

# PARKING MANAGEMENT PLAN

**TO:** Scott Gustin, Burlington Planning and Zoning  
**FROM:** Jonathan Slason, PE  
**CC:** Pam Mackenzie, CEO GBYMCA; Scott Mapes  
**DATE:** October 24, 2017  
**SUBJECT:** **DRAFT:** Parking Management Plan for the Proposed GBYMCA Development at 298 College Street, Burlington VT

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The purpose of this document is to develop a strategy to manage the parking demand generated by the proposed Greater Burlington YMCA (GBYMCA, the Y) at 298 College Street in Burlington. The document includes:

- A review of the proposed site and facility operational characteristics;
- A calculation of the parking spaces required pursuant to Table 8.1.8-1 of Article A of the CDO;
- A narrative that outlines how the proposed parking management plan addresses the specific needs of the proposed development, and more effectively satisfies the intent of Article 8 of the CDO and the goals of the Municipal Development Plan;
- An analysis of the anticipated parking demand for the proposed development; and
- Recommend strategies to reduce or manage the demand for parking into the future.

## **ITEM 1: Proposed Site and Operational Characteristics**

The proposed facility is moving approximately 450' east along College Street from the existing facility located at the intersection of College Street and Union Street. The proposed location moves from the "Downtown" parking district into the "Neighborhood" parking district. The existing facility size is approximately 49,000 square feet, with only 8 dedicated parking spaces, and 12 parking spaces leased from nearby properties.

The total size of the proposed GBYMCA facility is 64,687 gross square feet (GSF), including healthy living and wellness venues, a youth development center, community rooms, and administrative space. These functions are broken down into land uses defined in the CDO in Table 1.

**TABLE 1: GBYMCA GROSS SQUARE FOOTAGE INTO CDO LAND USE CODES<sup>1</sup>**

CDO Land Use	Size (GSF) – Percentage of Overall
Community Center	5,669 GSF – 8.8%
Daycare – Large	13,712 GSF – 21.2%
Fitness	44,585 GSF – 68.9%
Admin/Office	721 GSF – 1.1%
TOTAL	64,687 – 100%

The GBYMCA estimates 80 full time equivalent (FTE) employees at the primary healthy living and administrative facility, and 25 FTE employees at the child development center. The hours of operation for the two facilities are detailed in Table 2 (regular, non-holiday periods):

**TABLE 2: PROPOSED GBYMCA HOURS OF OPERATION (PEAK WINTER HOURS). CHILD DEVELOPMENT CENTER HOURS VARY WITH THE PROGRAM.**

Day(s)	Healthy Living Facility	Child Development Center
Monday - Thursday	5 AM – 10 PM	7 AM – 6 PM
Friday	5 AM – 9 PM	7 AM – 6 PM
Saturday	6 AM – 8 PM	Closed
Sunday	7 AM – 5 PM	Closed

The facility will receive regular trash, recycling, and compost collection; occasional deliveries of supplies; and typical parcel delivery.

The GBYMCA has estimated that membership will increase from 2820 individuals to 4875 individuals (+73%), and 1730 units to 3035 units (+75%). The existing facility averages approximately 20 member entrances per hour, with significant variations in arrival rate based on time of day, weather, and season. A recent travel behavior survey<sup>2</sup> noted that over 90% of members depart the facility within 2 hours of arrival.

The travel survey indicates that over half of the existing members are from Burlington and 81% of all members are from Burlington or the immediately adjacent communities of Colchester, Winooski, and South Burlington. Many of the remaining members register out of state zip codes, suggesting they are students at nearby institutions. The geographic distribution of membership is not expected

<sup>1</sup> Total building footprint allocated to uses. Common area, such as lobby and restrooms, proportionally allocated. Lobby and entrance not attributed to Day Care, as different location in building.

<sup>2</sup> Survey was administered in December 2015.

to change, and most members are expected to remain within a reasonable active transportation commute to the proposed facility, either by walking or cycling.

**ITEM 2: CDO Parking Requirement**

Table 8.1.8-1 of the Comprehensive Development Ordinance defines the parking requirement based on recognized land uses, proposed GSF, and number of employees. For each land use identified earlier, the following parking requirement has been calculated for the neighborhood parking district and is displayed in Table 3.

**TABLE 3: CDO PARKING REQUIREMENT CALCULATION – NEIGHBORHOOD PARKING DISTRICT**

Land Use	Table 8.1.8-1 Parking Rate	Independent Variable	Parking Requirement
Community Center	3.3 per 1,000 GSF	5,669 GSF	19 spaces
Daycare – Large	1 per 2 employees + 1 per 5 children	25 employees 108 children	12 spaces + 22 spaces
Health Club	3 per 1,000 GSF	44,585 GSF	134 spaces
Office – General	2 per 1,000 GSF	721 GSF	1 spaces
Total Parking Requirement			188 spaces

The existing facility, located 450-feet from the proposed site, is located within the downtown parking district; using these rates for the proposed facility, the parking requirement would be the following:

**TABLE 4: CDO PARKING REQUIREMENT CALCULATION – DOWNTOWN PARKING DISTRICT**

Land Use	Table 8.1.8-1 Parking Rate	Independent Variable	Parking Requirement
Community Center	1 per 1,000 GSF	5,669 GSF	6 spaces
Daycare – Large	2 Drop Off per 2 Employees	25 employees 108 children	25 spaces
Health Club	1 per 1,000 GSF	44,585 GSF	45 spaces
Office – General	2 per 1,000 GSF	721 GSF	1 spaces
Total Parking Requirement			77 spaces



### **ITEM 3: Parking Management Plan Narrative**

This parking management plan documents the appropriate amount of parking that should be required for the proposed GBYMCA facility and develops a strategy for ongoing management and parking demand reduction strategies. The plan identifies and addresses the intent of Article 8 of the CDO and the goals of the Municipal Development Plan.

From the CDO, the purpose of Article 8 is to:

- (a) *Ensure there are adequate parking and loading facilities to serve the use or uses of the property;*

This parking management plan analyzes the operation of the existing and proposed facility, documents existing travel behavior, examines the land use connection of the YMCA, and explores national guidance for similar facilities to develop an appropriate parking requirement consistent with the expected parking demand and neighborhood vision.

- (b) *Ensure that parking facilities are designed to provide proper circulation, reduce hazards to pedestrians, and protect the users of adjoining properties from nuisance caused by the noise, fumes, and glare of headlights which may result from the operation of vehicles parking off the street;*

Preliminary site circulation for vehicles, pedestrians, and bicyclists have been reviewed with the Planning and Zoning Department, the Department of Public Works, and will continue to be evaluated with the development of a Traffic Impact Study (TIS) for the proposed facility. The internal parking lot has been designed for safe, one-way travel with consideration to the neighbors.

- (c) *Reduce congestion in the streets and contribute to traffic safety; and*

Surveys of members have documented that many members do not drive primarily to the GBYMCA facility. Accordingly, the site has been designed to encourage walking and biking access as the primary mode of access. The site parking lot will be open to members and has been designed for one-way circulation, accounting for site constraints at the entrance and exit. Of the drivers who use the existing Y facility, the average location of remote parking is over 1,600 away from the current building.

- (d) *Encourage alternate modes of travel that will reduce dependence upon the single-occupancy automobile.*

With “Healthy Living” as a focus of the GBYMCA organization, the facility has been developed with walking and biking as the primary mode of access with high quality cycle parking and safe and efficient pedestrian access to and from the adjacent street network.

### **ITEM 4: Analysis of Parking Demand**

The appropriate parking demand has been estimated through the following considerations:

#### ***Evaluation of the GBYMCA Land Use***

A YMCA provides a unique service to the community not captured by the existing range of land uses in Appendix A of the CDO, which is used to identify the parking requirement. In particular, the



Greater Burlington YMCA (GBYMCA) is a non-profit operating in Burlington for almost 150 years, providing three areas of focus including youth development, healthy living, and social responsibility. These combined services, all contained within the facility, do not function the same as the seemingly related Daycare, Health Club, and Community Center land uses defined in the CDO. The services provided by the GBYMCA are complimentary, and similar to mixed-use developments, the peak demand for one of their services is generally not at the same time as the other services.

The Institute of Traffic Engineers (ITE) provides national guidance on parking and trip generation from different land uses. ITE assigns codes to each distinct land use, and ITE identifies a land use code for YMCA facilities specifically. ITE Land Use Code (LUC) 495: Recreational Community Center is defined as:

“A recreational community center is a stand-alone public facility similar to and including **YMCAs**. These facilities often include classes and clubs for adults and children; a day care or nursery school; meeting rooms; swimming pools and whirlpools;...”

Comparing ITE LUC 495 to ITE LUC 492: Health/Fitness Club, the PM peak hour trip and parking generation rates between the two land uses differs significantly (Table 5). Such a substantial difference in generation rates highlights the unique land use characteristics of Recreational Community Centers such as the GBYMCA.

**TABLE 5: ITE TRIP GENERATION & PARKING RATES FOR THE PM PEAK HOUR**

	Land Use Code 492: Health / Fitness Club	Land Use Code 495: Rec. Community Center	Comparing Land Use Code: 495 to 492
<b>PM Peak Hour Trip<sup>3</sup> Generation (Trips / 1,000 SF)</b>	3.45	2.31	33% reduction
<b>Peak Period Parking Demand<sup>4</sup> (Vehicles / 1,000 SF)</b>	5.27	3.2	39% reduction

The reduction showing how the more focused YMCA land use (495) reduces trips, even in the typical suburban environment that this data is based on.

One urban site for land use code 495 does identify that peak parking demand of 1.15 spaces per 1,000 SF. This urban site is closer aligned with the parking rates in the Downtown zone.

<sup>3</sup> ITE Trip Generation 10<sup>th</sup> Edition

<sup>4</sup> ITE parking generation 4<sup>th</sup> Edition

In summary of the proposed GBYMCA land use:

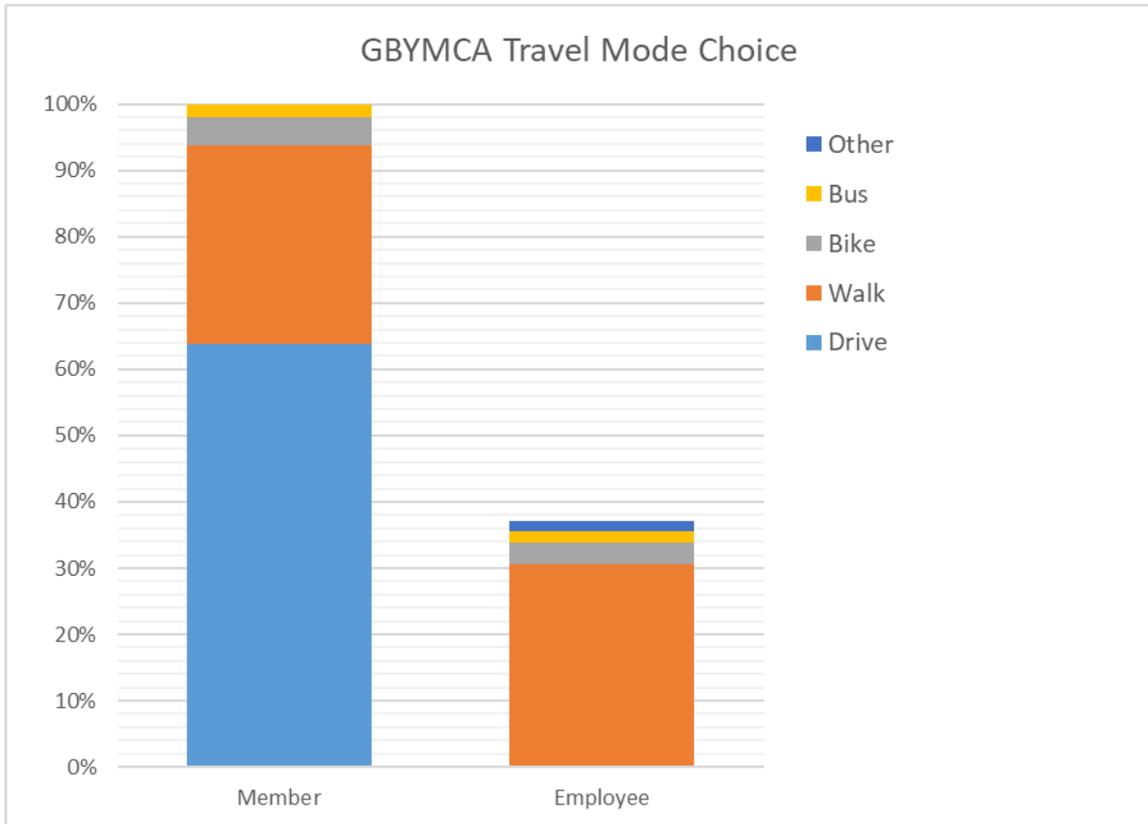
- A YMCA provides a unique range of services distinct from Health / Fitness Clubs and Day Cares;
- The range of services provided by the GBYMCA results in complimentary program peaks and associated parking demands;
- National traffic guidance authorities (ITE) distinctly categorize YMCAs in their literature; and
- A substantial difference in ITE trip and parking generation rates is noted between the YMCA category and those defined by the existing zoning land uses.

Given these characteristics, the CDO parking requirement calculation in Table 3 is recognized to overestimate the parking requirement, and a reduction in the parking rate would be more appropriate given the more specific land use of the Recreation Community Center.

#### ***Evaluation of Current GBYMCA Travel Behavior***

To document the true parking demand for the existing facility, the GBYMCA surveyed their existing membership and employees to understand the current travel mode choice of the membership and employees. An online survey was conducted in mid-December. A variety of information was gathered from 145 members and 64 employees (response rate of 5% of the members, 66% of employees). The key information from the survey regarding GBYMCA member and employee travel mode choice to the existing downtown Recreational Community Center follows.





**FIGURE 1: MEMBER AND EMPLOYEE TRAVEL MODE CHOICE TO AND FROM THE EXISTING GBYMCA RECREATIONAL COMMUNITY CENTER.**

Figure 1 illustrates that roughly two thirds of both the members and employees (64% and 63%, respectively) drive downtown to access the GBYMCA.

Of members who report regularly driving to the Y, 64% (59 of 92) responded that they typically park on the street proximate to the GBYMCA and their other destinations, while 29% reported parking in an off-street parking lot or garage. A review of the locations and distances to those locations indicate that existing drivers are already parking at distances exceeding 1,400 feet away from the YMCA on average, with a weighted average by location of over 1,600 feet.

Parking Location	Percent of Drivers	Estimated Distance to Parking
Battery Street	11.8%	2500
I'm already downtown	3.9%	
Main Street	10.5%	550
North Winooski Ave	18.4%	1675
Other (not identified parking)	9.2%	
Pearl Street	19.7%	1200
Pine Street	5.3%	1700
South Union Street	9.2%	
St. Paul Street	1.3%	1300
Willard Street	10.5%	1200

It should be noted that the travel survey was conducted in December when users are more likely to drive and the number of bicycle trips would be underrepresented, the results only captured a portion of the members, and the results were never tested for statistical significance. Even so, the survey results indicate that a large number of members and employees walk to the Y Recreational Community Center, even in the winter.

The combined information of the degree of non-driver patronage and the distances that members are currently traveling between off-site parking and the YMCA strongly indicates that the new facility could also justify a reduction of on-site parking supply.

### ***Evaluation of Adjacent Land Uses Necessary for Successful YMCAs***

As suggested by the Travel Behavior Survey, YMCAs benefit from a centralized location by combining trip destinations. By locating within a short distance to a variety of land uses, YMCAs are better able to achieve their mission by reaching a larger population. The variety of adjacent land uses, near both trip origins (residential locations) and destinations (retail, office) allows the YMCA to become part of their member's daily routine.

The existing GBYMCA, in operation in an urban setting, has been in service to the community for over 80 years, providing only 20 spaces for use by employees (8 on property and 12 leased spaces). Similar YMCAs around the country operate successfully under similar limited parking scenarios. The intention of these YMCAs is to capitalize on the mixed-uses and variety of activities in the surrounding neighborhood, and in doing so, YMCAs are desirable destinations for non-motorized travel.

In addition, since YMCAs are commonly in densely developed areas near residential land uses, providing a large number of parking spaces, either in an open lot or multi-story structure, will likely not fit within the context of the surrounding neighborhood.

### ***Adjacent Public Transit Routes***

CCTA operates the College Street Shuttle Route with free, regular service along College Street between the UVM Medical Center and Waterfront throughout the week.

## **ITEM 5: Parking Demand Estimates**

Based on the available data there are this PMP identifies three potential methodologies to develop parking demand estimates for the proposed GBYMCA facility.

### ***A) Utilize downtown district rates***

As this proposed facility is only 400' east of the downtown parking district, we believe that this facility will behave similarly to facilities located in the downtown parking district. Based on the survey data, a significant portion of members and employees utilize modes of active transportation to travel to the GBYMCA. As the proposed facility is only 450' of the existing facility we believe these mode choices would not change.

Additionally, the proposed GBYMCA is within walking distance of public parking garages, with the Bank Street garage approximately 1,600 feet away, which can be used as a viable alternative to on-

street parking if the parking demands exceed the capacity of the nearby on-street parking. This distance is reasonable given that aligns with existing average travel distances for patrons using off-site parking. The one urban data point for the YMCA parking use is generally in-line with the Downtown district rates.



**B) Exempt existing GBYMCA size**

The existing GBYMCA facility has been operating at its existing location for years, while providing no member parking, and only minimal employee parking. Assuming this current configuration operates efficiently, it should be assumed that it will continue to operate in a similar manner at the proposed location as it is only 450’ east of the existing location.

The existing site, if permitted today, might have a parking expectation such as the following:

**TABLE 6: EXISTING GBYMCA - USING DOWNTOWN DISTRICT PARKING RATES**

Land Use	Table 8.1.8-1 Parking Rate	Independent Variable	Parking Requirement
Community Center	1 per 1,000 GSF	4,294 GSF	4 spaces
Daycare – Large	2 Drop Off per 2 Employees	19 employees 82 children	19 spaces
Health Club	1 per 1,000 GSF	33,773 GSF	34 spaces

Land Use	Table 8.1.8-1 Parking Rate	Independent Variable	Parking Requirement
Office – General	2 per 1,000 GSF	546 GSF	1 spaces
Total Parking Requirement			58 spaces

If the existing building were to be permitted in the Downtown District the 20 spaces being provided is a 66% waiver off the CDO parking requirements.

Based on this, it would be reasonable to assume that the GBYMCA should only need to provide parking, beyond the existing 20 spaces, for the additional size proposed. The total parking for the proposed additional 15,687 square feet is estimated based on the rates presented in Table 3 scaled proportionally down from the total size of 64,687 square feet. The total of 80 spaces is comprised of 20 existing and 60 new spaces based on the neighborhood parking rates.

### **C) Extrapolate Existing Supply**

Like the previous methodology, it is assumed that the GBYMCA has been operating efficiently for years with minimal parking on-site. Based on current travel patterns it is likely that the additional size proposed will generate parking demand in-line with the current patronage patterns; much lower than the supply necessitated by the neighborhood district parking rates.

Based on this, it would be reasonable to assume that the proposed GBYMCA would need the same parking per square foot as this existing facility. This would assume all existing parking demand is scaled up accordingly, and any additional members would continue to find publicly available on-street and garage parking in a similar manner as existing members do.

## **SUMMARY**

Based on the findings documented above:

- A YMCA provides a unique range of services not captured in the current zoning land use and based on national guidance; ITE Land Use Code 495: Recreational Community Center has been developed to appropriately size the parking demand of a YMCA. Table 5 indicates that being more specific with the type of land use suggests a waiver of nearly 40% is reasonable.
- The operations of the existing GBYMCA Recreational Community Center demonstrate the success of a reduced parking demand rate, and the YMCA land use, adjacent to a free, regular bus route in a mixed-use neighborhood, is sited within an area that encourages trip-chaining and active transportation such as walking and bicycling. The land use and existing multi-modal nature of the employees and members suggest that further waivers are reasonable off of the typical parking supply indicated by the CDO. The urban parking

supply of 1.15 per 1,000 sq ft (suggesting 74 parking spaces in this situation) identified in the ITE parking generation manual reinforces that in urban areas, with safe and efficient non-motorized access, the parking demand is lower.

- Three methodologies for comparing the estimated parking demand are presented below.

**TABLE 7: ESTIMATED PARKING SUPPLY CALCULATION**

Methodology	Parking Supply	CDO Spaces Required	Waiver Percent
A) Downtown District Rates	77 spaces	188 spaces	59%
B) Exempt Existing Footprint	80 spaces	188 spaces	57%
C) Extrapolate Existing Supply	26 spaces	188 spaces	86%

The total estimated parking supply as documented above ranges from 26 to 80 spaces. The parking provided on-site should be maximized, at least to a point to safely and efficiently accommodate the peak periods associated with day care drop-off and pick-up.

It is anticipated that the GBYMCA will continue to lease off-site parking spaces to reduce the potential for impacts on city streets and other public parking.

### **ITEM 6: Parking Demand Management Strategies**

The GBYMCA is committed to the following strategies to reduce or manage the demand for parking for both members and employees into the future:

- **Provide an inviting environment for people walking and bicycling.** Encouraging both members and employees to walk, bike, and take transit to the proposed facility is consistent with the “Healthy Living” focus of the GBYMCA mission. Designing the new Y as an active oriented facility would include a clear, welcoming primary entrance facing the street; ample short-term bicycle parking near primary entrances; available showers and lockers; long-term, protected bicycle parking for employees; direct and continuous pedestrian access from College Street to Bradley Street, and through all vehicle parking areas. The employees currently travel primarily by active modes and the GBYMCA will continue to support and encourage this.

- **Become Executive Members of the Chittenden Area Transportation Management Association (CATMA).** CATMA provides a range of services that assist an organization to better understand and manage their transportation demands. As a member of CATMA, the GBYMCA will have access to their knowledge base and programs. In addition, CATMA may be able to assist with the following programs:
  - Securing off-site parking;
  - Coordinating shuttles to and from the site if needed;
  - Guaranteed ride home program;
  - Implementing a Bulk Transit Pass program for employees; and
  - Providing regional expertise on parking management strategies.
- **Continue to allow a flexible workspace.** While many employment positions at the GBYMCA require an on-site presence, as job duties allow, the GBYMCA will allow flexible working hours and work-from-home opportunities.
- **Recommend corporate membership into Car Share Vermont.** By allowing employee use of the Care Share Vermont (CSVIT) fleet, employees will have a vehicle option for work- or personal-related trips, even if the employee walked, biked or rode transit to the facility.
- **Create and enforce sensible rules for parking at the facility.** Time limits and restrictions will be clearly displayed for use of the parking area. GBYMCA staff will monitor for infractions, warn and track offenders, and repeat violators should be towed as necessary to ensure the parking supply is not abused.
- **Parking pricing.** The BGYMCA could offer pricing incentives as part of a membership amenity package. By encouraging use of off-site reserved parking as well as travel by non-auto modes. Parking allocation and potentially pricing can be incorporated into an overall membership package.
- **Continue to monitor traffic and transportation operations to adjust programs as needed.** Monitoring of the proposed parking supply may lead insight into peak demands, and certain programs may be managed to control parking demand. For instance, it may be beneficial for morning classes to be over, with enough time for participants to leave the site, prior to the morning Youth Development program drop-off period, and the next round of Healthy Living or community programs may be delayed until the drop-off period is over.

