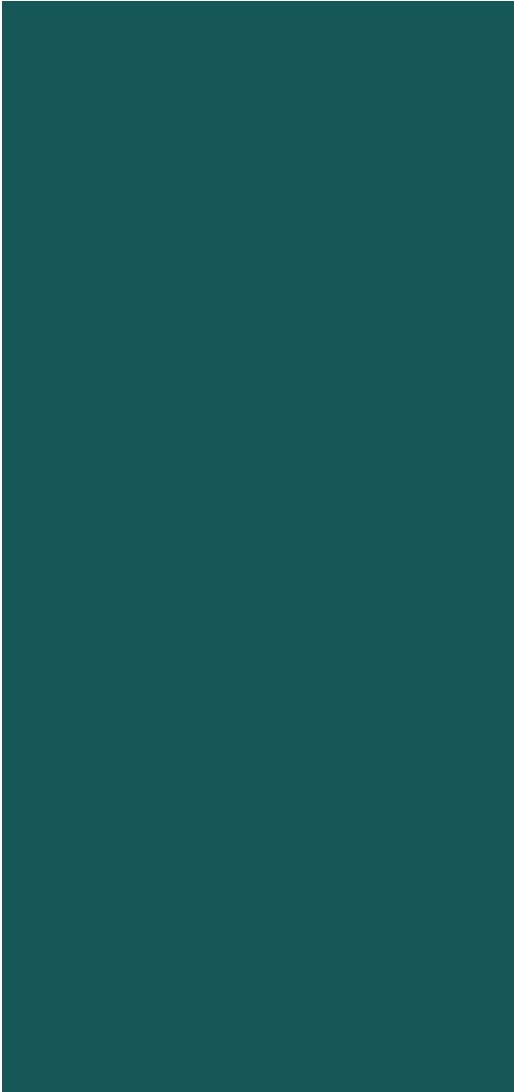




**Champlain College**  
**Strategic Transportation Plan**  
**Final Report**



***Submitted to:***

Champlain College

***Submitted by:***

Resource Systems Group, Inc.

May 31, 2013

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## EXECUTIVE SUMMARY

A 1994 Memorandum of Understanding between the City of Burlington and Champlain College ensured that the campus can develop within its boundaries on the condition that it is sensitive to the neighborhood context. The 2007 Champlain College Master Plan provides a road map for campus development through 2020. This Transportation Plan supports the Master Plan by recommending strategies to manage parking and transportation as the campus develops. As recognized in the campus master plan, it is simply not fiscally or environmentally sustainable or wise to build more and more parking supply, so this plan focuses on *managing* demand.

This plan was developed through a Campus Transportation Committee of faculty and staff representatives. The Committee met regularly from March 2011 through February 2012 to discuss barriers, issues, opportunities, incentives, alternatives, core improvements, and information/education campaigns.

Through this process, it has been determined that the new parking system will focus short-term (4 hours or less) parking at the core while shifting all-day or longer parking to off-site (Lakeside Avenue or Gilbane) facilities which are connected to the core via a high-frequency shuttle. The easiest, most equitable way of implementing this concept is by installing parking meters in campus parking lots.

This report summarizes the planning process and recommends actions for managing parking and transportation on campus. The time horizon for this plan is the full implementation of Campus Master Plan, which is 2020. The proposed parking plan is summarized in the map below, and next steps for implementing this plan are identified in the table.



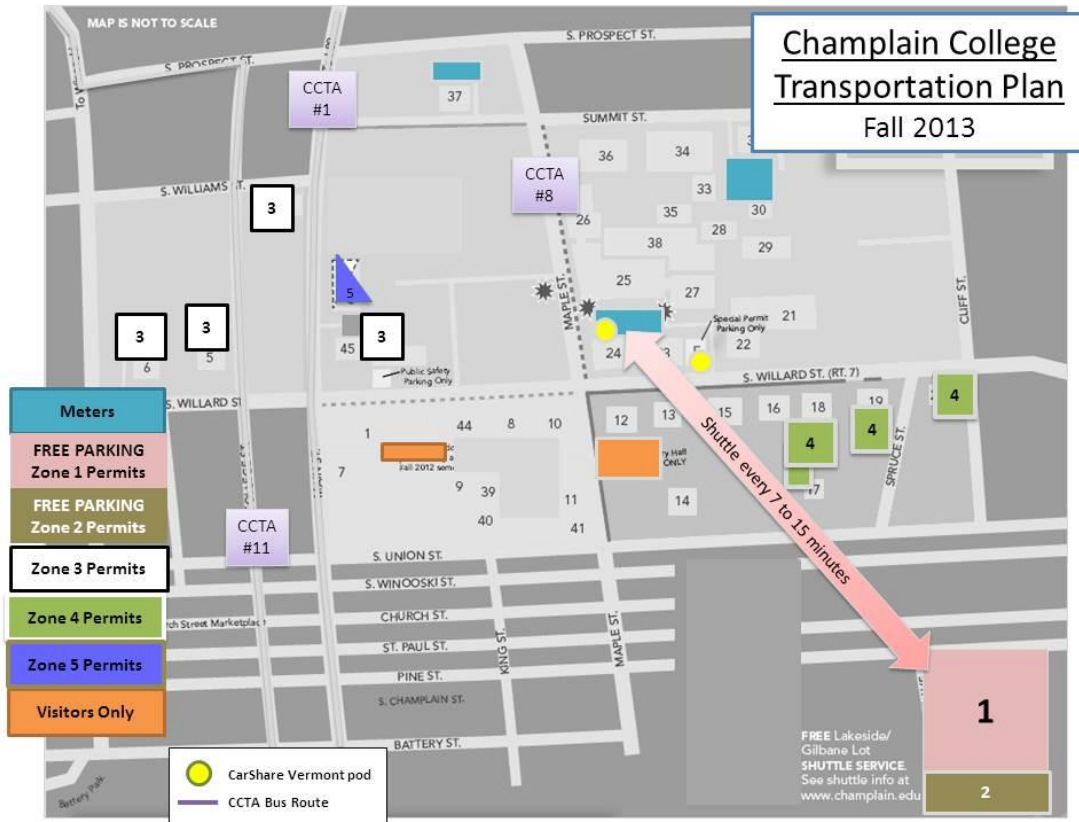
Action	Leader	Next Steps
Continue to work with the City of Burlington to mitigate on-street parking impacts around the core campus	Public Safety, Campus Planning & Auxiliary Services	Continue to work with the City to determine how on-street parking should be managed.
Continue working with CATMA to secure off-site parking to the north and east of campus	Finance and Administration	Continue to work with CATMA to secure long-term off-site parking to intercept drivers at convenient and sensible approaches to Champlain.
		Plan for shuttle service to connect these lots with the core campus.
		CATMA to collectively coordinate service with UVM and Fletcher Allen Health Care if feasible.
		In the meantime, improve shuttle service (particularly frequency) between current off-site parking at Lakeside and the core campus.
Implement Campus Information Campaign	Sustainability Office	Expand on the above lists and develop additional content.
		Identify ways of getting the word out (posters, email) to the campus community.
		Work one-on-one with each department to convey information and let the community know what to expect.
Implement incentive program and continue to work with CATMA to market existing programs	Human Resources	Review potential incentives with administration to determine which are feasible.
		Deploy incentives and market them to the campus through the Information Campaign described above.
Enhance bicycling and walking to/on campus	Campus Planning & Auxiliary Services, Sustainability	Implement a campus bicycle program as described above.
		Allow motorbikes under 50 cc's to park at bike racks.
		Reach out to Local Motion to implement best practices and explore partnership opportunities.
		Reach out to the City, UVM, and the CCRPC to partner on projects that extend past Champlain's campus, such as a bike share.
Release an RFP for parking meter vendors	Campus Planning & Auxiliary Services	Communicate existing resources to the campus.
		Develop list of desired features such as ability to accept debit cards, etc., and send to vendors for sales and installation estimates.

## 2013 Update

In 2013 this plan was updated to reflect more recent data and to include a “phased in” approach for Fall 2013. This phased in approach (shown below for Fall 2013) combines metered lots with increased permit prices based on a rezoning for the core campus.

Beginning in Fall 2013, lots that are 80% or more occupied during the weekly peak period will have parking meters installed. For Fall 2013, this will be the Summit Hall, MIC, and Bader lots. While the map above shows the campus parking system as ultimately envisioned in 2020, the process for implementing this plan involves installing meters in core campus lots as needed and on an individual basis as each one is at least 80% occupied during the weekly peak period.





## Champlain College Transportation Plan for Fall 2013

Zone	Who	Where	Total Number of Spaces	Costs* (per semester)
1	Faculty/Staff, Commuters	Lakeside, meters, any lot after 4PM and on weekends	266	FREE unless parked at a meter (then meter fees apply)
2	Residential Students, Commuters	Gilbane	200	FREE unless parked at a meter (then meter fees apply)
3	Faculty/Staff, Commuters	North, Sanders, 396 Main, 371 Main, Skiff	116	\$75 PT \$170 FT
4	Faculty/Staff, Commuters	Rowell, Jensen, South	63	\$90 PT \$200 FT
5	Residential Students (Radiography/Late Night Work)	Main Street Suites	28	\$170 FT
6	Residential Students at Quarry Hill	Quarry Hill	22	FREE unless parked at a meter (then meter fees apply)

Notes:

- Summit, Hauke and MIC to be metered (97 spaces total).
- All permits can use meters (but still must pay meter fees).
- Motorcycles and mopeds do not require permits; motorcycle parking will continue to be designated in the MIC lot and will not be metered. Mopeds will be allowed to park at bicycle racks.

\*Permit prices have not changed since 2003. These new prices bring the parking costs more in line with other Burlington parking facilities.



## 1.0 INTRODUCTION

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While providing a quality education and experience for its students, Champlain College needs to do its best to minimize and mitigate its impacts to its neighbors. A 1994 Memorandum of Understanding between the City of Burlington and Champlain College ensured that the campus can develop within its boundaries on the condition that it is sensitive to the neighborhood context. In 2003, the campus first introduced the parking program used today (consisting of zones and permits) to reduce traffic and parking in the neighborhood. The 2007 Champlain College Master Plan provides a road map for campus development through 2020. This 2012 Transportation Plan updates the original 2003 parking program and supports the Master Plan by recommending parking and transportation management strategies. This plan was developed through a Campus Transportation Committee of faculty and staff representatives. The Committee met regularly from March 2011 through February 2012 to discuss barriers, issues, opportunities, incentives, alternatives, core improvements, and information/education campaigns. This report summarizes this process and recommends actions for managing parking and transportation on campus. The time horizon for this plan is the full implementation of Campus Master Plan, which is 2020.

### 1.1 Purpose and Goals

The purpose of the Champlain College Transportation Plan is to prepare the campus for changes resulting from the implementation of the Campus Master Plan. Goals specific to each mode are as follows:

#### ***Parking***

- Reduce overall demand for parking.
- Provide a sufficient number of parking spaces to meet peak demand while reducing the number of off-street parking spaces on the core campus.
- Provide parking spaces in a system of on-campus and off-campus parking lots connected to the College's academic, residential and administrative facilities with a convenient and efficient shuttle service.
- Incorporate as appropriate spaces in regional park-and-ride and intercept parking facilities.

#### ***Roadway***

- Minimize traffic congestion by reducing the number of vehicles travelling to, within and between College facilities on and beyond the core campus.
- Provide safe and efficient access from the public road network to all parking facilities.
- Support efforts to reduce traffic speeds on public streets adjacent to College facilities.

#### ***Transit and Shuttle System***

- Provide an attractive, cost effective, and convenient service that is preferable to driving between campuses.
- Size vehicles as appropriate to meet ridership demand.
- Choose efficient vehicle technologies.
- Use efficient and safe routes.
- Minimize noise and air quality impacts.





- Coordinate shuttle service with other CATMA services and programs and CCTA.
- Incorporate intelligent transportation system technology to enhance operations and traveler information.

### ***ADA, Bicycle and Pedestrian***

- Improve ADA accessibility to and on campus.
- Provide connections to all transit stops.
- Work with City to provide for pedestrian and bicycle access, circulation and amenities in site planning for specific facilities.

## **1.2 Guiding Principles**

In addition to these goals, the Transportation Committee developed requirements that need to be included in any alternative management approach. The parking and transportation system must:

- Be **equitable** to all members of the campus community.
- Be **flexible** for users who may need to use different modes at different times.
- Consider the amount of time consumed by each trip; work schedules need to be flexible and the user's personal time needs to be respected as well.
- Include incentives for users.
- Be **simple** to use and understand.
- Continue to accommodate:
  - Campus service vehicles (facilities, IT, etc.)
  - Delivery vehicles
  - ADA
  - Loading and unloading
  - Visitors

## **1.3 Campus Master Plan**

The Campus Master Plan was completed in 2007 and provides a road map to develop the campus into the year 2020. In order for Champlain College to fulfill its mission, it needs to have certain physical facilities in place. This will frequently require that surface parking lots be replaced with buildings to make the most efficient use of the campus. Below are some of the main themes and directions of the Campus Master Plan.

### ***Campus Master Plan Vision***

- Support Champlain's future growth as a flexible, desirable, and attractive institution, while also supporting the historic, residential, quality of life and aesthetic character of the Hill.

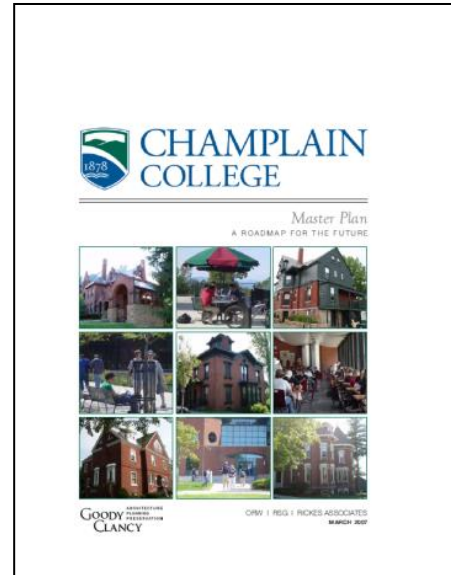




### **Planning Themes**

- Enhance the positive impacts and mitigate the negative impacts of the College on the neighborhood
- Sustainable accommodation of growth/change
- Address parking and transportation needs
- Build sustainability into day-to-day operations
- More effective and efficient use of space
- Inclusive planning approach with neighbors

## **1.4 Champlain College Sustainability Action Plan (Draft)**



This plan<sup>1</sup> by Sustain Champlain cites that 26% of the campus' total greenhouse gas emissions is from commuting to campus. The plan establishes the following goals specific to transportation:

- Have covered bike parking at least one central campus location by 2013.
- Create a bike commuter resource guide by 2013.
- Have 25% of employees register with CATMA by 2014.
- Set up a rideshare program for students by 2014.
- Install a “bike swipe” system (swipe Champlain ID) by 2018.
- Have at least 100 memberships (Faculty/Staff/Students) with CarShare VT by 2015.
- Attain a Bicycle-friendly University designation by 2015 (American League of Bicyclists).

These goals are consistent with the direction of this Transportation Plan.

## **2.0 EXISTING CONDITIONS**

This section describes the efforts that Champlain currently takes to manage its transportation demand and its parking system. Additional detail is provided in the presentations included in Appendix A.

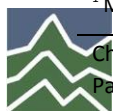
### **2.1 Transportation Demand Management**

Champlain College is a member of the Campus Area Transportation Management Association (CATMA), which affords it access to CATMA's award-winning programs and services for managing transportation demand:

- Emergency Ride Home
- Bike/Walk Rewards
- CCTA Bus Passes
- Carpools/RidesWork



<sup>1</sup> May 2012 Draft Plan at [http://www.champlain.edu/Documents/sustain\\_champlain/2011-2012Meeting%20Minutes/SAP\\_May2012Draft.pdf](http://www.champlain.edu/Documents/sustain_champlain/2011-2012Meeting%20Minutes/SAP_May2012Draft.pdf)



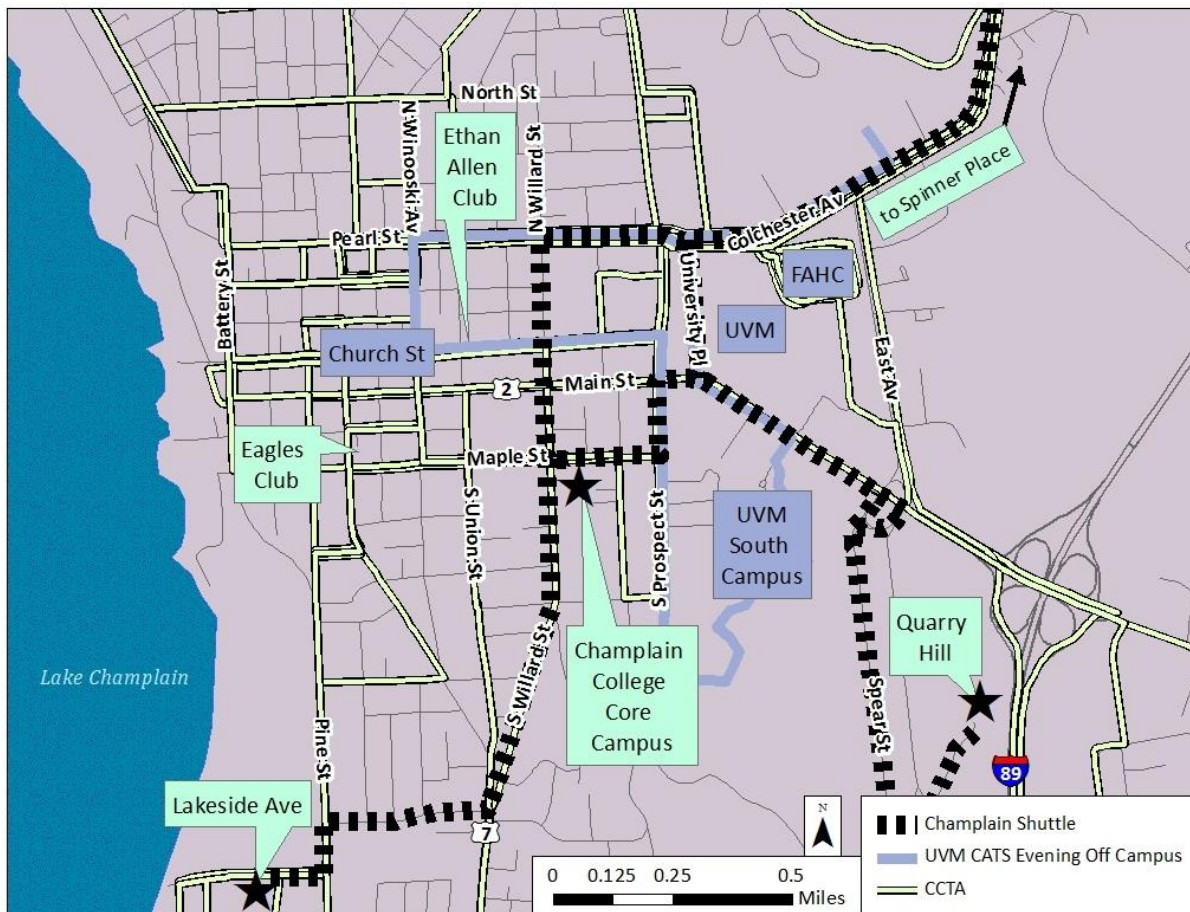
In addition, there is a CarShare Vermont pod with two vehicles on campus, giving people access to a car during the day so that they don't need to keep their own vehicle at the core, which reduces parking demand. Via a contract with CATMA, Champlain College affiliates are eligible for a free one-year CarShare Vermont membership.



### 2.1.1 Transit

Through CATMA, Champlain College affiliates can use their college identification to ride CCTA buses for free. Figure 1 shows the CCTA routes that serve the campus and the surrounding area. In addition, Champlain can ride the UVM CATS buses, but this does not appear to be widely known.

Figure 1: Transit service





CCTA



UVM CATS

In addition, the College has its own shuttle service to connect the core campus to Spinner Place, Quarry Hill, and Lakeside Avenue/Gilbane, as shown in Table 1. The Miller Center on Lakeside Avenue (Figure 2) has a transit lounge with coffee and a cantina for waiting passengers. A campus transit hub has been proposed with the future Hauke Center addition (expected to be built in 2013). A real-time shuttle locator (Figure 3) informs waiting passengers of when the shuttle will arrive. This information is available online, on mobile devices, and on monitors at the shuttle stops.



A major intercept parking facility, which would serve as a regional transit hub (the future South End Transit Center), is planned for the Gilbane lot (adjacent to the Miller Center) in the 2011 *Chittenden County Park-and-Ride/Intercept Facility Plan*.

**Table 1: Champlain College shuttle service (when school is in session; as of Fall 2012)**

Route	Days	Time	Frequency
<b>Gilbane/Lakeside Ave</b>	M-F	7AM to 6PM	Continuous loop
<b>Quarry Hill</b>	M-F	7:05AM to 5: 50PM	Every 30 min
<b>Spinner Place</b>	M-Th	7:05AM to 9:10PM	Every 15 min until 3:40PM, then every 30 min
	F	7:05AM to 6:10PM	
<b>Evening: Champlain-Quarry-Lakeside</b>	M-F	6PM to 9PM	Every hour
<b>Late night and weekends:</b>	M-Th	9:10PM to 12:00AM	Every 50 min
<b>Champlain-Spinner-Quarry-Lakeside</b>	Sat-Sun	11AM to 8:30PM	Every hour

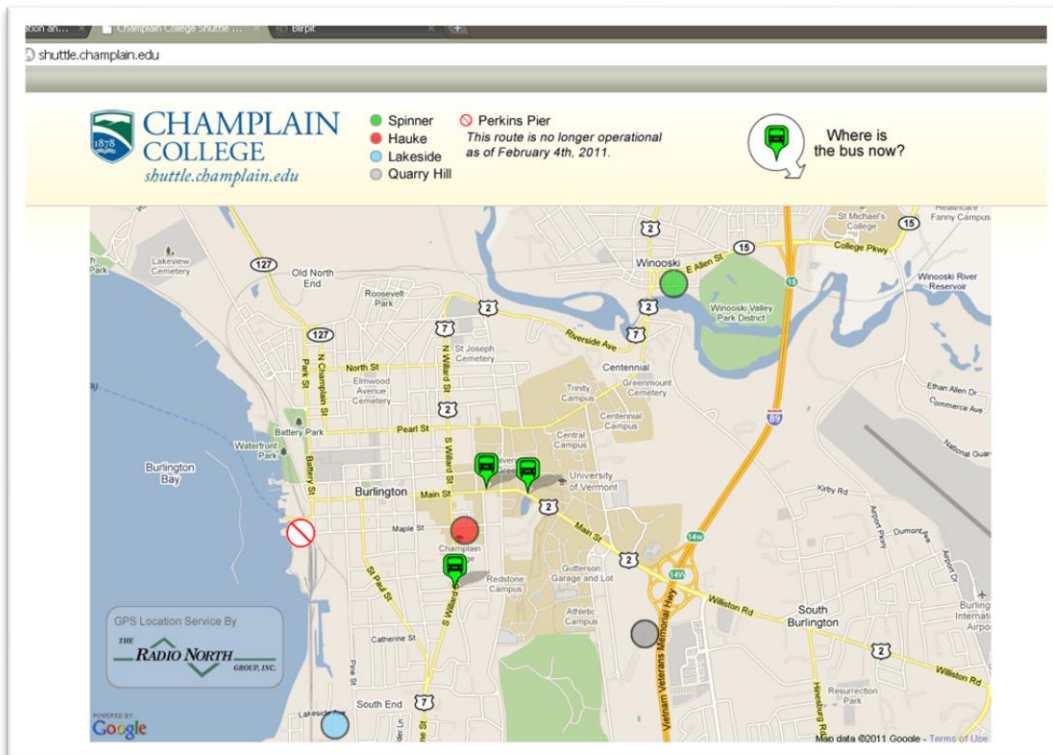




Figure 2: Lakeside Avenue transit lounge



Figure 3: Real-time shuttle locator



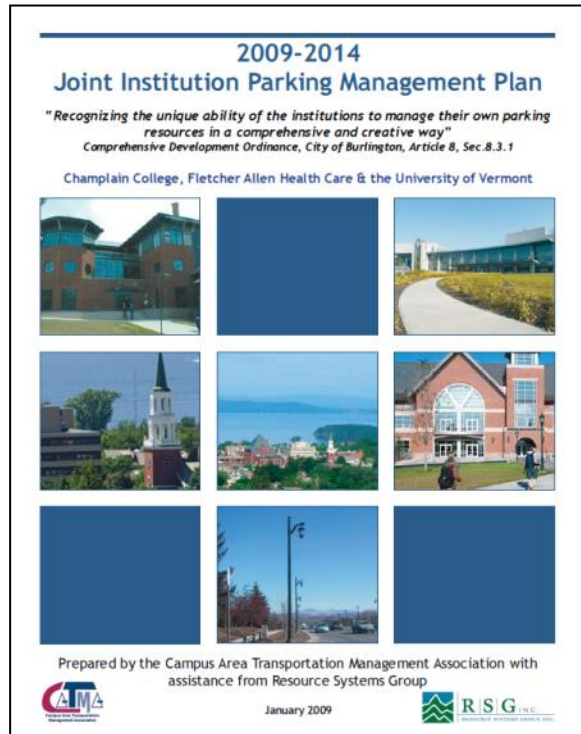
## 2.2 Parking

As of Fall 2012, Champlain College has a total of 871 parking spaces: 405 on the core campus and 466 off-site on Lakeside Avenue (this inventory does not include 173 on-street spaces in the core area because these are public spaces that cannot be exclusively limited to Champlain’s use). The following sections describe how parking is managed, existing and future supply, and weekly peak parking demand.

### 2.2.1 Management

Champlain College shows how it will comply with the Burlington City Parking Ordinance now and in the future through CATMA’s five year *Joint Institution Parking Management Plan* (JIPMP). The plan supports the College when it pursues the permits needed to build projects identified in the Campus Master Plan. The planning portion of the document is updated every five years, and there is an operations section that is updated annually to monitor parking conditions and management.

Champlain’s current parking management system is based on zones and permitting as shown in Table 2 and Figure 4. Permit prices have not changed since they were originally implemented in 2003.



**Table 2: Permit prices**


Zone	User Group/Permit Price
Zones 2-5	<u>Faculty/Staff and Commuting Students</u> Permits are \$100/semester for full-time affiliates, \$50/semester for part-time
Zone 6	<u>Residential Students</u> Free parking, served by shuttle every 7-12 minutes
Zone 7 & 8	<u>Residential Students w/ Special Needs</u> Permits are \$100/semester
Zone 9	<u>Evening Students</u> Free parking in Zone 11 & 6 or any lot after 4PM
Zone 11	<u>Faculty/Staff/Commuters</u> Free parking, served by shuttle every 7-12 minutes



**Figure 4: Parking zones**


**CHAMPLAIN COLLEGE**

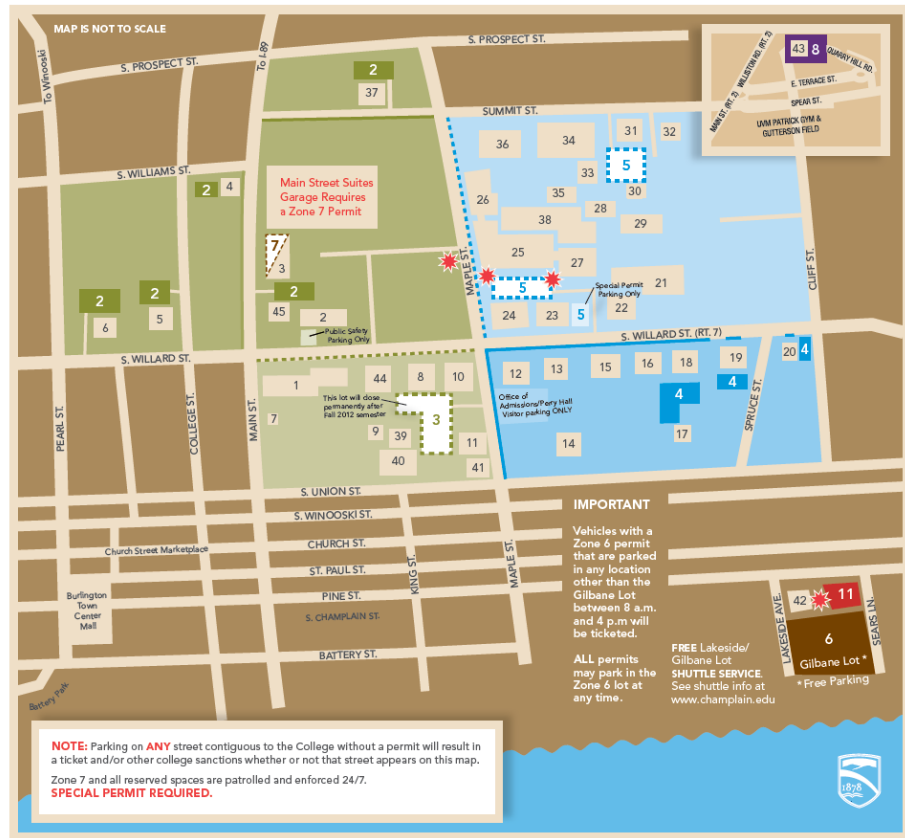
ZONE #/ PERMIT COLOR	LOT CATEGORY	BUILDINGS/ PARKING AREAS*
2	Faculty/Staff, Commuters	56 Summit, 396 Main, Sanders, North, 371 Main Street <b>ON STREET:</b> ——— Summit (Main-Maple), Main (Summit-South Willard)
3	Faculty/Staff, Commuters	Lakeview, Adirondack, Coolidge House <b>ON STREET:</b> - - - - - South Willard (Maple-Main)
4	Faculty/Staff, Commuters	Jensen/Rowell Halls, South Hall <b>ON STREET:</b> ——— Maple (S. Union-S. Willard) South Willard (Maple-Cliff)
5	Faculty/Staff, Commuters	Schilhammer Hall/MIC, Hauke Center/Bader Hall, Cushing Hall <b>ON STREET:</b> - - - - - Maple (So. Willard-Summit)
6	Residential/ Commuters	Gilbane Sarelire Lot <b>FREE SHUTTLE SERVICE</b> See shuttle info at <a href="http://www.champlain.edu">www.champlain.edu</a>
7	Residential Students with Special Needs	Main Street Suites
8	Residential Students	Quarry Hill
9	Free Evening Permit	Zones 6, & 11 (Fac./Staff - Lakeside) during shuttle hours. Any lot after 4 p.m. weekdays
11	Faculty/Staff Commuters	Lakeside

Parking lots on the map are indicated by the colors of each zone as noted above. The symbol  at 381 Main Street indicates a parking garage.

On-street permitted parking is noted by a line that corresponds with each zone's color and style.

Campus buildings are numbered according to the key to the right of the map.

Shuttle pick-up locations are noted by a star. 



**2.2.2 Supply: Existing and Future**

The main distinction in parking spaces is whether they are located at the core campus or off-site (for example, Gilbane or Lakeside Avenue). Figure 5 shows the number of parking spaces in the campus parking inventory. It is also important to note whether a space is on-street or in a lot/off-street; on-street spaces are not included in the campus inventory because they are public and cannot be exclusively reserved for Champlain. However, the Champlain cars that park in these spaces are counted to estimate parking demand.

Until the McDonald-Whiting and Hauke lots are no longer available (that is, when the Res Tri Phase 2 and Hauke/CCM construction projects begin), there will be 405 off-street parking spaces on the core campus and 466 spaces off-site at Gilbane/Lakeside (Figure 5). (The inventory does not include 173 on-street spaces that are available to Champlain constituents provided that they have a campus parking permit.)



Figure 5: Campus parking supply Fall 2012 (includes McDonald-Whiting (99 spaces) and Hauke (26 spaces) lots)

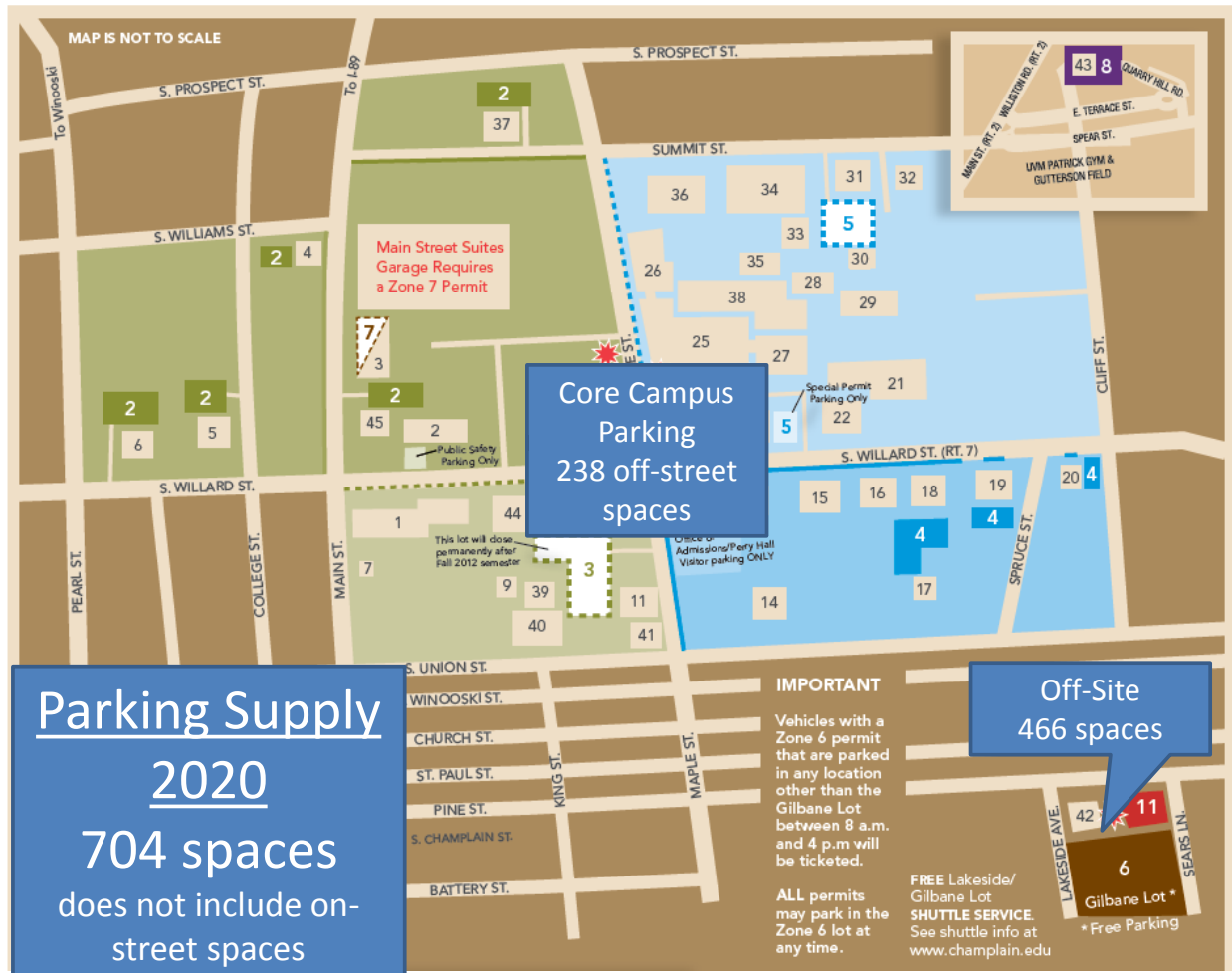


By 2020, when all the projects and buildings in the Campus Master Plan are expected to be built, there will be a total of 704 spaces in the campus inventory as shown in Figure 6. Many of the new buildings (described in Appendix B) are sited on existing parking lots to make the best use of the core campus. **In order to fulfill the campus Master Plan, parking will be shifted from the core to off-site.** The next section explains that even with these changes, there is still enough parking to meet the estimated demand.





**Figure 6: Campus parking supply Fall 2020**



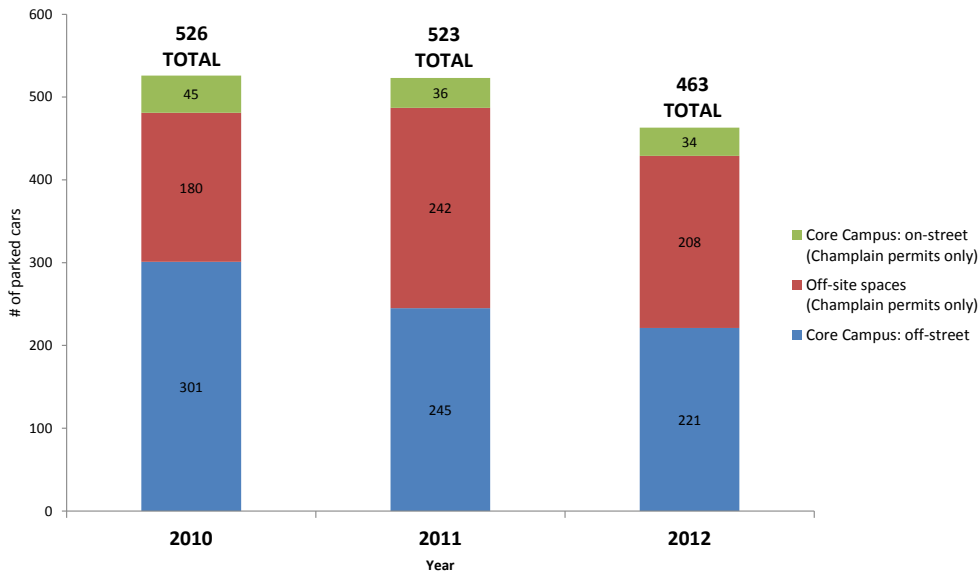
## 2.2.3 Demand

### 2.2.3.1 Based on Annual Parking Counts

Every year, RSG counts the number of Champlain College vehicles parked in the campus lots (core and off-site) and on the streets included in the permit system. The results are reported in the annual update to the CATMA JIPMP. Based on the November 2012 count, the peak parking period for the week for the core campus was 10:30-11:00AM on Wednesday, when the core campus occupancy (off-street and on-street) reached 255 vehicles. The peak period for the off-site facilities was between 12:00-2:00PM on Thursday, when the number of Champlain vehicles parked at Gilbane and Lakeside reached 208. These findings are consistent with counts from previous years as shown in Figure 7. Figure 8 shows the 2012 results by lot.



**Figure 7: Peak parking trends at Champlain College 2010-2012**



**Figure 8: 2012 Parking count results (also known as “peak parking demand”; figure does not include on-street parking demand of 34 spaces)**



These data also show the campus' most desirable parking lots. Only three lots are more than 80% full during the peak period: Bader/Hauke, MIC/East House, and Summit Hall.

### 2.2.3.2 Based on Permit Sales and CATMA Survey Data

Peak parking demand has also been estimated using CATMA survey data; this method applies permit sales to the estimated number of people on campus during the peak period. Using this method, 601 total parking spaces are estimated to be needed during the peak period as shown in Table 3. These data also suggest which user groups the demand is coming from. For example, Residential Students, who park long-term (at least an entire day) are required to park their cars at Gilbane. The highest demand comes from full-time faculty and staff, who are also parking all day.

**Table 3: Estimated peak parking demand (per 2012 JIPMP update)**

#### Estimated Parking Demand by User Group

	Parking Capacity in 2020	Demand (Based on CATMA data and permits sold Fall 2012)	
Core Campus/Short-Term Parking	238	Daytime Commuters	105
		Faculty/Staff Part-Time	5
		Vehicle Fleet	13
		<b>TOTAL Short-Term Demand</b>	<b>123</b>
Off-Site/All-Day Parking	466	Residential Students	220
		Faculty/Staff Full-Time	258
		<b>TOTAL All-Day Demand</b>	<b>478</b>
<b>Total</b>	<b>704</b>		<b>601</b>

These two approaches suggest that each week, the parking demand peaks between 463 and 601 vehicles. The 2020 parking supply of 704 spaces is more than sufficient to accommodate this demand.

Although more buildings are planned for the campus, the College does not plan to increase enrollment, so parking demand is not expected to increase between now and 2020.

## 2.3 Conclusion

There will be enough parking for Champlain College, but it will mostly be off-site and connected to the core with shuttles. The shuttles will be arranged to leave the core and Lakeside about every 8 minutes, as described below in Section 3.5. Parking will not be as convenient as it has been in the past. But the College will provide as many transportation alternatives, amenities, and incentives as feasible to minimize the inconvenience of off-site parking and make the alternatives attractive.

The Transportation Committee discussed these results, which were also presented at Town Meeting, College Council, Faculty Senate, and Staff Council meetings. (Presentations are provided in Appendix A.) Comments and feedback were collected and are summarized in Appendix C. Most of the Transportation Committee discussions focused on developing a time-based management system, as opposed to a user-group system with unlimited time like the current permit system. Management strategies and recommendations were guided by the principles in Section 1.2. The basic premise for managing parking will be to preserve core parking for short-term users who only need to park for a class or a couple hours, while anyone who needs to park longer will park off-site and take a shuttle. After reviewing a variety of approaches (discussed in Section 4.0), this approach was endorsed by the College Council at its November 11, 2011 meeting.



## 3.0 BASIC TRANSPORTATION SYSTEM IMPROVEMENTS

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This section responds to the comments and feedback received from the campus and identifies improvements that should happen regardless of the parking/transportation management strategy pursued:

- Coordinating On-Street Parking Management with the City
- Regional Intercept Lots and Park-and-Rides
- Campus Information Campaign on Transportation & Parking Options
- Incentives to Use Transportation Alternatives
- Shuttle System Improvements
- Bicycle and Pedestrian Connectivity

The Interim Memo in Appendix D can be looked to for more detail. The first step in implementing these core improvements is finding a home for them. For instance, the incentives are essentially employment benefits and might fit best with the Human Resources Department.

### 3.1 On-Street Parking Around Core Campus

One of the most important things for the evolving campus is to avoid shifting parking demand into the adjacent neighborhoods. Therefore, working with Burlington Public Works to effectively manage on-street parking is the first step to be taken in implementing the campus transportation plan. Possibilities include installing parking meters or signed (2-hour) time limits (such as those along Pine Street adjacent to Dealer.com). Champlain College is working with the Burlington Department of Public Works to discuss the prospect of installing on-street parking meters managed and enforced by the City. Any proposal will need to be approved by the Public Works Commission. More detail about on-street parking is provided in Appendix E.

#### NEXT STEPS

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- Continue to work with the City to determine how on-street parking should be managed.

*Timeframe: Immediate/in progress*

Leader: Public Safety, Campus Planning & Auxiliary Services

### 3.2 Regional Intercept Lots and Park-and-Rides

The most frequently mentioned comment heard from campus (including Transportation Committee, Faculty Senate, Staff Council, College Council, and general campus outreach) is the need for off-site parking to intercept commuters from the north and east of campus. Frustration was expressed with the inefficiency of having to drive (from the north) past the core campus to park at Lakeside Avenue only to take a shuttle back to the core. It is thereby recommended that the campus work with CATMA to secure off-site parking to the north and east of campus.



Figure 9 shows the intercept parking that is planned for Chittenden County, and indicates that the top priority is for a facility at Exit 14. Specific campus comments pointed to a desire for off-site parking to intercept Champlain-bound traffic from Colchester and the New North End of Burlington along North Avenue or VT 127. The Chittenden County Park-and-Ride Plan includes a recommendation for a park-and-ride near the railroad on VT 127 (just north of Park Street/Manhattan Avenue in Burlington) to be built in 5-10 years. The Chittenden County Plan also recommends a park-and-ride in Colchester on VT 127 near an interchange with the proposed Circumferential Highway, although this may now be infeasible since the Circ has been cancelled.



One of the roles that CATMA

serves for Champlain is brokering off-site parking. The campus administration has asked CATMA to secure off-site parking to intercept drivers from the north and east of campus and address the issues noted above.

## NEXT STEPS

- Continue to work with CATMA to secure long-term off-site parking to intercept drivers at convenient and sensible approaches to Champlain.
- Plan for shuttle service to connect these lots with the core campus.
- Explore coordinated service with UVM and Fletcher Allen Health Care via CATMA.
- In the meantime, improve shuttle service (particularly frequency) between current off-site parking at Lakeside and the core campus.

*Timeframe: On-going*

*Leader: Finance and Administration*

### 3.3 Campus Information Campaign: “Be Part of the Solution”

Communicating information about programs, services, upcoming changes, and incentives to the campus community is critical to the success of the transportation plan. It became clear during Transportation Committee meetings that many in the campus community are unaware of existing programs and services, such as the CATMA Emergency Ride Home and Bike/Walk Rewards programs, and CarShare Vermont. Most notably, people mentioned that they would take the CCTA bus to Burlington, except that it lets them off at Cherry Street and then they have no way of getting to campus. Commenters went on to suggest that there should be a shuttle connecting the downtown and campus. However, there is the College Street shuttle which is free and runs every 15 minutes to connect the eight blocks between Cherry Street and the core campus. Therefore, some gaps are not physical, but communicative and should be addressed in the Campus Information Campaign.



The purpose of this campaign will be to explain where and how to park, and how to get around conveniently even if your car is parked off-site. The program will market transportation alternatives and improve user information by communicating parking and transportation options. Goals of the campaign could include:

- Notify people of upcoming changes (such as the Whiting-McDonald lot disappearing).
- Increase effectiveness of changes.
- Decrease potential for complaints.
- Reduce parking demand.
- Increase use of alternative transportation.

Sending the message that the system is flexible rather than “all or nothing” is critical. Addressing perceived barriers and advertising incentives are key elements. For example, a “What if....?” series of questions could be used to educate the community about their options:

- What if I take the bus to work but then have an emergency, like needing to pick up my sick child at school?
  - Option 1: Use one of the CarShare Vermont cars that are parked on campus.
  - Option 2: Use the free CATMA Emergency Ride program to get reimbursed for a taxi to take you to your child’s school and then home (as long as you regularly use alternative transportation). (Covers up to \$60/ride, eight times/year.)
- What if I park down at Lakeside but then have a mid-day appointment or meeting that I need my car for? Or what if I have a last minute meeting scheduled off-campus?
  - Option 1: Use one of the CarShare Vermont cars that are on campus.
  - Option 2: The shuttles that connect Lakeside and the core campus will be scheduled to run about every 8 or 9 minutes.
- What if I want to ride my bike to work but need to look presentable for meetings?
  - Showers, changing facilities, and lockers for your gear are/will be available.
- What if I want to carpool but I have an early/late commitment that prevents me from catching a ride?
  - Check the CCTA schedules to see if one of the routes connects your house and campus. Your Champlain College ID gets you a free ride.
  - Check the CATMA ride-matching services for a carpool that fits your schedule.
  - Use CATMA’s Emergency Ride Home program.
- What if I want to walk or bike to work but the weather is bad?
  - Check the CCTA schedules to see if one of the routes connects your house and campus. Your Champlain College ID gets you a free ride.
  - Check the CATMA ride-matching services for a carpool that fits your schedule.

A similar list of “Why should I...?” questions can be developed to convey benefits and incentives (such as in Section 3.4):

- Why should I ride the bus?
  - It’s free with your Champlain College ID.
  - Saves you money on parking.



- Saves you money on gas.
  - You can text, check email, read the paper, etc. while riding the bus-you can't do that while you drive your car.
  - Reduces stress- no difficulty looking for a parking space, no road rage.
  - It supports the campus sustainability initiative and reduces Champlain's carbon footprint.
  - If you miss the last bus or have an emergency, you can still get where you need to go with a CarShare Vermont car or the Emergency Ride Home program.
- Why should I bike or walk to work?
    - CATMA Bike/Walk Rewards: You win prizes!
    - If the weather turns bad, you can take the CCTA bus for free.
    - Saves you money on parking.
    - Saves you money on gas.
    - It's healthier for you.
    - It supports the campus sustainability initiative and reduces Champlain's carbon footprint.
    - If you have an emergency, you can still get where you need to go with a CarShare Vermont car or the Emergency Ride Home program.

The Sustainability Office has taken the lead on this initiative.

Additionally, developing a map that shows how accessible many destinations are by walking might be helpful: for example, showing that downtown, the College Street Shuttle, and several "core" campus parking lots are all about a 10-minute walk from the core campus. People may not realize just how walkable the neighborhood is, and such a map would illustrate that many destinations are easier to walk to than driving a car and finding a parking place.

Signs should also be installed at the core campus noting that parking for more than four hours is available at the Miller Center on Lakeside Avenue.

## NEXT STEPS

- Expand on the above lists and develop additional content.
- Identify ways of getting the word out (posters, email) to the campus community.
- Work one-on-one with each department (for example, the Dean's Office and Academic Affairs) to spread convey information and let the community know what to expect.

*Timeframe: Immediate/in progress*

Leader: Sustainability Office

## 3.4 Incentives

Several incentives for using alternative transportation exist through CATMA. Additional incentives to encourage early adoption and shift users from the core campus can be created as well. Possible incentives to be considered by the campus are (the cost of these incentives will need to be estimated by campus administrators, but orders-of-magnitude are suggested by the symbols \$, \$\$, and \$\$\$):





- Free on-campus meal for early adopters, \$
- Additional vacation time, \$\$
- Alternative work schedules/telecommuting, \$
- On-site amenities, such as child-care, \$\$
- Preferred parking or reduced parking costs for car/vanpools, \$
- Covering off-site parking to protect cars from sun/snow, \$\$
- Coffee cards, \$
- Lunchtime shuttles to/from Church Street<sup>2</sup>
- Provide on-campus bike center with spare tubes, pumps, tools, etc., \$\$
- Parking cash-out, \$\$\$
- Electric bicycles for the uphill ride to core campus, \$\$
- Electric bicycle recharging stations, \$\$
- \$50 towards a bike tune-up each year that you ride to work 20 times, \$
- Reward every participant with a small gift (like a box of candy) and hand-deliver it so that it is visible and raises awareness of programs, \$
- Discounts to local merchants (already in place with CATMA)
- Incentives to encourage employees to live closer to work, (e.g. homebuyer downpayment assistance), \$\$\$

## NEXT STEPS

- Review potential incentives with administration to determine which are feasible.
- Deploy incentives and market them to the campus through the Information Campaign described above.

*Timeframe: Immediate*

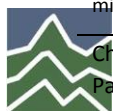
Leader: Human Resources

## 3.5 Shuttle System Improvements

Based on the feedback received from the campus and general observations, the following base improvements are recommended for the shuttle system.

- Shuttles should run about every 8 minutes.
- Extend the service hours to 6AM and midnight.
- Work schedules should be flexible to accommodate people riding the shuttles.
- Smaller, more comfortable, efficient/potentially alternatively fueled vehicles should be used.
- Include onboard storage racks because people have laptops, books and bags that take up quite a bit of room.
- Make sure vehicles are kept clean.
- There should be bike racks on shuttles.
- GPS (conveying traffic data) should be installed to help drivers choose fastest/least congested route.
- Make sure the pedestrian connection between Gilbane and Lakeside is safe and convenient.
- Conduct short survey of students and faculty/staff to find out what additional transit amenities are desired.
- Include ADA accessible shuttle vehicles.

<sup>2</sup> This incentive may be redundant given that the College Street Shuttle already connects South Willard Street to Church Street every 15 minutes.



Beyond these improvements, two alternative strategies were considered in terms of cost-efficiency: 1) contracting shuttle service to a provider such as Mountain Transit (which Champlain College currently does); or 2) purchasing vehicles and hiring drivers. Table 4 provides a preliminary cost estimate of annual expenses to the College, assuming that the extended service hours and frequencies listed above are in place. The first two options, Mountain Transit and Premier, are service providers with whom Champlain would contract to provide service; the other options are for various shuttle vehicles and fuels that the College would purchase and operate itself. Additional details on this cost estimate are provided in Appendix D. If passenger loads allow, the College may also want to consider using vehicles that do not require a Commercial Drivers License (CDL)<sup>3</sup>, so that students with flexible schedules can be hired as drivers.

**Table 4: Preliminary cost comparison of shuttle alternatives**

Vehicle type/service provider	Total Vehicle Costs/Year	Annual Operating Cost	Total Annual Costs
Mountain Transit		\$ 551,200	\$ 551,200
Premier		\$ 937,040	\$ 937,040
2011 Ford F550 ElDorado Aero Elite 290 (Diesel)	\$64,658	\$ 485,056	\$ 549,714
2011 Ford E350 ElDorado Aerotech 200 (gas)	\$51,727	\$ 455,659	\$ 507,385
2011 Ford E450 ElDorado Aerotech 220 (gas; wheelchair accessible)	\$38,795	\$ 455,659	\$ 494,454
2011 Ford E350 ElDorado Aerotech 200 (CNG)	\$71,124	\$ 396,864	\$ 467,988

## NEXT STEPS

- Public Safety has taken the lead on this and the new shuttle vehicle is in operation.

### 3.6 Encouraging Bicycling and Walking

Improving bicycle and pedestrian connectivity will improve accessibility, safety, quality of life, and campus cohesion. A campus bicycle program could include the following:

- Provide more bike racks, lockers, cages, and indoor storage. (An indoor storage area or cage could be accessed using a Champlain ID so that individuals don't need to bring bike locks.) Bike storage should be sheltered from weather, secure, and well lit.
- Showers and gear lockers.
- Mopeds/scooters/electric bicycles (any motorbike under 50 cc's) should be allowed to park at a bike rack.
- Bike racks could be added to shuttles.
- Add a bike "fix it" station (right) that includes tools and an air pump for self-service.



<sup>3</sup> Vehicles designed to carry 15 or more passengers (including the driver) require a CDL.



Champlain should reach out to potential local partners to see if there are any collaborative opportunities. For example, Champlain could talk to Local Motion to explore the potential for opening a bike shop on campus that helps with repairs, provides information, gives away bike bells and lights, and sells discounted bike locks (the campus could buy locks in bulk in order to pass on the discount to faculty/staff and students). Likewise, the Bike Users Group (BUG) at UVM has started a bike share (see example below) on that campus. A city-wide bike share involving the City, UVM, CATMA, and Local Motion could expand on this concept to improve bicycling connectivity. Electric bicycles have been suggested to assist with hills. Funding opportunities to support bicycling and walking may exist with the Chittenden County Regional Planning Commission (CCRPC).



## NEXT STEPS

- Implement a campus bicycle program as described above.
- Allow motorbikes under 50 cc's to park at bike racks.
- Reach out to Local Motion to implement best practices and explore partnership opportunities. The Safe Streets Collaborative is one potential partnership.
- Reach out to the City, UVM, and the CCRPC to partner on projects that extend past Champlain's campus, such as a bike share. Consider a pilot program at Lakeside to test the viability.
- Communicate existing resources to the campus.
- Consider pursuing Bike Friendly Campus designation from the League of American Bicyclists.

*Timeframe: On-going/in progress*

*Leader: Campus Planning & Auxiliary Services, Sustainability*

## 4.0 ALTERNATIVES FOR MANAGING PARKING

The Transportation Committee discussed several alternatives for managing parking and weighed the pros, cons, and feasibility of each. This section presents these alternatives and summarizes the discussion, explaining the process by which the preferred alternative of installing parking meters in campus parking lots was selected.

Frequently, the alternatives overlapped each other: for example, building short-term, more flexible parking into the system might be accomplished through the installation of meters.

Among the comments heard from campus input and the Committee were:

- Include a certain amount of free parking each semester, for example, UVM has an Occasional Use Parking Permit Program in which participants surrender their full-time parking permit in exchange for one day permit per month; additional permits can be purchased for \$2-\$4 per day.
- Parking permits (if they are still used) for commuter students and adjunct professors could be related to the number of credit hours they are taking/teaching.
- Redefine "Resident Student" (for parking permit purposes) as any student who lives within 1 mile of the core campus. This is intended to prevent students who live close to campus from using a Commuter Student parking permit and unnecessarily driving a couple blocks to campus. Making



these students ineligible for a commuter permit and preventing them from parking at the core will make more core parking available and should reduce unnecessary driving.

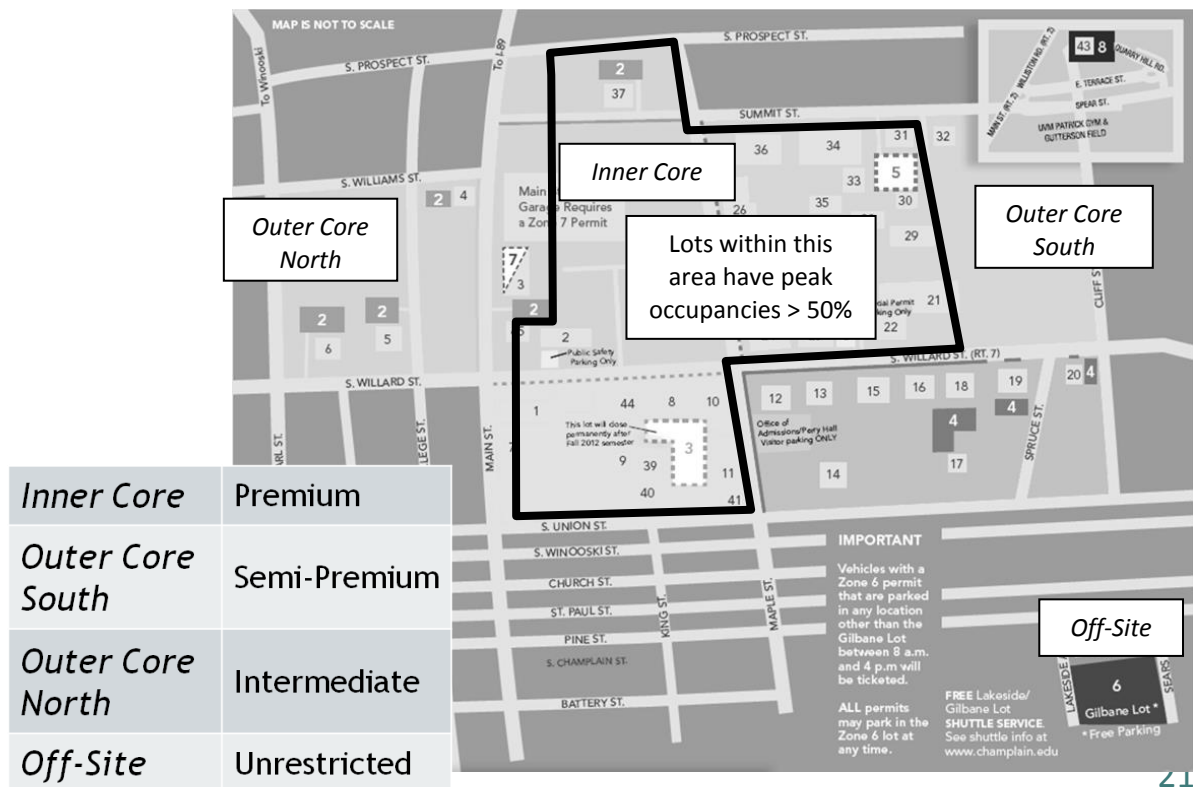
- Parking prices need to be set to prevent “lazy driving” to distinguish between *convenience* and *necessity*.

## 4.1 Alternative 1: Re-zone Parking Lots

As shown in Section 2.2.3 above, there are many parking lots at the core campus that are underutilized because they are the least desirable within their zone. Re-zoning the parking system according to peak period occupancy would maximize use of existing capacity.

The black outline in Figure 10 encircles the lots in the campus core that have greater than 50% peak occupancies. This area, as noted in Table 5, is referred to as the Inner Core. The Outer Core includes the core campus parking areas that have peak period occupancies of less than 50%. The Outer Core is divided into North and South, because the Outer Core South is closer to the core campus (and has generally higher parking occupancies than the Outer Core North, although still less than 50%) and because the Outer Core North requires crossing Main Street to access the core campus. Therefore, the Outer Core South is interpreted as more desirable than the Outer Core North. Demand for these desirable areas could be managed through pricing (permits or meters) and/or time limits (for example, 2 hours).

**Figure 10: Alternative Re-zoning of Campus Parking (based on historic (2010) parking occupancy)**



**Table 5: Alternative Re-zoning of Campus Parking**

New Zone	Lot	Lot Capacity	Total Zone Capacity	Pricing Options	Time Limitation Options
Inner Core	Durick lot	3	47	Premium	Short-term (~2 hours)
	56 Summit St. lot	29			
	Cushing/Pearl lot	15			
Outer Core South	Jensen lot	9	63	Semi-Premium	Short-term (~2 hours)
	Rowell lot	41			
	South House	13			
Outer Core North	396 Main	20	42	No change from current	~ 3hours
	North lot	10			
	Sanders lot	12			
Off-Site	Gilbane	200	466	Free/no change from current	Long-term (3+ hours)
	Lakeside Avenue	266			
Special: Service Vehicles	SLC/IDX	5	5	Not applicable	Not applicable
Special: Residential Students with Special Needs/Zone 7	381 Main (Main St Suites)	28	28	No change from current	No change from current
Special: Visitor	Perry Hall (Admission Visitor parking only)	16	16	No change from current	No change from current
<b>TOTALS</b>		<b>667</b>	<b>667</b>		

***Alternative 1 Conclusion***

*This alternative was not considered to be as simple or flexible as other alternatives and was eventually dismissed.*

**4.2 Alternative 2: Restrict Eligibility**

Restricting who is eligible to park at different locations was also considered. For example, faculty/staff/students who live within ½ mile of the core campus would be ineligible to purchase a parking permit, thereby freeing up parking spaces for others.

***Alternative 2 Conclusion***

*This alternative would require continuation of the permit system and base it on user groups. However, the Transportation Committee decided that a time-based system (discussed below) that is open to all is more fair and equitable. Therefore, this alternative was dismissed.*

**4.3 Alternative 3: Offer Short-term Parking Permits**

Currently only semester-long permits are available. This requires users to commit to never driving to campus for the semester or possibly succumbing to the “all-you-can-eat” syndrome of driving every day simply because a permit has been purchased. Providing an option in which people could commit to taking an alternative a few days each week would create more flexibility for users while reducing parking demand. The University of Wisconsin at Madison’s Transportation Services Department has found that people drive and park less if they are paying only for what they use.



This alternative could be implemented through a variety of options:

- Half-day or daily permits purchased in person (this would require additional staffing to administer).
- Coupon book or scratch/punch card: coupon displays date and time at which vehicle is parked and is displayed on dashboard or hung from rearview mirror. (See Figure 11.) College affiliates would purchase a limited number of books of coupons/cards for the semester.
- Create parking zones based on time limits, such as 1 hour parking only.
- An “occasional use” parking program in which users are provided five day-permits each semester in return for not purchasing a semester-long permit.
- Offer day-of-week permits, in which users can purchase a permit which allows them to park on campus on a specified day of the week (for instance a “Tuesday” permit or a “Friday” permit). Permits could be allocated for different days of the week to spread out the demand.
- Combine this alternative with the zone system described in Alternative 1 to allocate parking demand to different lots and manage capacity. For example, the MIC lot could be a two-hour only lot.

**Figure 11: Example of Punch Cards for Short-Term Parking**



#### ***Alternative 3 Conclusion***

*This alternative would continue to require significant college resources to issue permits and enforce parking. While the concept of developing a more flexible time-based option was popular with the Transportation Committee, implementing this alternative through meters (Alternative 5) rather than permits had stronger support.*

## **4.4 Alternative 4: Update Permit Prices**

The current parking program was developed in 2003 and permit prices have not been updated since that time. For comparison, parking rates from other Burlington locations and other academic institutions were collected. As shown in Figure 12 and

Figure 13, Champlain College’s parking rates are among the lowest. However, it is acknowledged that the other campuses in

Figure 13 are significantly different from Champlain in context and character.





**Figure 12: Burlington Parking Rates**

Institution	Rate
Champlain College	\$50 (part-time) - \$100 (full-time)/semester Free for off-site (Lakeside Ave) parking
University of Vermont	\$60-\$165/semester
Burlington City Garages	\$8/day or ~\$160/month (equates to ~\$500/semester)
Burlington Town Center or Courthouse Plaza	\$10/day or ~\$200/month (equates to ~\$600/semester)
Community College of VT (Winooski City Garage)	\$30-\$240/semester (based on number of credits)

**Figure 13: Parking Rates at Other Academic Institutions**

Campus	Permit Type	Cost
Champlain College	Daily	Free
	Annual	\$200
University of Vermont	Daily	\$12
	Annual	\$230
University of California - Santa Barbara	Daily	\$8
	Annual	\$432
University of Colorado - Boulder	Daily	\$7.75
	Annual	\$300
Cornell University	Daily	\$10
	Annual	\$725

A price elasticity study might be needed prior to developing a new permit price structure. Another alternative to address equity issues may be to price permits as a percentage of an employee’s base pay, as UVM currently does; or permits could be available by lottery.

***Alternative 4 Conclusion***

*Alternative 4 was not favored by the Transportation Committee, mainly due to equity concerns.*

## **4.5 Alternative 5: Install Parking Meters in Campus Lots (SELECTED ALTERNATIVE)**

Parking meters were selected as the preferred alternative because they satisfy many of the guiding principles identified by the committee. They provide a time-based system regardless of the user group (student, faculty, staff, visitor, etc.) that is equitable, flexible, and easy to use. Newer parking meter technology allows for pricing options that encourage long-term parking to shift to off-site locations, preserving the core campus for short-term and high turn-over parking. Meters are relatively easy to enforce and eliminate the staff time needed to issue and manage permits.

There is a difference in the parking meters that would be used in campus lots and those that would be used for public street parking. As noted in the 1994 Memorandum of Understanding with the City, the College must contain its impact on the neighborhood, meaning that Champlain College affiliates are not to take up all of the on-street parking in the neighborhood. If installed for public on-street parking, the City would enforce, manage and collect revenue from these meters. The Public Works Commission must approve the meters’ installation, and Champlain College could offer to assist with a financial contribution to encourage use of





technology that would support the campus parking system (peak hour pricing, progressive pricing, accepts Champlain College debit card, etc.).

Parking meters in campus lots would be installed and managed by the College, and would be contingent on the City managing on-street parking to prevent the neighborhood from being inundated by spill-over parking. Plaques should be installed on the meters explaining why the meters are in place (reduce impacts to the neighborhood, encourage alternative transportation, improve campus sustainability) and what the revenue is put towards (scholarship fund, shuttle system, etc.). This helps with acceptance and compliance.

Several technology options are available to minimize staff resources (particularly enforcement) and to maximize flexibility for users. Among these options are meters that:

- Accept credit cards
- Accept Smart Cards, such as the Champlain College debit card, to debit from an account.
- Allow users to only pay for the time used (for example, if you leave before your time is up).
- Allow for payment via a mobile device, such as a cell phone.
- Can be programmed for progressive pricing to encourage short-term parking, (for example, \$1 for the 1<sup>st</sup> hour, \$2 for the 2<sup>nd</sup> hour, and so on).
- Can be programmed for peak hour pricing to manage demand by requiring higher rates during busy times.
- Notify enforcement officials of violations, eliminating the need for patrolling.



These options are summarized in Appendix F.

Price elasticity and parking turnover studies could be conducted to most accurately determine appropriate prices and time increments. Pricing should be set to discourage “convenience” parking but enable “necessity” parking, while remaining competitive with on-street spaces.

The table below estimates the potential costs that users might realize with this alternative, based on the noted assumptions.



**Cost Comparison for Users**  
(per semester)

	<u>Scenario 1:</u> Walk, bike, or ride the bus	<u>Scenario 2:</u> Park at Lakeside & take campus shuttle	<u>Scenario 3:</u> Drive to campus 2x per week, staying 3 hours each time (6 hours per week)	<u>Scenario 4:</u> Drive to campus 1x per week, staying 8 hours (8 hours per week)	<u>Scenario 5:</u> Park at Core Campus all day, 5 days/week (40 hours per week)
<b>Current Permit</b>					
Full-time F/S, Commuter Student	Free	Free		\$100	
Part-time F/S, Commuter Student	Free	Free		\$50	
<b>Permit Updated to Market Rates</b>					
Full-time F/S, Commuter Student	Free	Free		\$150-170	
Part-time F/S, Commuter Student	Free	Free		\$60-75	
<b>\$1/hour Meters</b>					
Everyone	Free	Free	\$96	\$128	\$640
<b>\$0.50/hour Meters</b>					
Everyone	Free	Free	\$48	\$64	\$320

**Assumptions:**

1. Lakeside/Gilbane permits continue to be free, as they are now.
2. There are 16 weeks in a semester.

**Alternative 5 Conclusion**

*The Transportation Committee favored parking meters for the flexibility and equitability that they offer. Meters achieve many of the benefits of other alternatives such as short-term parking, but are viewed as the most user-friendly and easiest to implement. Moreover, they ease management by eliminating the need to issue and manage parking permits, as well as reduce enforcement needs. Permits would continue to be issued for the Lakeside and Gilbane lots, which would not be metered.*

**4.6 Alternative 6: Time Limits on Core Lots**

Core campus lots could be time-restricted so that cars are not allowed to be parked more than two or three hours at a time. There would be no user costs involved with this alternative, but like parking meters, it would be critical to have the City manage on-street parking to prevent vehicles from inundating the neighborhood. This option also requires considerable enforcement effort on the part of the College. It may also require a continuation of the permit system if the core lots are restricted to short-term parking for commuter students or part-time faculty.



### **Alternative 6 Conclusion**

*Although easy to use and implement, this alternative does little to discourage driving to campus and requires significant campus resources to enforce. It may result in a reversion to the conditions before campus parking and transportation were managed and the neighborhood experienced significant congestion due to vehicles searching for parking.*

## 5.0 PROPOSED PARKING PLAN

The table below summarizes the advantages and disadvantages of the various alternatives, and illustrates why the parking meter alternative was preferred in comparison to the other alternatives.

Alternative	Pros	Cons
1 Re-zone parking lots	<ul style="list-style-type: none"> <li>▪ Improve efficiency of underused core lots</li> </ul>	<ul style="list-style-type: none"> <li>▪ Administration, enforcement, and management needs are high</li> <li>▪ College still responsible for managing and enforcing on-street parking</li> </ul>
2 Restrict eligibility to park on campus to faculty/staff and students who live more than a mile from campus	<ul style="list-style-type: none"> <li>▪ Simple</li> <li>▪ Reduces parking demand</li> </ul>	<ul style="list-style-type: none"> <li>▪ Might not be perceived as equitable</li> <li>▪ Not flexible</li> </ul>
3 Short-term parking permits	<ul style="list-style-type: none"> <li>▪ Equitable, flexible, simple</li> <li>▪ Offers more flexibility than a semester long permit</li> <li>▪ Potentially less expensive for college affiliates than semester long permit</li> <li>▪ Reduces parking demand because of greater flexibility</li> </ul>	<ul style="list-style-type: none"> <li>▪ Still requires significant staff and budget resources from College</li> <li>▪ Administration, enforcement, and management needs are high</li> </ul>
4 Update permit prices	<ul style="list-style-type: none"> <li>▪ Creates a market economy</li> <li>▪ Reduces parking demand</li> <li>▪ Simple</li> </ul>	<ul style="list-style-type: none"> <li>▪ Not perceived as equitable</li> <li>▪ Not flexible</li> <li>▪ Administration, enforcement, and</li> </ul>



		management needs are high
		<ul style="list-style-type: none"> <li>College still responsible for managing and enforcing on-street parking</li> </ul>
5	On-Campus Meters (SELECTED ALTERNATIVE)	<ul style="list-style-type: none"> <li>Equitable, flexible, simple</li> <li>Offers more flexibility than a semester long permit</li> <li>Requires less resources on the part of the College to administer, enforce, and manage</li> <li>Potentially less expensive for college affiliates than semester long permit</li> <li>Accommodates visitor parking easily</li> <li>Reduces parking demand because of greater flexibility</li> </ul>
		<ul style="list-style-type: none"> <li>Requires City to assume responsibility of on-street parking</li> </ul>
6	Time limit signs	<ul style="list-style-type: none"> <li>Equitable, flexible, simple</li> <li>Offers more flexibility than a semester long permit</li> <li>Requires slightly less resources on the part of the College to administer and manage than the permit system</li> <li>Less expensive for college affiliates</li> <li>Accommodates visitor parking easily</li> </ul>
		<ul style="list-style-type: none"> <li>Requires City to assume responsibility of on-street parking</li> <li>No disincentive to drive/parking demand may not decrease</li> </ul>

The campus outreach process revealed several groups that require core campus parking, such as IT support services to transport equipment, cleaning staff vehicles to transport tools/materials, Res Life coordinators who need a car on hand for student emergencies, etc.. A list of these groups and their estimated needs is provided below. Spaces can be reserved for these needs with a sign and they would not be metered. Or these vehicles could be given a hangtag/dashboard permit to exempt them from paying the meters (this is probably the better option so that parking spaces are being used rather than sitting empty; however, a space would not be guaranteed).

**Table 6: Special need spaces**

Group	Number of Core Spaces Needed (at one time)	Location
Special Events	Special events will require special management on a case-by-case basis; this includes freshman orientation, commencement, move-in/move-out days, conferences and workshops, etc..	
IT Support Services	5 or provide a transferable Zone 11 permit	Close to building
Cleaning Services	4	Close to dormitories
Res Life	5	Lakeview (1), Sanders (1), South (1) + 2 floating
Visitors	16 spaces currently available	Perry Hall
ADA	1 per 25 spaces (in each lot)	Close to building
Class Speakers	2	Anywhere on Core Campus
Loading/unloading (deliveries)	1-2 spaces per lot	Close to building
Motorcycle/Moped/Scooters	Design into existing lots or reserve 1-2 full-size spaces	Include in existing lots; allow mopeds to park at bike racks
Librarians	1	Library
Physical Plant	Designated spaces are not needed	
Stern Center	1	Unknown



Howard Center	1	Skiff Hall
Wellness Center	1	Student Life Center (SLC)
Student Health Services- medical practitioners	4	Whiting Hall
Consultants	Can be asked to park on-street and/or pay meters; or park at Lakeside	
Sodhexo (opening cook)	1	Student Life Center (SLC)/Cushing
Sodhexo (all others)	Can be asked to park on-street and/or pay meters; or park at Lakeside	
Faculty, Staff, Student of the Year	3	Durick
College Vans	2	Student Life Center (SLC)
CarShare Vermont Pod	2	Work with CSVT to determine most convenient location for users
<b>TOTAL</b>	<b>~80</b>	

Figure 14 suggests how the various core lots could be managed. This plan could be further simplified by metering the Perry lot as well, since visitors could use the meters or abide by time limits. Spaces identified for special needs in the table above can be allocated throughout this plan by signing a few spaces in each lot as needed, or by providing special permits which exempt the vehicles from having to pay at the meters.

Figure 14: Proposed campus parking plan



There will be special events which require staffing to manage parking, such as move-in/move-out day, career fairs, orientation, and others. Res Life has had particular success in assigning staff to greet and direct drivers to short-term loading/unloading areas and then to Lakeside for all-day parking. This model should be followed to manage any special event parking.



The preliminary cost estimate below has been developed to suggest the potential expenses and revenues resulting from installing and using parking meters compared to the current permit system.

Parking Meters			Current Permit System	
Expenses			Expenses	
		<b>Assumed</b>		
<b>Lots that would be metered</b>	<b># of spaces</b>	<b># of meters</b>		
North House	10	1		
Sanders Hall	12	1		
396 Main	20	1		
Main Street Suites	28	1		
Summit Hall	29	1		
Miller Information Commons	42	1		
Cushing Hall	8	1		
Rowell	41	1		
Jensen Hall	9	1		
South House	13	1		
Perry Hall (could be signed for visitors only instead of metered)	16	1		
	228	11		
<b>Initial meter cost (assumes \$15k per meter; includes installation)</b>			<b>\$</b>	<b>165,000</b>
Annual operations (credit card transactions, Annual maintenance (battery replacement, repairs))	\$	3,960	\$	8,250
<b>Total Annual Operations &amp; Maintenance</b>			<b>\$</b>	<b>20,000</b>
<b>Annual Revenue (DEPENDS ON ASSUMPTIONS*)</b>			<b>Annual Revenue</b>	
meter rate is \$1/hour	<b>\$90,000 to \$205,000</b>		<b>\$</b>	<b>77,500</b>
meter rate is \$0.50/hour	<b>\$45,000 to \$102,000</b>		<b>Permit Sales for 1 academic year</b>	
			<b>\$</b>	<b>11,500</b>
			<b>Total Annual Supplies, Operations &amp; Maintenance</b>	

\*Low end scenario assumes 50% parking occupancy, 4 hours per day, 5 days per week, 40 weeks per year.  
 High end scenario assumes 75% parking occupancy, 6 hours per day, 5 days per week, 40 weeks per year.

## 6.0 CONCLUSIONS & NEXT STEPS

Through the campus outreach process, it has been determined that the new parking system will focus short-term (4 hours or less) parking at the core while shifting all-day or longer parking to off-site (Lakeside Avenue or Gilbane) facilities which are connected to the core via a high-frequency shuttle. The easiest, most equitable way of implementing this concept is by installing parking meters in campus parking lots.

The Transportation Committee recommends implementing strategies early so that there is enough overlap with the current system to work out the bugs and to reward early adopters and to get the campus community comfortable with and invested in the new system.

The first step in deploying these recommendations is to find a lead department to move them forward. Possible leaders are suggested in the table below, but could be revised as needed. Next steps for immediate action items are identified. A Steering Committee representing a cross-section of the campus community should meet regularly to ensure that people’s needs are being met and to keep the system moving forward by developing recommendations for additional improvements.



Action	Leader	Next Steps
Continue to work with the City of Burlington to mitigate on-street parking impacts around the core campus	Public Safety, Campus Planning & Auxiliary Services	Continue to work with the City to determine how on-street parking should be managed.
Continue working with CATMA to secure off-site parking to the north and east of campus	Finance and Administration	Continue to work with CATMA to secure long-term off-site parking to intercept drivers at convenient and sensible approaches to Champlain.
		Plan for shuttle service to connect these lots with the core campus.
		CATMA to collectively coordinate service with UVM and Fletcher Allen Health Care if feasible.
		In the meantime, improve shuttle service (particularly frequency) between current off-site parking at Lakeside and the core campus.
Implement Campus Information Campaign	Sustainability Office	Expand on the above lists and develop additional content.
		Identify ways of getting the word out (posters, email) to the campus community.
		Work one-on-one with each department to convey information and let the community know what to expect.
Implement incentive program and continue to work with CATMA to market existing programs	Human Resources	Review potential incentives with administration to determine which are feasible.
		Deploy incentives and market them to the campus through the Information Campaign described above.
Enhance bicycling and walking to/on campus	Campus Planning & Auxiliary Services, Sustainability	Implement a campus bicycle program as described above.
		Allow motorbikes under 50 cc's to park at bike racks.
		Reach out to Local Motion to implement best practices and explore partnership opportunities.
		Reach out to the City, UVM, and the CCRPC to partner on projects that extend past Champlain's campus, such as a bike share.
Release an RFP for parking meter vendors	Campus Planning & Auxiliary Services	Communicate existing resources to the campus.
		Develop list of desired features such as ability to accept debit cards, etc., and send to vendors for sales and installation estimates.





## 6.1 Schedule

Spring  
2013

- Business as Usual
  - Continue zoned parking permit system
  - Another shuttle has been added for 5-7 minute frequencies during AM & PM peak times
  - McDonald-Whiting lot to close
  - Plan and deploy Campus Info Campaign
  - Develop RFP for parking meters and plan for installation
  - Work with City to transfer on-street parking management

Summer  
2013

- Introduce Parking Meters in On-Campus Lots/Update Zoned Parking Permit System
  - Meters to be installed in core campus lots, concurrent with Champlain to stop managing on-street parking
  - Continue permits for re-zoned lots and off-site parking (Gilbane/Lakeside)
  - **Monitor and evaluate operations**

Spring  
2013

- Construct Campus Transit Center
  - Bader lot to close
  - Begin to plan for Eagles and Ethan Allen Club projects (i.e., will they be served by shuttles? how will parking be managed?)
  - **Monitor and evaluate operations**

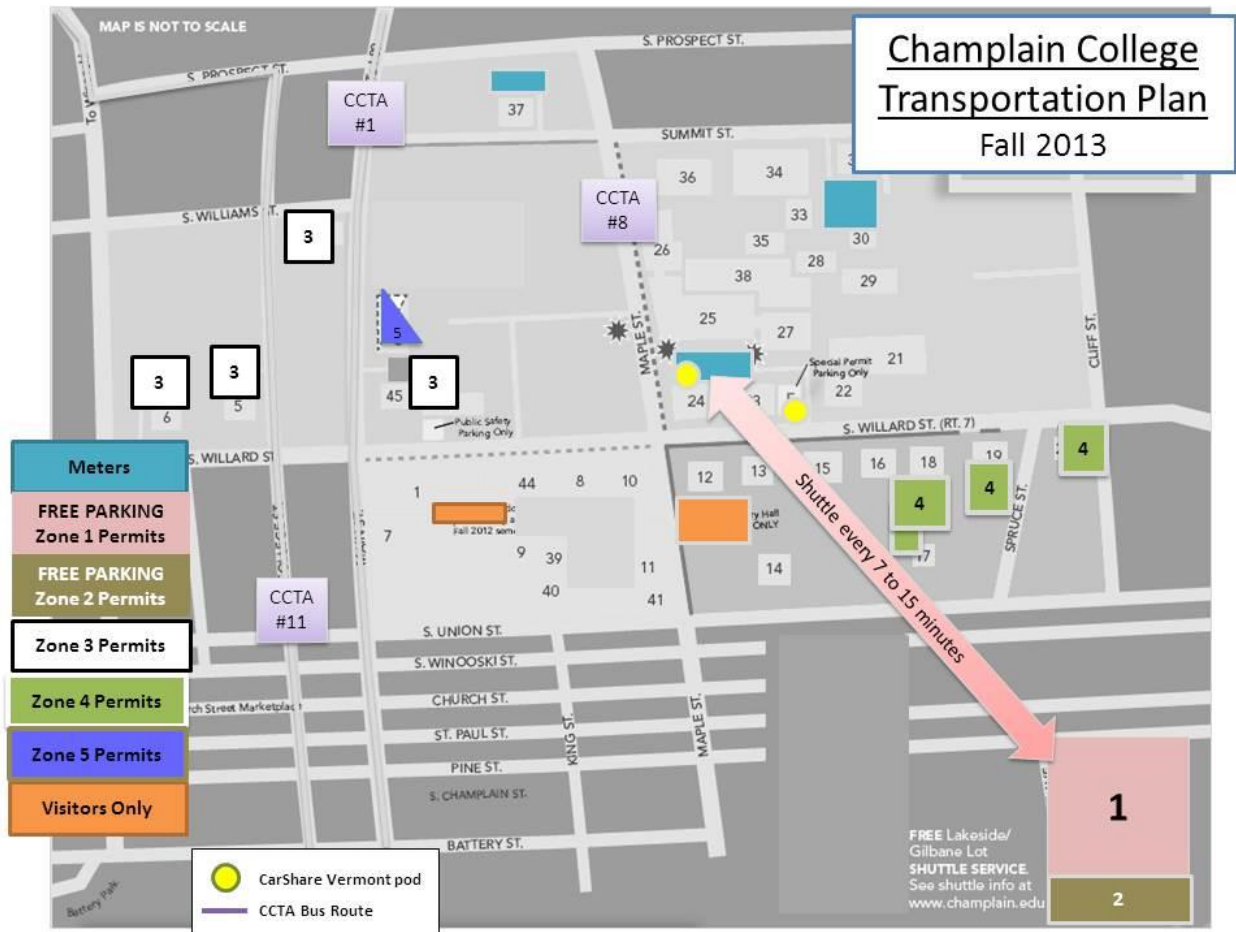


## 7.0 ADDENDUM: PHASE-IN PLAN

In March 2013 this plan was updated to reflect more recent data and to include a “phased in” approach for Fall 2013. This phased in approach (shown below for Fall 2013) combines metered lots with increased permit prices based on a rezoning for the core campus (that is, a combination of Alternatives #3, 4, and 5 from Section 4.0).

Beginning in Fall 2013, lots that are 80% or more occupied during the weekly peak period will have parking meters installed. For Fall 2013, this will be the Summit Hall, MIC, and Bader lots.

- Other lots are split into two permitted zones (north and south) according to relative convenience and traffic circulation patterns.
- Permit prices have been raised to better reflect market rates.
- Lakeside/Gilbane will continue to be free and all-day parkers are encouraged to park there.



## Champlain College Transportation Plan for Fall 2013

<u>Zone</u>	<u>Who</u>	<u>Where</u>	<u>Total Number of Spaces</u>	<u>Costs*</u> (per semester)
1	Faculty/Staff, Commuters	Lakeside, meters, any lot after 4PM and on weekends	266	FREE unless parked at a meter (then meter fees apply)
2	Residential Students, Commuters	Gilbane	200	FREE unless parked at a meter (then meter fees apply)
3	Faculty/Staff, Commuters	North, Sanders, 396 Main, 371 Main, Skiff	116	\$75 PT \$170 FT
4	Faculty/Staff, Commuters	Rowell, Jensen, South	63	\$90 PT \$200 FT
5	Residential Students (Radiography/Late Night Work)	Main Street Suites	28	\$170 FT
6	Residential Students at Quarry Hill	Quarry Hill	22	FREE unless parked at a meter (then meter fees apply)
<b>Notes:</b> - Summit, Hauke and MIC to be metered (97 spaces total). - All permits can use meters (but still must pay meter fees). - Motorcycles and mopeds do not require permits; motorcycle parking will continue to be designated in the MIC lot and will not be metered. Mopeds will be allowed to park at bicycle racks.				

\*Permit prices have not changed since 2003. These new prices bring the parking costs more in line with other Burlington parking facilities.

While the map of the parking plan for 2020 shows the campus parking system as ultimately envisioned, the process for implementing that plan will involve installing meters in core campus lots as needed and on an individual basis as each one is at least 80% occupied during the weekly peak period. If optimum parking occupancy is not reached under the parking meter plan (that is, there are lots of empty spaces), the administration will adjust aspects of the meters (such as price, time limits, etc.) to reach the appropriate occupancy levels (about 80-85% is the industry standard). Revenue collected from the meters will fund parking management operations and the campus shuttle system. Additional items that the Transportation Committee discussed:

- The meters will be in effect Monday-Friday 8AM-4PM. The meters will be turned off at 4PM and on weekends (like the current permit system). Drivers will not have to pay the meters during school vacations or summer break.
- The meters are likely to cost \$1/hour (25¢ / 15 minutes). There will be a 4 hour time limit.
- The meters will accept cash (bills and coins), credit cards, CC Cash cards (or similar system), and there will be codes available so that those visiting departments on college business won't have to pay.
- With the meters that are likely to be installed, the user will simply enter the amount of time they wish to park for, pay, and the meter/kiosk will print a receipt to be placed on the vehicle's dashboard to show that parking has been paid up until a certain time.
- The meters will accept CC Cash Cards or a similar system to debit user accounts. The College will add



credit to individuals' accounts each semester to allow for 8 hours of free parking.

- Revenue collected from the meters will fund parking management operations and the campus shuttle system.
- Free parking will still be available at Lakeside /Gilbane and the campus shuttle makes frequent trips from there to the core campus.
- All drivers will need to register and obtain a free parking sticker from Public Safety to distinguish between Champlain and non-Champlain vehicles.
- The campus transportation website has been updated to show all transportation options: <http://www.champlain.edu/transportation>
- Current transportation alternatives that will continue to be offered by CATMA include:
  - Free rides on CCTA buses: <http://www.cctaride.org/>
  - Emergency Rides home
  - Carpools/RidesWork program
  - Bike/walk rewards
- The campus will continue to work with CarShare Vermont to locate vehicles on campus.

## Parking Meter Instructions

The following are the anticipated parameters of the parking system, but are subject to change depending on the meter vendor selected.  
*The following applies to campus parking lots, not on-street parking.*

- Hours of operation: Monday through Friday, 8AM-4PM. (Not in operation during school vacations or summer break.)
- 1. Insert coins or tokens until it displays the desired ending time. OR  
Insert a credit card completely and wait for the meter to tell you to remove it. Press "add time" until it displays the desired ending time.
- 2. Press green "print" button. Receipt is behind the window on the bottom right.
- 3. Place receipt on dashboard.

### More Detailed Instructions

#### CASH/COINS

1. Insert cash/coins and the display window will automatically show the ending time to which you are paid. For example, if you arrive at noon and put in two quarters, it will display 12:30.
2. It will not let you purchase time past 4PM so you don't have to worry about overpaying.
3. There is a door at the coin opening to keep rain and snow out of the machine. There is a very short delay before this door opens to allow you to insert your coin into the slot.
4. When you have purchased the amount of time you want, press the green "print" button and a receipt will fall behind the bell shaped window on the bottom right. Slide the door up and pull out your receipt. Put the receipt, face up, on the dashboard inside your car.

#### CREDIT CARDS /CC CASH CARDS

1. Insert your credit card all the way in and remove quickly. There is a small ridge inside the machine which may feel like the stop, but please insure that your card goes in until only about 10% is visible.
2. Push the blue "add time" button until you reach the desired time.
3. If you want to buy the maximum allowed time (4 hours) hit the blue "max time" button.
4. Press the green "print" button.
5. A receipt will fall behind the bell shaped window on the bottom right. There will be a slight delay while the machine verifies your credit card.
6. Slide the door up and pull out your receipt.
7. Put the receipt, face up, on the dashboard inside your car.

