to the success of nighttime businesses in downtowns, especially for female patrons.

The sidewalk conditions leading to the lot from both Concord Avenue and Alexander Avenue are not adequate. Each sidewalk is too narrow, uneven, and not ADA compliant. Widening the sidewalks would provide for easier and safer access to Leonard Street (Figure 25). Each sidewalk should terminate in a marked pedestrian crossing across the parking lot driveways they encounter.



### Figure 25 Sidewalk Access to the Claflin Lot

Uneven narrow sidewalks terminating without crosswalks do not provide a good environment for pedestrians accessing the Claflin Lot.

# C) Install Improved Crosswalks and Narrow Wide Roadways and Intersections

Belmont Center's streetscape plan recommends many improved intersections, curb extensions, and added crosswalks that make access to vacant remote parking spaces easier, greatly expanding the supply that is within a short walk of Leonard Street. Today, intersection delays can make a short walk take too long for convenient parking. However, there are other areas that can still be improved to aid in pedestrian safety and access:

• Intersection of Leonard St, Royal Rd, Common St, and Concord Ave (south of the bridge): Current layout and streetscape plans are not sufficient for pedestrians to cross the street. Currently, with no stop signs, yield signs, or traffic lights, it is difficult for a pedestrian to navigate the intersection. This is particularly important for those trying to access the inbound train station platform.

The proposed configuration extends the median and adds a crosswalk, but the plan does not accommodate pedestrians trying to get to the station. A roundabout, extended curbs, and added median refuges would substantially aid a pedestrian in navigating this intersection, and would slow car speeds down while increasing intersection capacity.

 Intersection of Leonard St, Concord Ave., and Channing Road (north of the bridge): This intersection is entirely out of scale with Belmont Center, with a 60-foot distance to cross on foot without refuge where vehicles are turning and crossing. It lies on a principal desire line, with pedestrians regularly seen attempting to cross, and would serve as a key gateway to reserve parking on Concord Ave.

The proposed improvement adds curb extensions to reduce crossing distances of Concord and Channing Roads. These extension could be made more aggressive. Furthermore, the primary barrier of crossing Leonard should be made shorter with less travel lane capacity, which would significantly reduce conflict and decision points, increasing safety for pedestrians and motorists alike.

### Figure 26 Intersection of Leonard, Concord, and Channing



This vital intersection is very dangerous for pedestrians but is on a frequent pedestrian desire line.

# 

### Figure 27 Current and Recommended Improved Streetscape Plan

Current Plan

Recommended Improvements

Source: BSC Streetscape Plan and Nelson\Nygaard

# **Recommendation 5: Create a Signing Program**

While regulatory signing for parking regulations is prominent and plentiful in Belmont Center, signing that helps direct parkers to available parking areas is very limited. With very few signs leading to the Claflin Lot, there is no indication to visitors - or welcoming reminder to regulars - that convenient off-street parking exists. As Belmont seeks to attract businesses and customers, greater ease of finding parking spaces is important.

### Figure 28 Entrance to Claflin Lot

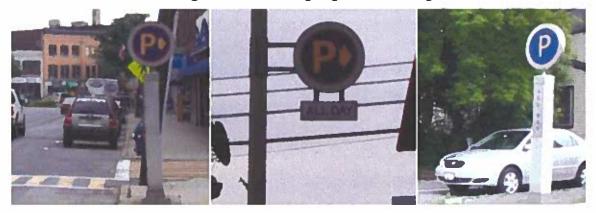


A lack of signage at the entrance to the Claflin Lot makes it difficult to navigate.

Many communities employ a clear and consistent signing system that helps direct visitors to off-street parking easily (see examples in Figure 29). Given Belmont's desire to resolve utilization issues in on-street spaces during high demand times in the evening and on Saturday mornings, clear signing to the existing municipal lot is an important component of understanding where to park.

There is also a lack of signing for pedestrians. Once a motorists exits their car in the Claflin Lot, it is not obvious to a visitor how to get to Leonard Street. Many may walk around the block of retail shops, unclear on whether or not it is permitted to cut through. Hanging signage in front of and in back of the shops that provide cut-throughs would be incredibly useful for pedestrians.

Figure 29 Parking Signs in Framingham



Distinguishable signage makes it easier for motorists to notice. Source: NelsoniNygaard

# **Recommendation 6: Use Modern Payment Technology**

The only paid parking area in Belmont Center is in the Claflin Lot. There is one pay and display station for the 131 spaces. The station is old, only takes bills and coins, and does not give change. A newer, more modern machine that takes credit cards, provides more information to customers, and is better able to track parking lot utilization would be an upgrade to both users and the Town.

The Town may also consider providing in-car meters to permit holders, Town residents, and commuters. In-car parking meters (also known as in-vehicle parking meters or IVPM) allow individual motorists to pay for parking by utilizing a personal metering device displayed in their vehicle (either set on the dashboard or hung from the rear view mirror). The palm size unit is usually provided to motorists who pay a refundable deposit and a nominal monthly fee. It provides

the motorist with convenience by eliminating the need to carry coins and pay for parking at curbside meters or pay stations in lots/garages.

In-car meters would be beneficial to those that park regularly on-street, in the Claflin Lot, or in designated commuter parking areas because of the greater convenience, reduced costs, and pricing flexibility. For example:

- Users only pay for actual time parked. Park for 5 minutes, pay for 5 minutes.
- No walking to the pay station just park your car, turn on your in-car meter, and go.
- No coins or exact change needed.
- Similar to an EZPass, users can log-into their account on-line, download their usage, and print receipts.



In-Car meters allow users to pay for their actual time parked - plus, they are very convenient in cold winter months because you just turn on your meter and go.

- In-car meters are at no cost to the Town; users pay for or lease the units.
- Town can easily give discounts to Town residents, monthly permit holders, and/or senior citizens.

# **Other Strategies**

Complementary strategies to the parking management plan can also help to encourage more efficient utilization of parking resources in the Center. These include:

- Increasing parking supply
- Bringing more Zipcars to Belmont
- · Changing parking regulations in select areas
- Installing bicycle racks

# **Increasing the Parking Supply**

The parking utilization study shows that Belmont has an abundance of available parking spaces in the Center at all times of day. Therefore, a central priority should not be to increase on-street parking supply as a tool to increase availability; however, increasing the supply in the core would be beneficial during the peaks.

**On-Street Supply:** Adding on-street spaces should be explored on the following blocks: (1) Alexander Avenue between Claflin Street and Cross Street (one-side only), (2) on Royal and Dumbarton Roads near the commuter rail station, and (3) on Leonard Street between Alexander Avenue and Pleasant Street (one-side only).

**Off-Street Supply:** There is little opportunity to expand lots. While the Claffin Lot can be restriped to maximize the number of spaces, the most efficient configuration adds less than 10 new spaces (Figure 31). This is not recommended.



### Figure 31 Re-Striping Configuration of the Claflin Lot

Re-striping the Claflin Lot would not substantially change the number of parking spaces. It is only a slight increase from 195 to 202 spaces and is not recommended.

# **Adding Zipcars to Belmont**

With Belmont's accessibility to MBTA buses and commuter rail, access to Zipcar car-sharing would benefit residents, employees, and visitors. Two Zipcars were added off Alexander Avenue in late 2011. More designated, visible Zipcars could be parked and made available near Leonard Street to help employees who use transit have on-demand access to a car when needed.

# **Changing Parking Regulations in Select Areas**

Prime spaces should be regulated to provide maximum benefit for those that need them. The loading zone spaces on Leonard Street should be evaluated to determine whether or not they are in the correct locations. Observations on Leonard Street indicate that most vehicles that are loading double-park, particularly larger trucks that would not be able to fit into a small loading zone space.

One option for loading would be to greatly lengthen the loading zone but restrict trucks to only load/unload during designated time periods. For example, there could be no parking in two longer stretches of Leonard Street from 6AM – 10AM for loading, with those spaces reverting to customer parking afterwards.

# **Installing Bicycle Racks**

Bicycle parking is an essential part of encouraging bicycling and typically serves two important markets. Long-term parking is needed for bicycle storage for residents and employees. This parking is located in secure, weather-protected, restricted access facilities. Short-term parking serves shoppers, recreational users and other. As well as security, convenient locations are a priority – otherwise, bicyclists will tend to lock their bicycles to poles or fences close to their final destination. Bicycle improvements increase mobility, reduce auto dependency, congestion and air pollution, and can be a very important mode of transportation for families with low income.

The Town of Belmont should invest in and install ABPB-compliant bicycle racks in the Center. Incorporating minimum bike parking facilities for new developments and encourage existing developments to consider making such improvements would help in making bicycle parking a routine part of all projects.

# **Application to Belmont Center**

An assessment of the parking management strategies recommended above in terms of how they might impact parking in the Center follows in Figure 32.

Figure 32	Evaluation of Initial Parking Management Program
-----------	--

Program	Purpose	Benefits	Limitations
1. Revise parking permits	<ul> <li>Provide a designated area for employees to park</li> <li>Use a simple fee structure</li> <li>Price most desirable locations the highest</li> <li>Price least convenient parking the lowest</li> </ul>	<ul> <li>Efficiently separates long-term parking from short-term parking</li> <li>Establishes clear area for employees according to their intended length of stay</li> <li>Discounts for monthly rates</li> </ul>	<ul> <li>Relies on business owners to advertise</li> <li>Requires highly visible signage designating permit parking</li> </ul>
2. Establish more convenient customer parking	<ul> <li>Encourage long-term parking away from most desirable spaces</li> <li>Increase availability of parking for customers</li> <li>Have first 15 minutes free</li> </ul>	<ul> <li>Maintain consistent availability in most desirable locations</li> <li>Visitors balance willingness to pay &amp; desire for convenience</li> <li>Visitors determine length of stay – no time-limits needed</li> <li>Market price in many zones is free</li> </ul>	<ul> <li>Pricing is a hot button issue</li> <li>Relies on education &amp; outreach</li> <li>Requires capital investment</li> <li>Need to periodically re-evaluate demand to adjust prices, hours, &amp; zones</li> </ul>
3. Introduce commuter parking	<ul> <li>Commuters can park in designated areas</li> <li>Can benefit residential neighborhoods that opt in for added supply</li> </ul>	<ul> <li>Allows more commuters to park during the day</li> <li>Increases ridership on the commuter rail</li> <li>Optionally provides revenue for neighborhood improvements</li> </ul>	<ul> <li>Need to reduce barriers to walking from more remote spaces to the station</li> <li>Expansion requires coordination with residents</li> <li>Constrains overall supply for other non-permit users</li> </ul>
4. Improve walking conditions	<ul> <li>Connect the Claffin Lot with Leonard Street</li> <li>Improve sidewalks and intersections</li> <li>Improve lighting</li> </ul>	<ul> <li>Allows for better access to/from Claffin Lot</li> <li>Better access to remote spaces on Concord Ave.</li> </ul>	<ul> <li>May require substantial investment</li> <li>Need to identify willing landowner for passageway lease</li> </ul>
5. Create a signing program	<ul> <li>Install wayfinding signs for pedestrian access</li> <li>Install vehicular signs for Claflin Lot access and others</li> </ul>	<ul> <li>Improves pedestrian circulation</li> <li>Better utilization of Claffin Lot</li> <li>Identifies other available parking</li> </ul>	<ul> <li>Must invest in brand, look and feel</li> <li>May need assistance from store owners</li> </ul>
6. Use modern payment technology	Efficiently and conveniently collect parking fees	<ul> <li>Provides visitors with a variety of payment options</li> <li>Efficient revenue collection &amp; monitoring</li> <li>Simplified enforcement</li> <li>Easily adjustable fee structure</li> <li>Easily adjustable hours of operations</li> </ul>	<ul> <li>May require retrieving a receipt &amp; returning to place in vehicle</li> <li>Increases sidewalk obstructions</li> <li>Requires capital investment</li> </ul>

# **Chapter 5.** Parking Action Plan

The following implementation matrix outlines short-term and long-term actions that are recommended to support the parking management program. Timeframes are considered by the consultant to be the most aggressive possible. Costs are estimated. On-going annual costs would be off-set by estimated annual parking revenues of approximately \$200,000 per year, enabling the Belmont parking pricing program to return nearly \$70,000 per year to Center improvements.

No.	Item	Description	Timeframe	Cost
1	Farnham Road Conflicts	Post driveway clearance signs and enforce	Immediately	< \$500
2	Outreach Program	Advertise parking program elements	May 2012	< \$500
3	Begin Passageway Negotiation	Identify likely partner for passageway between Leonard and Claflin lot	Summer 2012	N/A
4	Signing Installation, Phase 1	Install basic parking signs at Leonard businesses, on-street, and Claflin Lot	Summer 2012	< \$2,500
5	Reduce Employee Permit Fees	Reduce permit to \$30/month	June 2012	N/A
6	Parking Payment Device Leases	Initiate vendor selection for pricing on Leonard, side streets, and Claflin Lot	July 2012	N/A
7	Training & Education	Begin enforcement and staff training	August 2012	< \$2,500
8	Signing Installation, Phase 2	Install pricing signing	September 2012	< \$4,000
9	Begin Pricing	Begin new pricing; remove current Claflin pay station	September 2012	~\$150,000/yr. (net surplus ~\$135,000/yr.)
10	Commuter Parking Expansion	Sign new spaces on Royal Road and zones on Concord Ave.; Offer new commuter permit at \$20/month	October 2012 (pricing month 2)	< \$500
11	Residential Parking Ordinance	Offer optional monthly permit in residential areas	December 2012 (pricing month 4)	N/A
12	Parking Ordinance	Passage of parking management ordinance to prioritize availability	January 2013	N/A
13	Center Improvements	Initial package of Center improvements approved by business' association	Spring 2013 (pricing month 8)	~\$50,000
14	Initiate Passageway Lease	Open public walkway	Summer 2013 (pricing month 10)	~\$20,000/yr.
15	Improve Sidewalks	Expand sidewalks to Channing and Alexander	Fall 2013 (pricing month 12)	~\$50,000
16	Center Improvements	Annual package of Center improvements approved by business' association	Spring 2014 (pricing year 2)	~\$50,000/yr.
17	Streetscape Bond Payment	Begin payoff of 5-year bond for downtown streetscape improvements	Spring 2014 (pricing year 2)	~\$50,000/yr.

### Figure 33 Recommended Implementation Plan