

Burlington Planning Commission

149 Church Street
Burlington, VT 05401
Telephone: (802) 865-7188
(802) 865-7195 (FAX)
(802) 865-7144 (TTY)

www.burlingtonvt.gov/pz

*Andy Montroll, Chair
Bruce Baker, Vice-Chair
Yves Bradley
Alexander Friend
Emily Lee
Harris Roen
Jennifer Wallace-Brodeur*

Burlington Planning Commission

Tuesday, November 10, 2020, 6:30 P.M.

Remote Meeting via Zoom

To Join the Meeting on a Computer

Link: <https://us02web.zoom.us/j/87447204747>

To Join the Meeting on a Phone

Number: +1 312 626 6799 **Meeting ID:** 874 4720 4747

AGENDA

I. Agenda

II. Chair's Report

III. Director's Report

IV. Public Forum – Time Certain 6:35 p.m.

See pg. 2 of the Agenda Packet for details on how to participate in the public forum for this meeting.

V. Joint Institutional Parking Management Plan 2020-2025

On behalf of the University of Vermont, Champlain College, and UVM Medical Center, CATMA will attend to answer questions and provide additional feedback on the revised JIPMP 2020-2025. Information related to this item is included in the agenda packet:

- Memos from CATMA with supplemental information, dated 11/10 and 10/8 (p. 3 and 9)
- 2020-2025 Joint Institutional Parking Management Plan (p. 11)
- JIPMP Supplement (p. 60)
- Memo from staff RE: JIPMP changes from 2019 to 2020 (p. 79)
- DRAFT memo from Commission to DRB re: action on the JIPMP (p. 77)

Staff Recommendation: Provide feedback to CATMA regarding the plan, and to staff regarding the Commission's memo to the DRB. Approve recommendation memo with any changes.

VI. Commissioner Items

- a. Upcoming Meetings –Joint Meeting with City Council Ordinance Committee, viaZoom

I. Minutes & Communications

- a. The minutes of the October 13, 2020 meeting and communications are enclosed in the agenda packet on page 81.

II. Adjourn

The City of Burlington will not tolerate unlawful harassment or discrimination on the basis of political or religious affiliation, race, color, national origin, place of birth, ancestry, age, sex, sexual orientation, gender identity, marital status, veteran status, disability, HIV positive status, crime victim status or genetic information. The City is also committed to providing proper access to services, facilities, and employment opportunities. For accessibility information or alternative formats, please contact Human Resources Department at (802) 540-2505. Written comments on items may be directed to the Planning Commission at 149 Church Street, Burlington, VT 05401, or at mtuttle@burlingtonvt.gov

Burlington Planning Commission

149 Church Street
Burlington, VT 05401
Telephone: (802) 865-7188
(802) 865-7195 (FAX)
(802) 865-7144 (TTY)

www.burlingtonvt.gov/pz

*Andy Montroll, Chair
Bruce Baker, Vice-Chair
Yves Bradley
Alexander Friend
Emily Lee
Harris Roen
Jennifer Wallace-Brodeur*

Burlington Planning Commission

Tuesday, November 10, 2020, 6:30 P.M.

Remote Meeting via Zoom

To Join the Meeting on a Computer

Link: <https://us02web.zoom.us/j/87447204747>

To Join the Meeting on a Phone

Number: +1 312 626 6799 **Meeting ID:** 874 4720 4747

AGENDA

I. Agenda

II. Chair's Report

III. Director's Report

IV. Public Forum – Time Certain 6:35 p.m.

See pg. 2 of the Agenda Packet for details on how to participate in the public forum for this meeting.

V. Joint Institutional Parking Management Plan 2020-2025

On behalf of the University of Vermont, Champlain College, and UVM Medical Center, CATMA will attend to answer questions and provide additional feedback on the revised JIPMP 2020-2025. Information related to this item is included in the agenda packet:

- Memos from CATMA with supplemental information, dated 11/10 and 10/8 (p. 3 and 9)
- 2020-2025 Joint Institutional Parking Management Plan (p. 11)
- JIPMP Supplement (p. 60)
- Memo from staff RE: JIPMP changes from 2019 to 2020 (p. 79)
- DRAFT memo from Commission to DRB re: action on the JIPMP (p. 77)

Staff Recommendation: Provide feedback to CATMA regarding the plan, and to staff regarding the Commission's memo to the DRB. Approve recommendation memo with any changes.

VI. Commissioner Items

- a. Upcoming Meetings –Joint Meeting with City Council Ordinance Committee, viaZoom

I. Minutes & Communications

- a. The minutes of the October 13, 2020 meeting and communications are enclosed in the agenda packet on page 81.

II. Adjourn

The City of Burlington will not tolerate unlawful harassment or discrimination on the basis of political or religious affiliation, race, color, national origin, place of birth, ancestry, age, sex, sexual orientation, gender identity, marital status, veteran status, disability, HIV positive status, crime victim status or genetic information. The City is also committed to providing proper access to services, facilities, and employment opportunities. For accessibility information or alternative formats, please contact Human Resources Department at (802) 540-2505. Written comments on items may be directed to the Planning Commission at 149 Church Street, Burlington, VT 05401, or at mtuttle@burlingtonvt.gov

Guidance for Participating in a Virtual Planning Commission Meeting

As social distancing measures to preserve public health and safety continue to be required to prevent the spread of COVID-19, or are recommended as a standard practice, the Office of City Planning will be supporting the Planning Commission to conduct their meetings online via Zoom. Here is information about how to join a virtual meeting, and what to expect while participating.

General Guidance for Public Participation

Please remember that in this digital meeting environment, meetings are open to the public and anyone may be watching or listening even if you cannot see them. Meetings will be recorded, and both the recording and chat content of the meeting will be maintained as a public record.

Please ensure your display photo and screen name are professional, such as using your first and last name. Please test your audio and video prior to the start of a meeting, and familiarize yourself with how to join a meeting by your chosen method. And finally, please be patient with us. Technology doesn't always work as planned, and we are all learning how to hold a successful virtual meeting!

How to Join a Virtual Meeting

Zoom allows participation via either computer or telephone. Each agenda for a meeting that will be conducted virtually will include details about how to join via either of these options, including a web address, phone number, Meeting ID, and password.

If you participate via computer, you have the option of seeing Commissioner videos and any presentation materials that may be shared. If you use either a standard phone or cell phone to call in, you will only hear the audio portion of the meeting. If you join via a smartphone, you may have the option to download the Zoom app, which will enable you to see and hear the meeting.

How to Participate in a Virtual Meeting

During meetings, only Planning Commission members and limited staff members will be viewed on video. Members of the public attending a meeting will be muted, except when invited to speak during public forum or a public hearing. Whether members of the public can speak at other times during the meeting is the discretion of the Chair.

If you want to speak during public forum, please take the following steps to assist us in making this process run as smoothly as possible:

- Email staff at mtuttle@burlingtonvt.gov by 5pm on the day before a meeting to indicate your interest in speaking. You do not need to provide your comments. Staff will enable your microphone as your name is called from a list of interested speakers.
- During a meeting, you can use the "Raise Hand" feature, or indicate in a chat message that you wish to speak during public forum. Staff will enable your microphone as your name is called.
- If you are interested in submitting your comments in writing instead of speaking during the meeting, you may do so by 5pm the day before a meeting, they will be forwarded to the Commissioners ahead of the meeting.



To: Burlington Planning Commission
From: Kim Furtado, Transportation Analyst, CATMA
Sandy Thibault, Executive Director, CATMA
Date: November 5, 2020
RE: Joint Institutional Parking Management Plan 2020-2025

CATMA presented the 2020-2025 Joint Institutional Parking Management Plan to the Burlington Planning Commission on Tuesday, October 13, 2020. During our presentation there were some questions regarding data and analysis, which we hope to clarify through this memo and at the November 10, 2020 Planning Commission meeting. Below is a list of questions from the Planning Commission and our clarifications.

Clarification #1A:

Previous versions of the JIPMP broke down the demand for off-campus students by those students traveling from within a ½ mile of campus and those traveling from outside a ½ mile of campus, why does the current version not make that distinction?

The previous method calculated demand by finding the percentage of a particular group on campus at a peak time and the percentage of that group which contributed to vehicle parking (driving alone and ½ carpool). These two percentages were combined and then multiplied by the number of users in that group to get the number of parking spaces needed.

For example, the previous version of the JIPMP (brought to the PC in May 2019), Table 4-14 showed the following for off-campus student demand:

User Group	Number in Category	Peak % on Campus	Demand Generator (Mode Share)	Parking Demand (Spaces)
Off-Campus (within ½ mile)	3,174	89.1%	4.1%	116
Off-Campus (outside ½ mile)	4,266	91.2%	28.8%	1,122
Subtotal	7,440			1,238

The current formula estimates demand by calculating a new variable of all users who contribute to vehicle parking who are on campus at the peak time. The peak parking demand percentage referenced in this current version are the percentage of those individuals of all survey responses.

In an effort to simplify the charts in this version, user groups are separated only if they are from different surveys (students v. employees) or if their peak parking demand percentage is determined from a different variable (on-campus v. off-campus).

As you can see, in the JIPMP version immediately preceding the 2020-2025 JIPMP, off-campus student demand was 1,238 spaces and in the 2020-2025 JIPMP estimated demand is 1,261.



Clarification #1B:

The previous version of the JIPMP had UVM's off-campus students within a ½ mile having an auto mode share of 43%, but the current version shows only 3% of off-campus students within a ½ driving alone and only 1% carpooling to campus. Why is that?

The 43% is from the JIPMP presented to the planning commission in March 2019. This calculation was based on the 2018 survey data which did not appropriately ask respondents what their mode was nor what time they are on campus, so this data point was incorrect. In the May 2019 version presented to the Planning Commission, the mode share for off-campus students within a ½ mile was 4.1% (based on 2016 survey data).

CATMA issued an updated survey in Fall 2019, which had primary mode and time on campus asked as it was in 2016. Using this new survey data, the auto mode share (which is no longer a data point used to calculate demand) is 4.6% as compared to 93.7% of students outside of a ½ mile of campus.

Clarification #2:

How were students in campus-affiliated housing accounted for in this version of the JIPMP versus previous versions?

In the current 2020-2025 JIPMP, campus-affiliated housing (i.e. Redstone Lofts/Apartments & 194 St. Paul Street) were considered on-campus students, and their affiliated parking lots were included in the parking lot list in our 2019 survey. In previous surveys, campus-affiliated housing was not specified in the housing options, so students could self-select whether they were on or off campus which impacted their response to rest of the survey. In the JIPMP presented to you on 10/13, Redstone Lofts/Apartments students were included in the off-campus student user group. Based on PC questions on this, there are two options to remedy this:

Option #1) separate Redstone Lofts/Apartments students as their own user group

Option #2) move Redstone Lofts/Apartments to the on-campus supply

Both options require Redstone's parking to be added to supply, although UVM operated parking supply can accommodate all the Redstone Lofts/Apts students/residents cars.



OPTION #1:

University of Vermont			
User Group	Number of Potential Users	Peak Parking Demand ¹	
		% of Users	Spaces
Employees ²	3,920	60.6%	2,376
On-Campus Students	5,366	11.1%	596
Redstone Lofts & Apartments	605	64.6%	391
Off-Campus Students	7,577	15.4%	1,167
Visitors			185
Fleet			218
Total Peak Parking Demand³			4,933
Total Parking Supply			5,301
<i>UVM Operated Parking Supply</i>			4,939
<i>Redstone Parking Supply</i>			362
Net Spaces (w/ only UVM supply)			+6
Net Spaces (w/ total supply)			+368

OPTION #2:

University of Vermont			
User Group	Number of Potential Users	Peak Parking Demand ¹	
		% of Users	Spaces
Employees ²	3,920	60.6%	2,376
On-Campus Students	5,971	13.4%	801
Off-Campus Students	7,577	15.4%	1,167
Visitors			185
Fleet			218
Total Peak Parking Demand³			4,747
Total Parking Supply			5,301
<i>UVM Operated Parking Supply</i>			4,939
<i>Redstone Parking Supply</i>			362
Net Spaces (w/only UVM supply)			+192
Net Spaces (w/ total supply)			+554



Clarification #3:

What percentage of students are parking on-street at peak time? How many of them are from within a ½ mile of campus?

The CATMA Fall 2019 Employee & Student Transportation Surveys attempted, for the first time, to collect data about on-street parking by asking “who is on campus at peak time and parking on street”. However, we did not branch this question with mode. As we stated in the current JIPMP, Table 2-3 was most likely an over estimation. We recognized the survey question could have been misunderstood or confusing for respondents, and we plan to update this question in our Spring 2021 Surveys to collect better data.

Below is an updated table, based on additional analysis, filtering only individuals that drive to campus at peak time and park on the street:

	Number of People Driving to Campus at Peak Time & Parking on Street	Percentage of People Driving to Campus at Peak Time & Parking on Street
UNIVERSITY OF VERMONT		
Off-Campus Students (w/in ½ mi)	2	1%
Off-Campus Students (outside ½ mi)	25	7%
Employees	35	4%
CHAMPLAIN COLLEGE		
Off-Campus Students (w/in ½ mi)	0	0%
Off-Campus Students (outside ½ mi)	0	0%
Employees	5	7%
UVM MEDICAL CENTER		
Employees (Medical Center Campus)	30	4%
Employees (1 So Prospect)	2	3%
Total	99	



Clarification #4:

How were you able to condense the groups used to estimate demand in this version vs previous versions?

Previous versions of the JIPMP broke employees down by the following categories:

Previous Versions	Current Version
UVM/Champlain Students On-Campus Students • First Year Students • Non-First Year Students Off-Campus Students • Off-campus students within ½ mile of campus • Off-campus students outside ½ mile of campus	UVM/Champlain Students • On-Campus Students • Off-Campus Students
UVM/Champlain Employees Full-time Part-time Contracted*	UVM/Champlain Employees • All employees (full & part time) • Contracted*
UVM Medical Center Employees by Campus • Full-time • Part-time & Per Diem	UVM Medical Center • All Employees by Campus

*Contracted employees are not surveyed by CATMA. Their respective parking demand is an estimate provided by the institutions.

In past JIPMPs, these subcategories were created on the assumption that each group has significantly different mode shares because of the times they are on campus. However, since the current JIPMP's demand formula consists of only those who drive to campus at peak time (instead of all those who drive multiplied by those on campus at peak time) the subcategories are not necessary to accurately estimate demand.

Clarification #5:

What does the UVM Medical Center's off-site supply look like and how does it help manage parking demand?

Below is an updated demand calculation for UVM Medical Center that includes their off-site parking supply and those who park there. We can replace the current demand charts with below supply format, or include current and below.



UVM Medical Center			
User Group	Number of Users	Peak Parking Demand ¹	
		% of Users	Spaces
Medical Center Campus			
Employees	5,567	34%	1,893
Out-Patients			708
In-Patients			75
Visitors ²			250
Fleet			38
<i>Subtotal</i>			2,964
1 South Prospect			
Employees	630	6%	38
Out-Patients			236
Fleet			8
<i>Subtotal</i>			282
Total Peak Parking Demand³			3,246
Parking Supply on campus			2,509
Parking Supply off-site			1,237
Total parking supply			3,746
Net spaces			+500

It should be noted this surplus would primarily be accounted for at their off-site lots.

Clarification #6: Can we see utilization maps with the breakdown of who parks where?

This is a good question/suggestion, and one CATMA may be able to include in our Spring 2021 JIPMP update. We will work with the institutions to explore the information they have available or could collect to produce this map. In the interim, both [UVM](#) and [Champlain College](#) have maps on their websites that illustrate permitted parking lots, EV stations, handicap parking, bike parking and storage, GMT bus stops near campus, CATS shuttle stops, Carshare pods. We can add these links into this update if appropriate, or in Spring 2021 update.

We will plan to review the contents of this memo and respond to any further questions at your meeting on 11/10, as we plan to then present to DRB on 11/17. Thank you again for your engagement and thoughtful input as we strive to provide an improved and resourceful 5-year JIPMP.



MEMORANDUM: October 8, 2020

To: David White, Meagan Tuttle, and Scott Gustin at City of Burlington
From: Sandy Thibault and Kim Furtado at CATMA
Subj: UVM's Potential Leasing of 351 Pine Street in relation to the CATMA 2020-2025 JIPMP

In the 2020-2025 CATMA Joint Institutional Parking Management Plan (JIPMP), the University of Vermont's current and future parking supply contain a new 200-space parking lot located at 351 Pine Street. 351 Pine Street was approved by the Development Review Board for a Conditional Use E-LM permit on December 3, 2019. The utilization of 351 Pine Street for residential student long-term parking/storage was a necessary requirement for approval of the 149 Beaumont Avenue Firestone addition due to the project's impact to on-site parking.

At the time of approval, UVM's on-site lots averaged an 83% occupancy rate at peak time. However, both approval for 351 Pine Street and 149 Beaumont Avenue preceded the COVID-19 pandemic which has dramatically altered parking occupancy on UVM's campus. As of September 30, 2020, UVM's on-site lots averaged a 61% utilization rate (*Attachment 1*). Due to this low utilization, using 351 Pine Street as vehicle storage is unnecessary for the 2020-2021 academic year. The City of Burlington's Planning and Zoning Department has permitted UVM to sublease its 351 Pine Street from October 1, 2020 through August 2021, pending Act 250 approval and acknowledgement within the 2020-2025 JIPMP vis-à-vis this memo. The lot will be used for vehicle storage by a local car dealership and will not result in any increase in traffic.

The analysis contained within the CATMA 2020-2025 JIPMP was produced using data collected in Fall 2019, and it would be inconsistent to amend the JIPMP with partial data collected under different pretenses. However, to provide the City with as accurate conditions as possible given existing data, a demand estimate using updated enrollment numbers and without the 351 Pine Street parking lot was created (*Attachment 2*). With a new supply of 4,740 spaces and reduced in-person student enrollment numbers, UVM's estimated demand for Fall 2020 is 4,401 leaving them a 339-space surplus. This demand estimate is not as accurate as that provided within the JIPMP due to expected differences in peak time on-campus and clearly overestimates demand when compared to current utilization. CATMA is confident UVM has the on-site parking capacity to manage demand without the 200 spaces at 351 Pine Street until August 2021. The Spring 2021 JIPMP Annual Update will address this change in more detail, as both CATMA and UVM will closely monitor on-site utilization over the coming months.

If you have any questions, please reach out to Kim or me. Thank you.



Attachment 1: Average occupancy counts for UVM's parking lots in September 2020.

UVM PEAK DEMAND LOT COUNTS - September 2020				
Location	Usable Spaces	Occupied Spaces	Empty Spaces	Percent Full
Athletic Commuter	1,674	867	807	52%
Core Central	57	44	13	77%
Core East	784	577	207	74%
Core North	369	219	150	59%
Core South	193	50	143	26%
Core West	387	163	224	42%
Commuter Lots	323	249	74	77%
Redstone	619	498	121	80%
Trinity	334	214	120	64%
Total	4,740	2,881	1859	61%

Attachment 2: Estimated demand for UVM's parking lots for Fall 2020 Semester.

University of Vermont			
User Group	Number of Potential Users	Peak Parking Demand ¹	
		% of Users	Spaces
Employees ²	3,920	60.6%	2,376
On-Campus Students ³	5,227	13.3%	696
Off-Campus Students ⁴	6,010	15.4%	926
Visitors			185
Fleet			218
Total Peak Parking Demand⁵			4,401
Total Parking Supply			4,740
Net Spaces			339

1. Peak parking demand is calculated from data collected in the 2019 CATAMA Employee and Student Transportation Survey using the methodology described in Appendix A. "% of Users" consists only of car users who are on campus at peak time.
2. Employees not located on Main Campus are not included in this count. These numbers have not been changed. UVM will have updated numbers in November 2020.
3. UVM converted Jeanne Mance, Slade, and the Cottages for quarantine/isolation spaces.
4. This number only includes students with in-person access to UVM. 2,055 students have chosen the At Home/Online option for Fall 2020 and have no access to on-campus facilities.
5. Total peak parking demand has a margin of error of ± 210 spaces.



2020 - 2025

Joint Institutional Parking Management Plan



Submitted on: October 13, 2020

Prepared for: City of Burlington
Planning Commission

Submitted by: Chittenden Area
Transportation Management
Association

In Cooperation with: Champlain
College, University of Vermont,
and University of Vermont Medical
Center

Table of Contents

Table of Contents.....	i
List of Tables.....	iii
List of Figures.....	iii
1. Introduction	1
Joint Institutional Parking Management Plan	1
About CATMA	2
2. Collective Summary	4
Collective Institutional Results	4
Nearby On-Street Parking	5
Collective Trends.....	6
Collective TDM Strategies/Highlights.....	6
3. Champlain College.....	8
Current Conditions.....	8
Future Conditions	10
Unique Trends & TDM Strategies	12
4. University of Vermont.....	16
Current Conditions.....	16
Future Conditions	19
Unique Trends & TDM Strategies	22
5. University of Vermont Medical Center	28
Current Conditions.....	28
Future Conditions	31
Unique Trends & TDM Strategies	32
6. Conclusion	36
Appendix A: Methodology	37
Lot Counts.....	37
Survey Administration.....	37
Survey Weighting	37
Demand Calculation	38
Margin of Error	38
Appendix B: Parking Demand Estimation Overview	40
Parking Demand Overview	40
Parking Demand Concepts and Terminology.....	40

State of Practice for Institutional Parking Plans in Higher Education.....41

Advantages and Drawbacks of Lot Counts42

Advantages and Drawbacks of User Surveys42

Conclusions.....43

References43

List of Tables

Collective Summary

Table 2-1. Summary of current parking conditions and CDO requirements. ----- 4

Table 2-2. Summary of future (2025) parking conditions, CDO requirements, and requested parking waiver. ----- 5

Table 2-3. Institutional on-street parking demand at peak time. ----- 5

Champlain College

Table 3-1. Current GSF, parking requirements, and parking supply for Champlain College. ----- 8

Table 3-2. List and completion status of all projects mentioned in the 2014-2019 JIPMP. ----- 8

Table 3-3. Current parking demand calculation for Champlain College. ----- 9

Table 3-4. Champlain College survey respondents reporting on-street parking at peak hours. 10

Table 3-5. Future construction plans for Champlain College.----- 11

Table 3-6. Future GSF, parking requirements, and parking supply for Champlain College. ---- 11

Table 3-7. Estimated future parking demand for Champlain College. ----- 11

Table 3-8. Champlain campus shuttle schedule. ----- 14

University of Vermont

Table 4-1. Current GSF, parking requirements, and parking supply available at UVM. ----- 16

Table 4-2. List and completion status of all projects mentioned in the 2014-2019 JIPMP. ----- 16

Table 4-3. List of projects completed in past year that were not included in 2014-2019 JIPMP. 17

Table 4-4. Current demand calculation for UVM. ----- 19

Table 4-5. UVM survey respondents reporting parking on-street at peak time. ----- 19

Table 4-6. Future construction plans for UVM with associated changes of building area and parking requirements.----- 19

Table 4-7. Future GSF, parking requirements, and parking supply for UVM.----- 20

Table 4-8. Estimated future parking demand for UVM ----- 21

Table 4-9. CATS Shuttle Schedule.----- 26

University of Vermont Medical Center

Table 5-1. Current GSF, parking requirements, and parking supply available at UVM Medical Center (Medical Center Campus and 1 South Prospect).----- 29

Table 5-2. Current demand calculation for UVM Medical Center (Medical Center Campus and 1 South Prospect). ----- **Error! Bookmark not defined.**

Table 5-3. Future GSF, parking requirements, and parking supply for UVM Medical Center (Medical Center Campus and 1 South Prospect). ----- 31

Table 5-4. Estimated future parking demand for UVM Medical Center (Medical Center Campus and 1 South Prospect).----- 31

Table 5-5. UVM Medical Center shuttle schedule. ----- 34

Table 5-6. Average number of transit passes sold monthly by UVM Medical Center for selected years (2014 & 2019).----- 35

List of Figures

Champlain College

Figure 3-1. Map of average parking utilization rates by lot on Champlain College campus. ---- 10

Figure 3-2. Mode split (2019) for Champlain employees and off-campus students (by distance of home from campus).----- 12

Figure 3-3. Collective mode split (2019) (including sustainable modes) for Champlain College employees and students. ----- 13

Figure 3-4. Drive alone rate for Champlain College employees and off-campus students (by distance of home from campus) (2001 – 2019).-----	13
Figure 3-5. Vehicle ownership trend for Champlain on-campus students (2003-2019). -----	14
Figure 3-6. UA Trips by Champlain students, faculty, and staff with associated cost (2008 - 2019).-----	15
<u>University of Vermont</u>	
Figure 4-1. Map of average parking utilizations rates by lot on University of Vermont campus. 18	
Figure 4-2. Mode split (2019) for UVM employees and off-campus students (by distance of home from campus). -----	22
Figure 4-3. Collective mode split (2019) (including sustainable modes) for UVM employees and students. -----	22
Figure 4-4. Drive alone rate trend for UVM employees and off-campus students (by distance of home from campus) (2001 – 2019).-----	24
Figure 4-5. Vehicle ownership trend for UVM on-campus students (2003-2019). -----	24
Figure 4-6. UA Trips by UVM students, faculty, and staff with associated cost (2008 -2019).--	25
<u>University of Vermont Medical Center</u>	
Figure 5-1. Map of average parking utilizations rates by lot on UVM Medical Center campus. 30	
Figure 5-2. Mode Split (2019) for UVM Medical Center Employees by Campus.-----	32
Figure 5-3. Collective mode split (2019) (including sustainable modes) for UVM Medical Center employees. -----	33
Figure 5-4. Drive Alone rate trend for UVM Medical Center Employees (2001-2019). -----	33

I. Introduction

The Chittenden Area Transportation Management Association (aka CATMA) has been submitting a 5-year Joint Institutional Parking Management Plan (JIPMP) to the City of Burlington since 2009, along with annual updates under [Article 8 of the Burlington Comprehensive Development Ordinance \(CDO\)](#). This report allows the institutions to demonstrate parking demand and, when lower than parking requirements outlined in Article 8 of the CDO, receive what amounts to a parking waiver from those standards when applying for zoning permits for projects listed in this report. This report may be approved by Burlington's Planning Commission and Development Review Board (DRB) for a period of up to five years with annual updates reported to the City's Planning and Zoning office. This Plan is submitted by CATMA on behalf of its founding institutional members: Champlain College, University of Vermont, and the University of Vermont Medical Center.

Joint Institutional Parking Management Plan

Purpose

The 5-Year JIPMP and its annual updates are intended to:

- Recognize the need to manage parking demand and resources holistically and creatively, employing transportation demand management (TDM) practices as well as supplying adequate parking facilities
- Recognize the efficiencies gained when several neighboring institutions share resources and collaboratively participate in parking and TDM programs
- Ensure that city streets in nearby neighborhoods are not unfairly burdened by parking demands from post-secondary education or medical institutions.

In addition to the requirements of Burlington ordinance Article 8 Section 8.1.15 Waivers from Parking Requirements, an Institutional Parking Management Plan shall include the following:

- a) Information specifying the proposed number of students (full-time, part-time, commuter, on campus, off campus, and continued education), faculty and staff (full time and part time), patients and visitors being served by the institution and anticipated over the ensuing five year period;
- b) An analysis of the anticipated parking demand by user group, time of day and / or demand by use;
- c) Information specifying the number and composition of the institution's vehicle fleet, where these vehicles are regularly kept, and designated "service vehicle only" parking;
- d) Programs, policies or incentives used to reduce or manage the demand for parking which may include but are not limited to:
 - policies which restrict and/or prohibit the bringing of vehicles to the institution for various users or groups of users
 - transportation demand management programs to encourage the use of public transit, walking, bicycling, carpooling, vanpooling and telecommuting
 - implementation of a parking permit system to allocate parking throughout the system;
- e) Implementation of a monitoring, compliance, and enforcement system to measure and ensure compliance with the plan.

Content

The 2020-2025 JIPMP contains a collective summary chapter which highlights the current and future parking conditions of each institution, on-street parking trends, collective transportation trends, and collective TDM strategies in place for all of the institutions.

Each institution (Champlain College, University of Vermont (UVM), and University of Vermont Medical Center (UVM Medical Center) have their own chapter which contains the following information:

- Current parking requirements per Burlington's Comprehensive Development Ordinance (CDO)
- Updates on construction projects reported in the previous [2014-2019 JIPMP](#)
- Current parking demand estimates and on-street parking
- Planned construction projects for the next five years
- Future parking demand estimates
- Institutional mode trends reported from the 2019 CATMA Employee and Student Transportation Surveys
- Update on status of institution-specific TDM strategies

The data provided in the 2020-2025 JIPMP has been streamlined from previous versions to only include the most relevant information.

A new Supplement document was created for reasons of space and is not essential for inclusion in the full text of this report but might benefit the reader for further detail.

About CATMA

CATMA was established in April 1992 by the three “Hill” institutions in Burlington: Champlain College, University of Vermont, and the University of Vermont Medical Center. In January 2015, CATMA expanded to a regional TMA serving Chittenden County with transportation demand management services, incentives, and programs. Its mission is to work with members and community partners to plan and manage safe, convenient, and economical transportation and parking options in ways that better coordinate land use and reduce environmental impacts. In addition to collective parking management among the Hill institutions, they have also invested and committed to TDM strategies for over 27 years. An overview and information on CATMA can be found at catmavt.org.

Transportation Management Associations (TMA)

TMA's are associations, organizations, or cooperatives that provide transportation services and education to businesses, property owners, residents, and employees in a defined geographic area, combining their efforts to expand transportation options and reduce program costs. They are not-for-profit collaborations of private and public sector entities working together towards common goals, such as congestion mitigation, transportation services and pollution reduction.

Transportation Demand Management (TDM)

Transportation Demand Management is defined as, “ the acts of creating a most efficient multimodal transportation system that moves people with the goal of reducing congestion, improving air quality, and stimulating economic activity.”¹ It is the use of planning, programs, policy,

¹ Association for Commuter Transportation. 2020. “Benefits of TDM.” <https://www.actweb.org/i4a/pages/index.cfm?pageID=3473>

marketing, communications, incentives, pricing and technology to shift travel mode, routes used, departure times, number of trips and location and design work space or public attractions.”

2. Collective Summary

Collective Institutional Results

The findings below provide an overview of the parking supply and demand data collection and analysis effort conducted by CATMA with guidance from the UVM Transportation Research Center. Parking demand is calculated by determining the peak proportion of automobile users that park on campus using data from CATMA's 2019 Employee and Student Transportation Surveys. For the purpose of this report, demand is defined as the number of automobile users who park on campus at the peak time. A more detailed explanation of the demand calculation can be found in [Appendix A](#). Detailed findings can be found in the individual institutional sections.

Each institution's employment and enrollment numbers refer to employees working on the "Hill" and students who attend classes within the City of Burlington.

Table 2-1 is a summary of all information required to apply for a parking waiver per the Burlington Comprehensive Development Ordinances, which will be referred to as CDO throughout this document. The CDO outlines both the minimum required number and maximum allowed number of parking spaces any development can have based on size and use, but because the institutions are uniquely positioned to manage their parking demands in collective and creative ways, they can request a parking waiver from the City of Burlington if they demonstrate their ability to manage parking demand. **The waiver requested will be the minimum parking required per CDO minus the institution's parking supply.**

As seen in Table 2-1, there is often a discrepancy between the maximum utilization recorded and the estimated demand. The discrepancy between utilization and demand simply means that all people who may want to park on campus at a given time did not park on campus when counts were conducted. These individuals may find alternative locations (such as the street or a non-campus parking lot) to park their vehicle or may utilize other transportation modes during peak time. For a more in-depth explanation of this, please see [Appendix B](#).

It should be noted that all information in this report reflects data predating the COVID-19 crisis. All Hill institutions foresee changes in future policies and trends, which may reduce users and parking demand. Champlain College and UVM enrollment numbers may change. Over the past four months, the Hill institutions have expanded telework, online learning, and telehealth options. It is also likely for at least the next year, large events typically hosted on campus by the institutions will not be possible due to physical distancing guidelines which will reduce demand for visitor parking. The impacts of these conditions will be addressed in 2021 Annual JIPMP Update.

Table 2-1. Summary of current parking conditions and CDO requirements.

	Champlain College	UVM	UVM Medical Center
Current Conditions			
Current Potential Users¹	2,967	17,468	6,197
Current Demand²	612	4,754	2,330
Current Maximum Parking Utilization³	599	3,958	2,408
Minimum Parking Required by CDO⁴	1,677	11,159	3,284

Current Parking Supply	710	4,939	2,509
-------------------------------	-----	-------	-------

¹Current users includes students and employees. Due to insufficient mode data for patients/visitors, demand created by them is added to the demand calculation based on institutional estimates.

²Determined using CATMA 2019 Employee and Student Transportation Survey.

³This is the maximum count recorded between 10 AM and 2 PM on Oct. 22-24, 2019 or Feb. 18-20, 2020.

⁴Requirements based on gross square footage (GSF) calculations found in Burlington CDO.

Table 2-2. Summary of future (2025) parking conditions, CDO requirements, and requested parking waiver.

	Champlain College	UVM	UVM Medical Center
Future Conditions			
Future Potential Users¹	2,910	17,931	6,197
Future Demand²	591	4,867	2,330
Minimum Parking Required by CDO³	1,754	11,313	3,284
Net Impact of Planned Projects (2020-2025)	-	128	-
Future Parking Supply	660	5,045	2,509
Waiver Request⁴	1,094	6,268	775

¹Future users includes students, employees in Burlington and visitor/patient estimates.

² Determined using CATMA 2019 Employee and Student Transportation Survey.

³Requirements based on gross square footage (GSF) calculations found in Burlington CDO.

⁴The waiver request is equal to the minimum parking required by the CDO minus the future parking supply.

On-Street Parking Adjacent to Institutions

For the first time in CATMA's history, the 2019 Employee and Student Transportation Surveys attempted to understand who from the three institutions parks on city streets adjacent to the campuses. There are 283 institutional affiliates who may park on-street during peak time (Table 2-3). This estimation is most likely higher than actual use for two reasons: 1) off-campus students may have said they park off-campus but their car is parked by their residences and 2) it is unlikely every single day each of these people are parking on the street due to nearby street parking availability and restrictions.

Table 2-3. Institutional on-street parking demand at peak time¹.

	Champlain College	UVM	UVM Medical Center	All
Students				
<i>On-Campus</i>	6	13	N/A	19
<i>Off-Campus</i>	12	99	N/A	111
Employees	22	80	51	153
Total	40	192	51	283

¹Peak time for each institution can be found in Appendix A, Table A-2.

Collective Trends

The 2019 CATMA Employee Transportation Survey saw an increase in drive alone rates not only for employees of the three Hill institutions, but for all of CATMA membership. This collective increase is most likely due to a combination of factors such as lower gas prices and more affordable housing outside of Burlington. It is also consistent with a gradual increase in single-occupancy vehicle commuting that has been documented at the state level². The 2019 CATMA Student Transportation Survey showed that for students living within a half mile of their respective campus, drive alone rates decreased. Because housing distance remained constant, existing TDM strategies could continue to decrease the drive alone rate amongst this group.

Collective TDM Strategies/Highlights

CATMA offers its members a comprehensive suite of TDM incentives, programs and services that are essential to support and encourage sustainable mobility options rather than driving alone.

A comprehensive suite of TDM programs is essential to provide a commuter with connectivity options. The following is a list of TDM programs available to CATMA members:

- Transit Discounts and Subsidies
 - Unlimited Access: Applicable for UVM and Champlain College
 - Discount Passes : Applicable for UVM Medical Center
 - Employee Transit Pass Program: Applicable for CATMA members*CATMA's Unlimited Access Program is GMT's second largest customer.*
- [CATMA Bike/Walk Rewards Program](#)
- [Greenride Bikeshare System Access/Member Discounts](#)
- [Carpool/Vanpool Services](#)
- [CarShare Vermont System Access/Campus Discounts](#)
- [Guaranteed Ride Home](#)
- Education, Outreach and Awareness

The following demonstrates the collective efforts of the Hill institutions to share parking and TDM resources. In addition, each institution has individual TDM and Parking initiatives in place which are described in their respective chapters.

- Off-Site Parking and Shuttles: CATMA, on behalf of its members, contracts with Ride Your Bike, LLC for 403 spaces at 115 Lakeside Avenue lot. Of these, UVM Medical Center leases 252 spaces, Champlain College leases 150 spaces although Champlain will reduce to 100 effective 9/1/20. Each member operates their own shuttles in order to provide direct and efficient service and meet employees work schedules.
- Campus Shuttles: Each institution has its own self-operated or contracted shuttle service. These shuttles are used on/around campus and also between campus and off-site lots. Employees of all Hill institutions can ride any of the shuttles, if needed. However, for UVM Medical Center shuttles, there must be capacity for its employees before allowing other riders to board. UVM allows Ruggles House constituents to ride the CATS shuttle as a good neighbor gesture.
- Shared Campus Parking and Shuttles: UVM Medical Center leases parking from UVM (South Lot of Jeffords).

² Vermont Agency of Transportation. 2019. "The Vermont Transportation Energy Profile."
https://vtrans.vermont.gov/sites/aot/files/planning/documents/planning/The%20Vermont%20Transportation%20Energy%20Profile_2019_Final.pdf

- Green Mountain Bike/Walkway: There are numerous pedestrian and bikeways throughout the UVM Medical Center and UVM medical and academic campuses which their constituents, visitors, neighbors and general public utilize. The Green Mountain Bike/Walkway represents a new active transportation project that was constructed in collaboration with both institutions and has created a thoroughfare through UVM's main campus, across a portion of UVM Medical Center's campus to Colchester Avenue, giving users a safe and clear north/south route through the campuses.
- Real-Time Shuttle App:
 - In Winter 2019-2020, Champlain College joined the TransLoc Real-Time Shuttle App contracted by UVM.
 - UVM Medical Center contracts with Premier Bus Company for its employee intra-campus shuttles effective 1/1/2020. A real-time shuttle app locator is available for employees, and this shuttle info is on display screens in key shuttle pick up and drop off locations.

3. Champlain College

Founded in 1878, Champlain College is a small, not-for-profit, private college overlooking Lake Champlain and Burlington with additional campuses in Montreal, Canada and Dublin, Ireland. Their career driven approach to higher education prepares students for their professional life from their very first semester.

For the fifth year in a row, Champlain was named a “Most Innovative School” in the North by *U.S. News & World Reports* “America’s Best Colleges” 2020 regional rankings and listed among The Princeton Review’s “The Best 385 Colleges” in 2020. Champlain is also featured in the 2020 Fiske Guide to Colleges as one of the “best and most interesting schools” in the United States, Canada and Great Britain as well as recognized as a 2020 College of Distinction for its “Engagement, Teaching, Community and Outcomes”.

Current Conditions

Users (Students, Employees, & Visitors)

Champlain College is a small college with 4,419 current enrollments. Only 2,087 students are based on the Burlington campus, with over half of Champlain’s total enrollment based abroad or online. Of the Burlington students there are 2,078 undergraduate students and 9 graduate students. Champlain employs 1,194 staff members, but only 880 are based on the Burlington campus. Champlain has 377 full-time employees, 415 part-time employees, and 88 contracted employees.

GSF Requirements and Parking Supply

Champlain College is in the Shared Use Parking District and the Downtown Parking District. Champlain has a total of 47 buildings that influence the parking inventory. The gross square footage (GSF), associated required parking, and the current parking supply are included in Table 3-1 with further details in Supplement. Both Champlain College’s on-site and offsite parking supply contribute to the parking supply discussed in this JIPMP. Champlain’s current parking supply of 710 spaces is 967 spaces below the minimum parking required per Burlington’s CDO and 1,387 below the maximum.

Table 3-1. Current GSF, parking requirements, and parking supply for Champlain College.

	Champlain College
GSF	838,191
Minimum CDO Parking Requirement	1,677
Current Parking Supply	710
<i>On-Site</i>	560
<i>Leased Offsite Parking Supply</i>	150

Table 3-2. List and completion status of all projects mentioned in the 2014-2019 JIPMP.

Building Project	Completion Status
Butler Hall (ResTri)	Completed
Valcour Hall (Res-Tri)	
194 St Paul St	

CCM Project	
Miller Information Commons Addition	Carried forward to 2020-2025 JIPMP
Foster Hall Addition	
Information Technology & Sciences Building	
Ethan Allen Center	No longer planned
Summit & Maple Res Hall	
West Hall/Perry Lawn Res Hall	
Career Center/Durick Hall Addition	
IDX Student Life Addition	

Demand

Using data collected from the 2019 CATMA Transportation Surveys, Champlain College's current estimated peak parking demand is 612 spaces (margin of error ± 60 spaces) which is 98 spaces under their parking supply (see Table 3-3). During peak time, it is estimated 40 on-street parking spaces are occupied by Champlain College affiliates (see Table 3-4).

To complement the peak demand estimate from the 2019 CATMA Transportation Survey, Champlain College conducted parking lot utilization counts at 10 AM, 12PM, and 2 PM one week in October 2019 (12PM counts were not conducted in October) and a week in February 2020. Champlain's highest parking utilization was on Tuesday, October 22, 2019 at 2:00 PM with 599 occupied spaces, equating to an 84% utilization rate. This is very close to the peak demand (85% utilization) estimated from the survey data. Champlain College averaged a 73% utilization rate (517 spaces) for the 13 counts conducted. Figure 3-1 shows the average utilization by lot.

Table 3-3. Current parking demand calculation for Champlain College.

Champlain College			
User Group	Number of Potential Users	Peak Parking Demand ¹	
		% of Users	Spaces
Employees	880	40%	352
On-Campus Students	1479	14%	208
Off-Campus Students	608	5%	31
Visitors			15
Fleet ²			6
Total Peak Parking Demand³			612
Total Parking Supply			710
Net Spaces			98

¹Peak parking demand is calculated from data collected in the 2019 CATMA Employee and Student Transportation Survey using the methodology described in Appendix A. "% of Users" consists only of car users who are on campus at peak time.

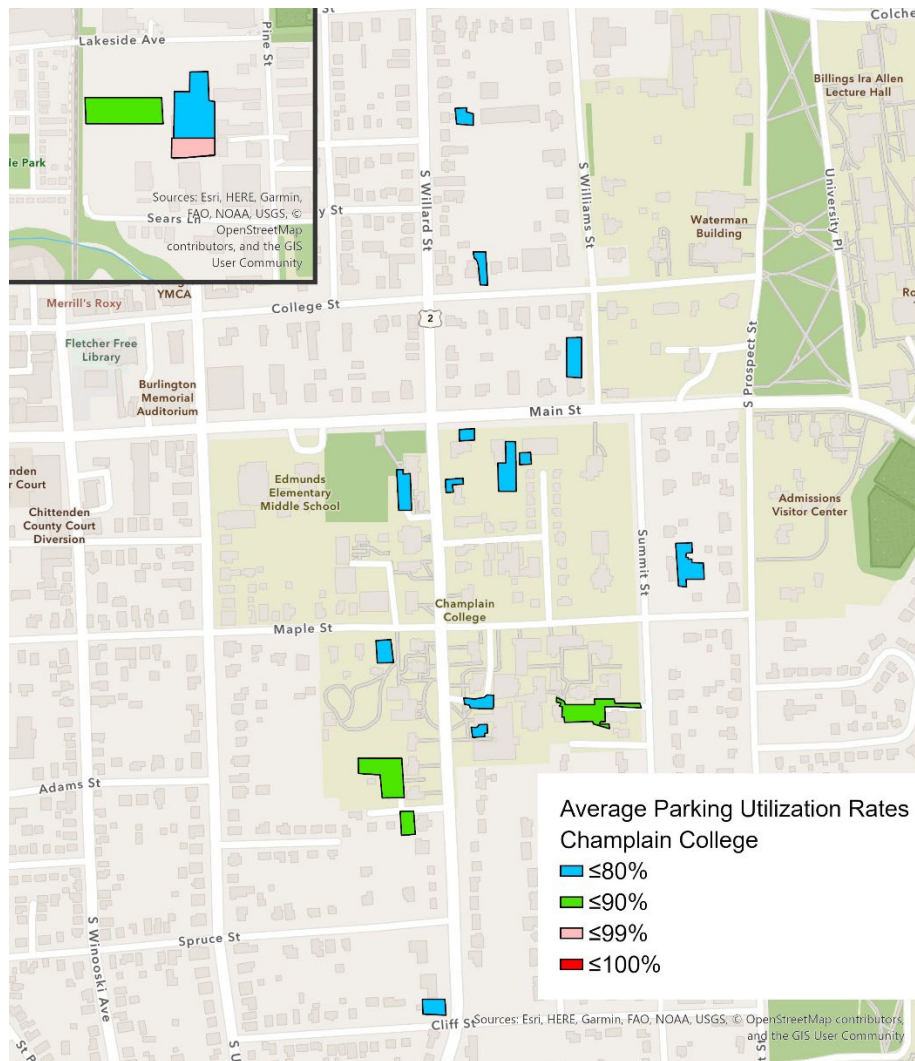
²Champlain has 16 fleet vehicles but estimates only 40% would attempt to park on campus at peak time. However, this estimation is not included as a peak parking demand percentage because it was not calculated from 2019 CATMA Employee Transportation Survey data.

³Total peak parking demand has a margin of error of ± 60 spaces.

Table 3-4. Champlain College survey respondents reporting on-street parking at peak hours.

	Within 2 Blocks of Campus	More Than 2 Blocks of Campus	Total
On-Campus Students	4	2	6
Off-Campus Students	6	6	12
Employees			22
Total			40

Figure 3-1. Map of average parking utilization rates by lot on Champlain College campus.



Future Conditions

Users (Students, Employees, & Visitors)

Champlain College expects a slight increase in enrollment and slight decrease in employment in the coming years. Total enrollment will increase to 4,430, but enrollment on the Burlington

campus will decrease slightly to 2,080 due to a lack of in-person graduate students. Full-time employment will remain at 380, part-time employment will decrease to 350 employees, and contracted employees will increase to 100.

GSF Requirements and Parking Supply

Champlain intends to complete the following projects by 2025 (Table 3-5). These projects are all academic buildings and thus no new residential beds will be added.

Table 3-5. Future construction plans for Champlain College.

Project Name	Change in Building Area	Associated Change in Parking Requirements	Est. Completion
MIC Addition	8,000	0	2025
Foster Hall Addition	3,500	0	
New ITS Building	27,000	0	

Champlain's GSF is expected to increase because of the new construction (Table 3-5). The maximum parking allowed would be 2,192 spaces. Champlain's inventory of 660 spaces is 1,094 spaces below the CDO required minimum and 1,532 below the maximum.

Table 3-6. Future GSF, parking requirements, and parking supply for Champlain College.

	Champlain College
GSF	876,691
Future CDO Required Parking	1,754
Future Parking Supply	660
<i>On-Site</i>	560
<i>Leased Offsite Parking Supply</i>	100

Estimated Demand

Using the same demand generator calculated by the 2019 CATMA Transportation Surveys for Champlain College, it is expected overall parking demand will decrease by 2025 (see Table 3-7). This decrease is mostly due to reduction of employees from 880 in 2020 to a projected 830 in 2025. Champlain, in collaboration with the City of Burlington, CATMA, Gotcha Bike, and others is bringing 200 electric-assist bikes to the regional bikeshare program and adding two bikeshare hubs to Champlain's campus (totaling seven campus bikeshare hubs which are conveniently accessible to all members regardless of campus affiliation). E-bike use has been shown to decrease drive alone rates year round by 10%³.

Table 3-7. Estimated future parking demand for Champlain College.

Champlain College			
User Group	Number of Potential Users	Peak Parking Demand ¹	
		% of Users	Spaces

³ McQueen, Michael, John MacArthur, and Christopher Cherry, PhD. 2019. "The E-Bike Potential: Estimating the Effect of E-bikes on Person Miles Travelled and Greenhouse Gas Emissions." Portland State University and University of Tennessee, Knoxville. https://wsd-pfb-sparkinfluence.s3.amazonaws.com/uploads/2019/05/E-bike-Potential-Paper-05_15_19-Final.pdf

Employees	830	40%	332
On-Campus Students	1474	14%	207
Off-Campus Students	606	5%	31
Visitors			15
Fleet ²			6
Total Peak Parking Demand³			591
Total Parking Supply			660
Estimated TDM Effects⁴			-25
Net Spaces			94

¹Peak parking demand is calculated from data collected in the 2019 CATAMA Employee and Student Transportation Survey using the methodology described in Appendix A. "% of Users" consists only of car users who are on campus at peak time.

² Champlain has 16 fleet vehicles but estimates only 40% would attempt to park on campus at peak time. However, this estimation is not included as a peak parking demand percentage because it was not calculated from 2019 CATMA Employee Transportation Survey data.

³ Total peak parking demand has a margin of error of ± 58 spaces.

⁴This value is only representative of new TDM strategies that have not yet affected current demand. The explanation of how this value was determined can be found in the narrative above.

Unique Trends & TDM Strategies

Trends

Employees and students at Champlain College are both more likely to drive alone than carpool as their primary mode to campus. Just over 40% of employees drive alone as their primary commute, though 68% report driving alone to campus sometimes. All user groups at Champlain have low use of carpool as a primary mode, though students are much more likely than employees to sometimes carpool to campus. Students within a half-mile of campus report a very low drive alone rate of only 4% (Figure 3-2). There are 39% of Champlain students and employees who choose an active mode of transportation as their primary mode and 24% who choose the public bus or campus shuttle instead of relying on an automobile (Figure 3-3).

Figure 3-2. Mode split (2019) for Champlain employees and off-campus students (by distance of home from campus).

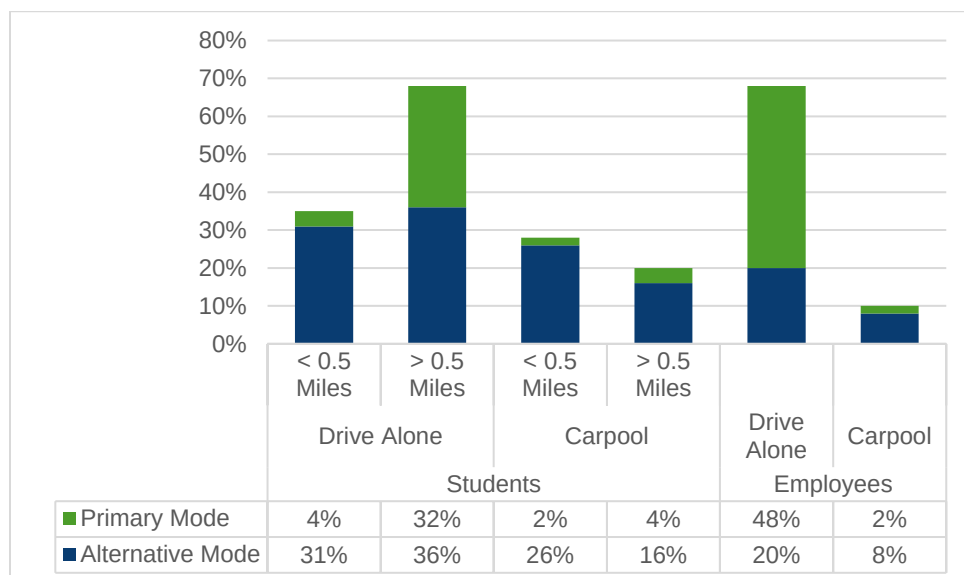
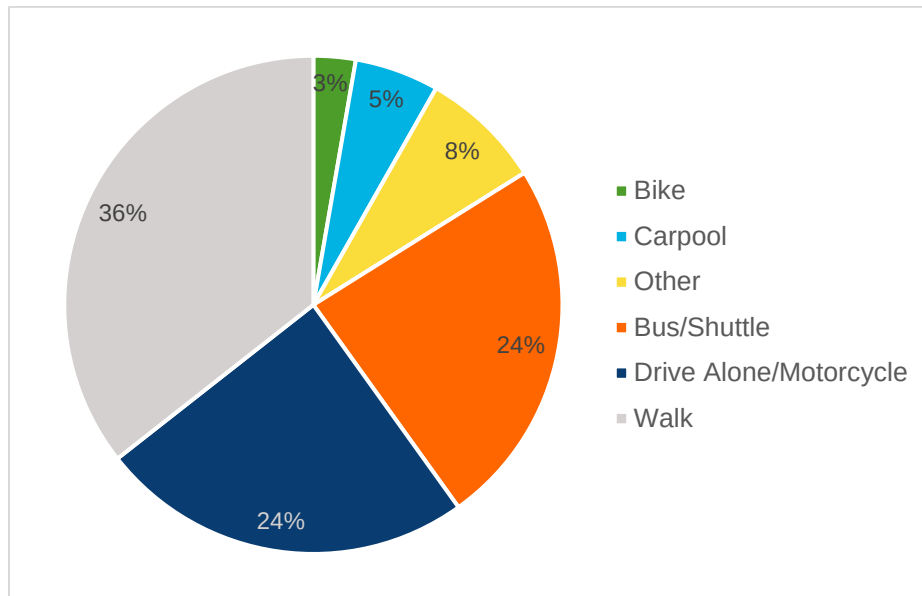


Figure 3-3. Collective mode split (2019) (including sustainable modes) for Champlain College employees and students.



Over time, students, regardless of their distance from campus, have relied on automobiles less and less, with 2019 seeing the lowest drive alone rate yet. The drive alone rate for employees raised slightly from the 2016 CATMA survey, but it has remained relatively stagnant for the past decade (Figure 3-4). Similarly to off-campus students, automobile reliance for on-campus students (as measured by vehicle ownership) has continued to decline, reaching an all-time low in 2019 (Figure 3-5). This new low can be attributed to Champlain's Fall 2018 policy prohibiting first years from bringing a car to campus (though some exceptions are allowed).

Figure 3-4. Drive alone rate for Champlain College employees and off-campus students (by distance of home from campus) (2001 – 2019).

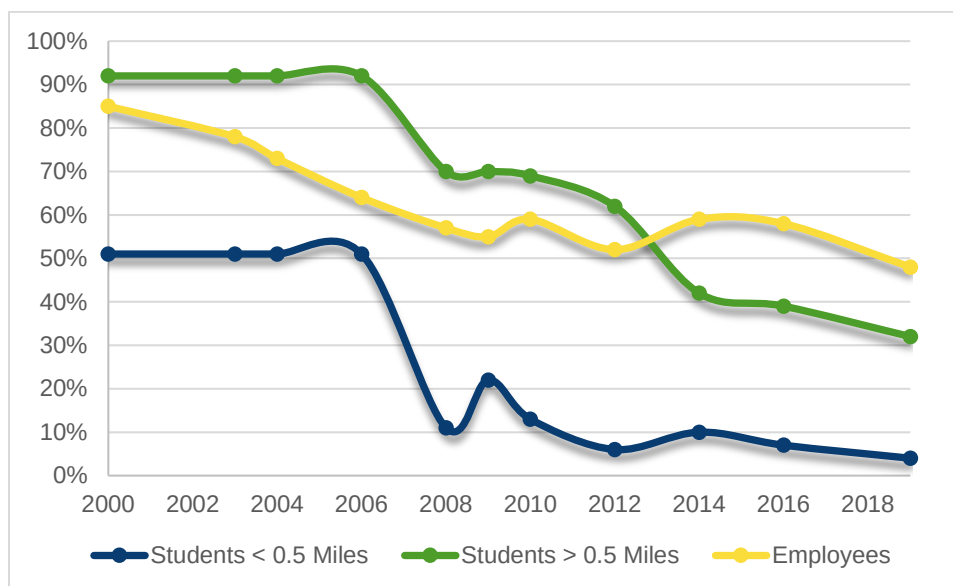
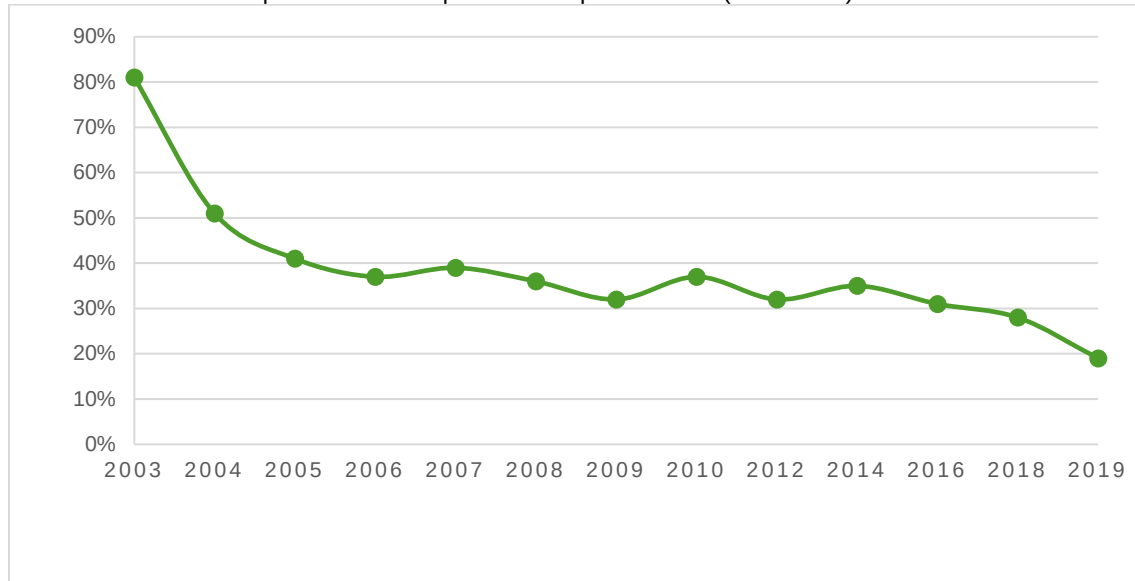


Figure 3-5. Vehicle ownership trend for Champlain on-campus students (2003-2019).



TDM Strategies

Permits & Other Regulated Uses

All vehicles parked on Champlain's campus must be permitted. Commuter students and employees have access to a free Zone 1 permit (located off-site at Champlain's 175 Lakeside Avenue campus). Employees can receive one permit per semester which can have two associated vehicles. Residential students can purchase a permit to park in the off-site lot at 115 Lakeside Avenue. All other permits allow users to park at the main Burlington campus have an associated fee ranging from \$90 - \$225 per semester. As of December 2019, Champlain College has issued 858 active permits.

Champlain Transportation's Parking Coordinator conducts daily counts and monitors lots. Individuals found in violation of parking rules will be given a citation with fines ranging from \$10 - \$100. Certain citations have a higher fee associated with them if it is not a user's first offense. City streets surrounding Champlain are also monitored by college staff as per an agreement made between Champlain and the City of Burlington. Cars parked on street without proper permitting and who are suspected of being Champlain College affiliates are issued a citation from the college. Tickets are issued via a commonly used ticketing management company, IPARQ.

On-Campus Shuttles

The Champlain campus shuttle system runs between the CCM Center on Main Campus, 194 Saint Paul Street Apartments, the Miller Center at 175 Lakeside Avenue, and the 115 Lakeside Avenue resident student parking lot. The shuttle system is operated in conjunction with Mountain Transit.

Table 3-8. Champlain campus shuttle schedule.

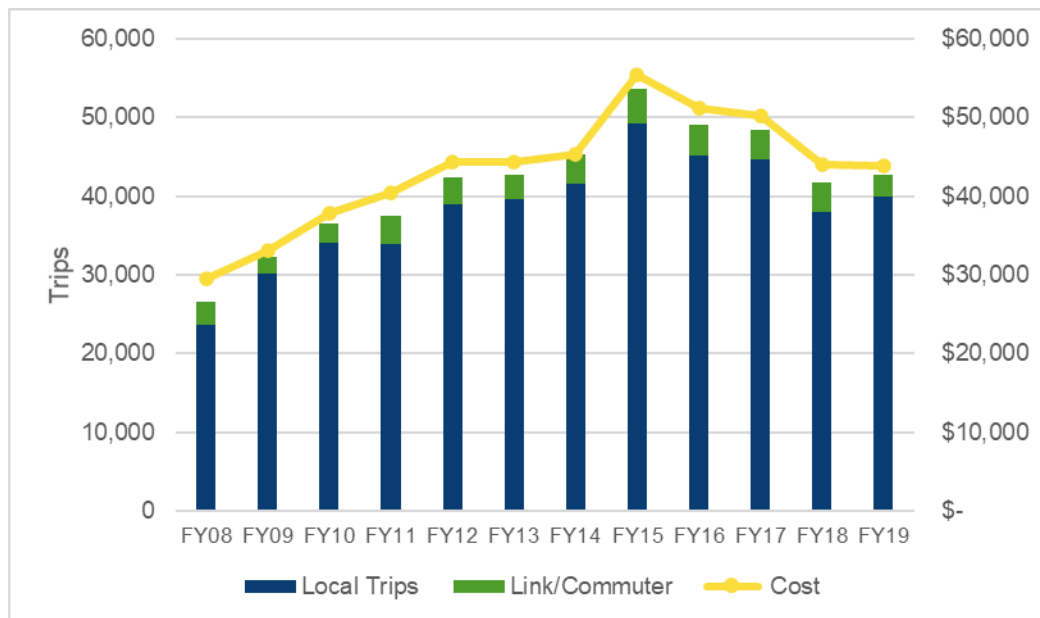
Routes	Days	Times	Runs Every (Minutes)	Buses Running
--------	------	-------	----------------------	---------------

Weekday	Mon - Fri	6:30am - 11pm	8-10	2
Weekend	Sat - Sun	10am - 9pm	15-17	1

Transit

In 2006, Champlain College joined the CATMA Unlimited Access Program, which provides unlimited free access on existing GMT public transit services to staff, faculty, and students. Champlain receives a 28% discount per ride from GMT by being a part of this program. Ridership and associated costs are displayed in Figure 3-6.

Figure 3-6. UA Trips by Champlain students, faculty, and staff with associated cost (2008 -2019).



Bicycle Infrastructure & Parking

Champlain College is nationally recognized as a Silver-level Bicycle Friendly Campus as of 2015. Champlain employees and students have access to bike racks throughout campus as well as covered bike storage in the CCM building. There are accessible showers on campus for those who bike. Bicycle pumps and other tools are located throughout campus. Champlain affiliates are eligible for a 50% discount on annual Greenride Bikeshare Membership through CATMA.

Car Sharing

Champlain College has a partnership with CarShare Vermont via CATMA's Campus Programs Contract. Champlain contributes between \$7,500 and \$10,000 annually to CarShare Vermont so that students and employees without long-term parking permits can receive a subsidized membership to CarShare services. The Campus Programs Contract accounts for about 30% of CarShare Vermont's total membership. There are two pods on Champlain's campus: 194 St. Paul Street and West Hall Lot.

NOTE: The Supplement provides more detailed data referred to in this report.

4. University of Vermont

Since 1791 the University of Vermont has worked to move humankind forward. Today, UVM is a Public Ivy and top research university of a perfect size, large enough to offer a breadth of ideas, resources and opportunities, yet small enough to enable close faculty-student mentorship across all levels of study, from bachelor's to M.D. programs. Students' educational experience and activities are enriched by its location- from the energy and innovation of Burlington to the forests, farms and independent spirit of Vermont. UVM provides students endless ways to explore the world, challenge ideas and dig in on the most pressing issues of our time.

Current Conditions

Users (Students, Employees, & Visitors)

The University of Vermont is the largest academic institution in the state with 13,548 total enrollments. In Fall 2019, UVM had 10,700 undergraduate students, 1,627 graduate/certificate students, 478 medical students, and 743 non-degree continuing education students. Employment at UVM currently in Fall 2019 was 4,139 faculty and staff. There were 3,570 full-time employees and 569 part-time employees. Excluding non-Burlington employees, UVM's total current employment is 3,920.

GSF Requirements and Parking Supply

The University of Vermont is in the Shared Use Parking District. UVM has a total of 232 buildings and accessory buildings. Sites UVM ground-leases (and their associated parking spaces), such as Redstone Lofts, Redstone Student Apartments, and Centennial Court Faculty/Staff Apartments are not included in this total. The gross square footage (GSF), associated required parking, and the current parking supply are included in Table 4-1. For the purposes of the JIPMP, all UVM's parking (on and off-site), except for parking it leases to the UVM Medical Center, count towards its current parking supply. UVM's current parking supply of 4,939 spaces is 6,220 below the CDO minimum and 9,009 below the maximum.

Table 4-1. Current GSF, parking requirements, and parking supply available at UVM.

	UVM
GSF	5,579,076
Minimum Parking Requirement	11,159
Current Available Parking Supply¹	4,939
<i>On-Site</i>	5,351
<i>Off-Site²</i>	200
<i>Leased Parking</i>	-612

¹On-site, off-site, and leased parking are used to calculate the current available parking supply.

²Off-Site parking is located at 351 Pine Street and is used for long term parking.

Table 4-2. List and completion status of all projects mentioned in the 2014-2019 JIPMP.

Building Project	Completion Status
STEM	Yes
Kalkin Addition (Ifshin Hall)	

61 Summit (Alumni House & Silver Pavilion)	Carried forward to 2020-2025 JIPMP
UVM Rescue Building	
Billings	
Housing Master Plan - Phase 1	
Virtue Field Outdoor Seating - Phases 1 & 2	
Virtue Field Outdoor Seating - Phase 3	
Multi-Purpose Event Center	
Athletic Recreation Center	

Table 4-3. List of projects completed in past year that were not included in 2014-2019 JIPMP.

Building Project	Associated Change in Parking
Cohen Hall	10
Library Addition	1
439 College Street	19
Pine Street Parking Lot	200

Demand

Using the Fall 2019 CATMA Employee and Student Surveys, along with the information above, it was determined the current parking demand for the University of Vermont is 4754, putting it at a 185-space surplus (margin of error ± 210 spaces)(Table 4-4). This estimated demand is higher than the recorded maximum parking utilization rate (observed on Thursday, February 20, 2020 at 12:00 PM) which was 83%. UVM averaged an 80% utilization rate for the counts conducted. Figure 4-1 shows the average utilization by lot. 80 employees and 112 students indicated they prefer to park on the street during peak time when driving to campus (Table 4-5).

Figure 4-1. Map of average parking utilizations rates by lot on University of Vermont campus.

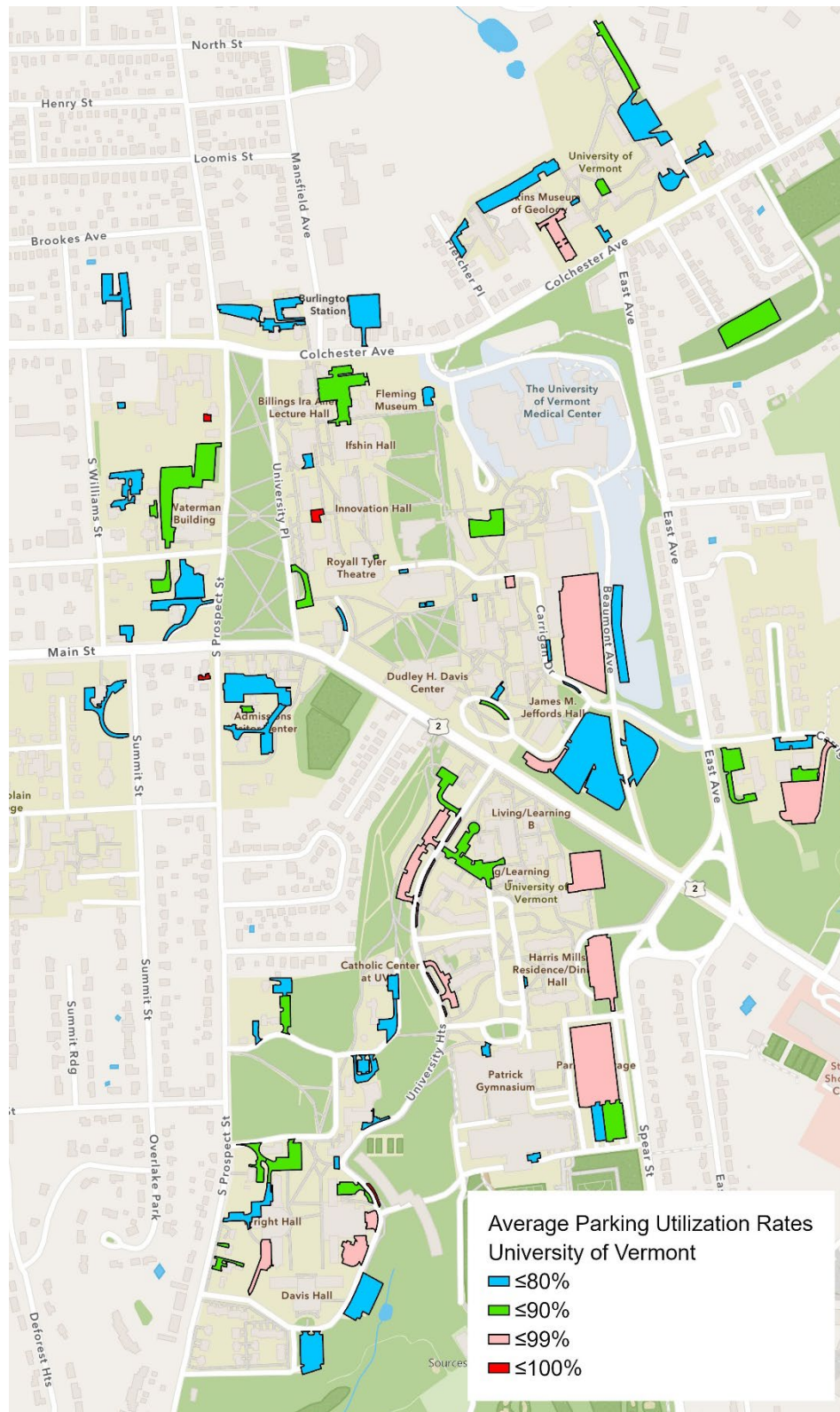


Table 4-4. Current demand calculation for UVM.

University of Vermont			
User Group	Number of Potential Users	Peak Parking Demand ¹	
		% of Users	Spaces
Employees ²	3,920	60.6%	2,376
On-Campus Students	5,366	13.3%	714
Off-Campus Students	8,182	15.4%	1,261
Visitors			185
Fleet			218
Total Peak Parking Demand³			4,754
Total Parking Supply			4,939
Net Spaces			185

¹Peak parking demand is calculated from data collected in the 2019 CATMA Employee and Student Transportation Survey using the methodology described in Appendix A. "% of Users" consists only of car users who are on campus at peak time.

²Employees not located on Main Campus are not included in this count.

³Total peak parking demand has a margin of error of ± 210 spaces.

Table 4-5. UVM survey respondents reporting parking on-street at peak time.

	Within 2 Blocks of Campus	More Than 2 Blocks of Campus	Total
On-Campus Students	6	7	13
Off-Campus Students	59	40	99
Employees			80
Total			192

Future Conditions

Users (Employees, Patients, & Visitors)

UVM expects a slight increase in both employment and enrollment by 2025. Projected enrollment is 13,850, a 302-student increase from 2020. This increase is expected to occur equally among all student groups. Projected employment is 4,081 for UVM's Burlington sites.

GSF Requirements and Parking Supply

UVM intends to complete the following projects by 2025 (Table 4-6). These projects will grow the university by over 35,000 GSF and 128 parking spaces.

Table 4-6. Future construction plans for UVM with associated changes of building area and parking requirements.

Project Name	Change in Building Area	Associated Change in Parking	Est. Completion
Music Building Recital Hall Addition	4,544	3	2022

New Research Facility for COM ¹	75,000	-121	
Jeffords East Lower Lot	0	67	
University Road (East Ave to Compound)	0	15	
University Heights Road (Southwick)	0	7	
Pomeroy Barn & 172 South Prospect	-6,067	15	
Virtue Field Phase 2	5,000	0	
ADA Code Compliance	0	-20	
Blundell	0	5	
Fleming Museum	0	20	2024
Outing Club Relocation	13,250	5	
Southwick Hall	0	3	
Tarrant (Multi-Purpose) Event Center	119,099	0	
Interfaith Center Parking Lot	0	40	2025
Torrey Hall Addition	2,860	0	
Miscellaneous Parking Adjustments ²		25	
Bioresearch Complex	0	200	
Future Structured Parking	0	TBD	
Coolidge Hall	-30,510	-10	
Colchester Ave/Dewey	-82,622	-83	Unknown
Back 5 & Cottages (Trinity Campus)	-64,907	-243	
Colchester Research Facility ³	0	200	
Total	35,647	128	

¹New Research Facility for COM has a separate Parking Plan which has been approved by the DRB in 2019. It is included in this project list to provide an accurate list of expected changes to UVM's parking supply.

²Wherever possible UVM will attempt to reallocate space to create more parking. It is estimated this will result in ~25 spaces over 5-years based on previous experience.

³This facility is estimated to house between 200 and 400 parking spaces. Though it is off-site it will impact on-campus demand depending on UVM policy.

The future parking inventory for UVM is provided in Table 4-7. UVM plans to continue leasing a portion of its parking supply to other institutions for revenue. UVM's future parking supply of 5,045 is 6,268 spaces below the CDO minimum and 8,705 spaces below the maximum.

Table 4-7. Future GSF, parking requirements, and parking supply for UVM.

	Main Campus
GSF	5,656,447
Minimum Parking Requirement	11,313

Future Available Parking Supply¹	5,045
<i>On-Site</i>	5,257
<i>Off-Site²</i>	400
<i>Leased Parking</i>	-612

¹On-site, off-site, and leased parking are used to calculate Future Available Parking Supply.

²The 200 off-site parking spaces located at 351 Pine St and the Colchester Research Facility are used for long term parking.

Estimated Demand

Assuming constant commute trends between 2020 and 2025, the estimated future demand for UVM will rise. However, this increased demand will be met with an increased parking supply and a reduction in fleet vehicles, which will increase UVM's estimated future parking surplus to 255 (margin of error $\pm$ 204 spaces)(Table 4-8). To reduce this demand, UVM will employ the following strategies:

UVM, in collaboration with the City of Burlington, CATMA, Gotcha Bike, and others is bringing 200 electric-assist bikes to the regional bikeshare program and adding five bikeshare hubs to UVM's campus (totaling seven campus bikeshare hubs which are accessible to all members regardless of campus affiliation). E-bike use has been shown to decrease drive alone rates year round by 10%⁴. UVM will be adding MDC (Motor Drive Cycles) parking options in safe, non-vehicle spaces. This will free up parking currently being occupied by MDCs for conventional vehicles. UVM estimates this will add 27 SOV spaces. Finally, in the 2019-2020 academic year, the Center for Research on Vermont launched an initiative which incentivizes UVM employees to turn in their parking permit. This pilot project resulted in 30 permits being turned in. If these three strategies continue in the future, this will reduce UVM's parking demand by 77 spaces giving UVM a 255-space surplus.

In addition, the potential post-COVID impacts on telework and online courses would reduce demand.

Table 4-8. Estimated future parking demand for UVM

University of Vermont			
User Group	Number of Potential Users	Peak Parking Demand ¹	
		% of Users	Spaces
Employees ²	4,081	60.6%	2,474
On-Campus Students	5,516	13.3%	734
Off-Campus Students	8,334	15.4%	1,284
Visitors			185
Fleet			190
Total Peak Parking Demand³			4,867
Total Parking Supply			5,045

⁴ McQueen, Michael, John MacArthur, and Christopher Cherry, PhD. 2019. "The E-Bike Potential: Estimating the Effect of E-bikes on Person Miles Travelled and Greenhouse Gas Emissions." Portland State University and University of Tennessee, Knoxville. https://wsd-pfb-sparkinfluence.s3.amazonaws.com/uploads/2019/05/E-bike-Potential-Paper-05_15_19-Final.pdf

Estimated TDM Effects⁴	-77
Net Spaces	255

¹Peak parking demand is calculated from data collected in the 2019 CATMA Employee and Student Transportation Survey using the methodology described in Appendix A. "% of Users" consists only of car users who are on campus at peak time.

²Employees not located on Main Campus are not included in this count.

³Total peak parking demand has a margin of error of ± 204 spaces.

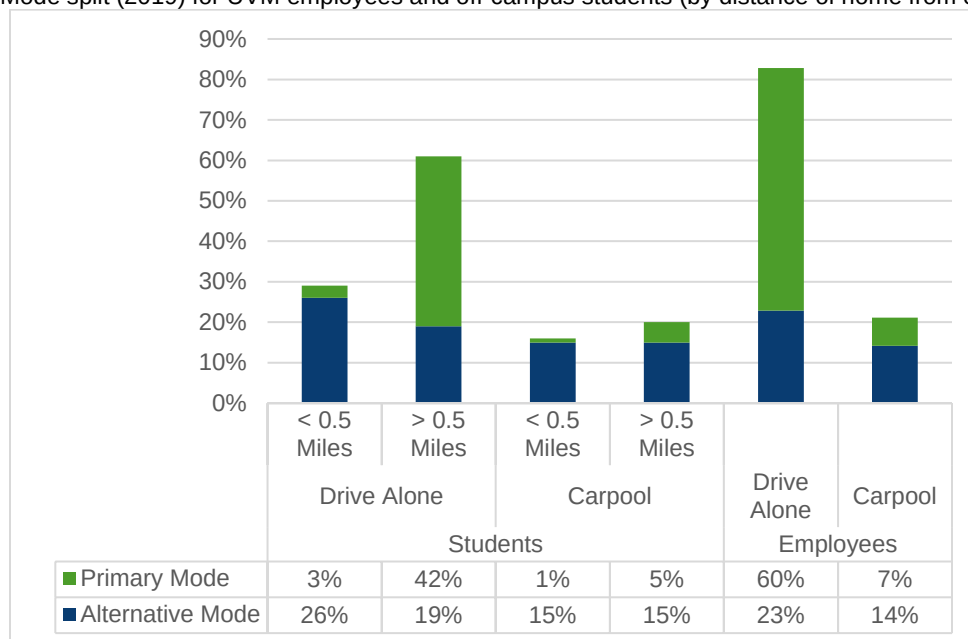
⁴This value is only representative of new TDM strategies that have not yet affected current demand. The explanation of how this value was determined can be found in the narrative above.

Unique Trends & TDM Strategies

Trends

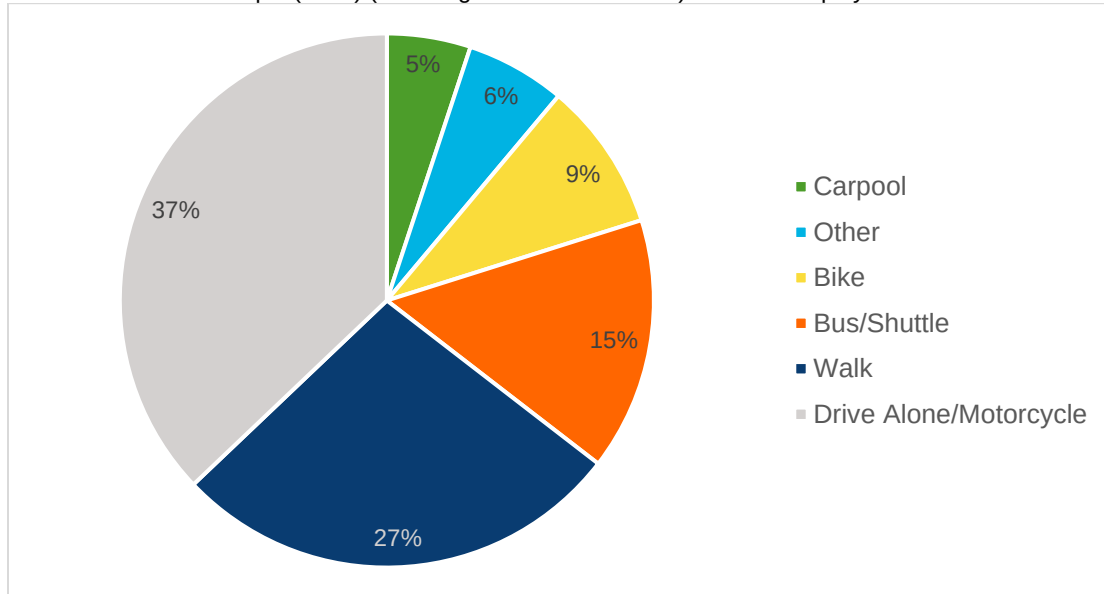
Although UVM's employee drive alone rate is much lower than the state average of 82%⁵, it is the main mode for 60% of employees and 42% of off-campus students who live farther than a half-mile from campus. Off-campus students within a half-mile of campus prefer other commute modes, with only 3% of those students reporting drive alone as their primary mode (Figure 4-2).

Figure 4-2. Mode split (2019) for UVM employees and off-campus students (by distance of home from campus).



⁵ Vermont Agency of Transportation. 2019. "The Vermont Transportation Energy Profile." https://vtrans.vermont.gov/sites/aot/files/planning/documents/planning/The%20Vermont%20Transportation%20Energy%20Profile_2019_Final.pdf

Figure 4-3. Collective mode split (2019) (including sustainable modes) for UVM employees and students.



Over the past four years, the drive alone rate for employees and off-campus students living farther than a half-mile from campus has increased, but both remain lower than the first recorded rate (Figure 4-4). Students living within a half-mile of campus have returned to their lowest drive alone rate. For on-campus students, automobile-reliance is measured by vehicle ownership, which has risen 6% since the previous year's survey (Figure 4-5). However, this number remains much lower than the first recorded ownership statistic.

Figure 4-4. Drive alone rate trend for UVM employees and off-campus students (by distance of home from campus) (2001 – 2019).

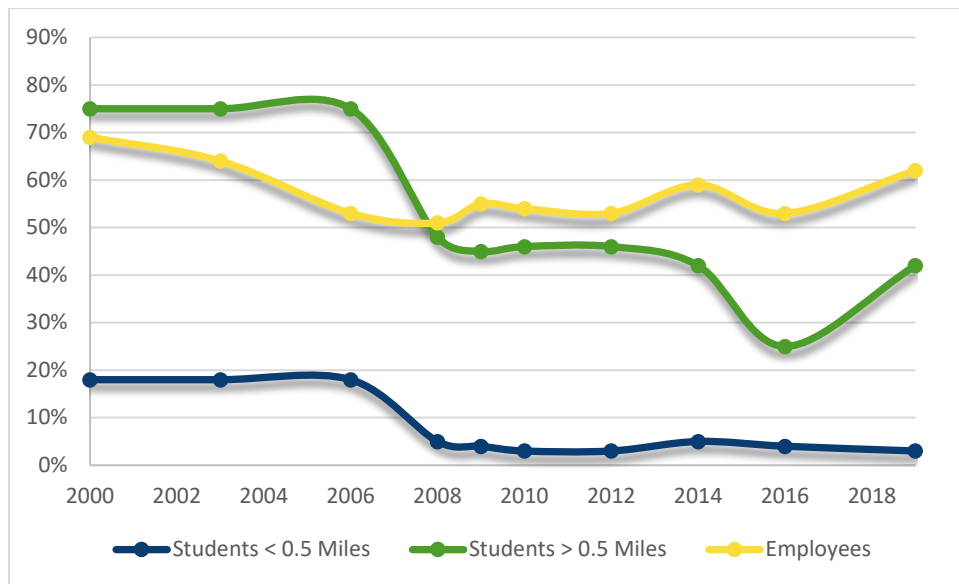
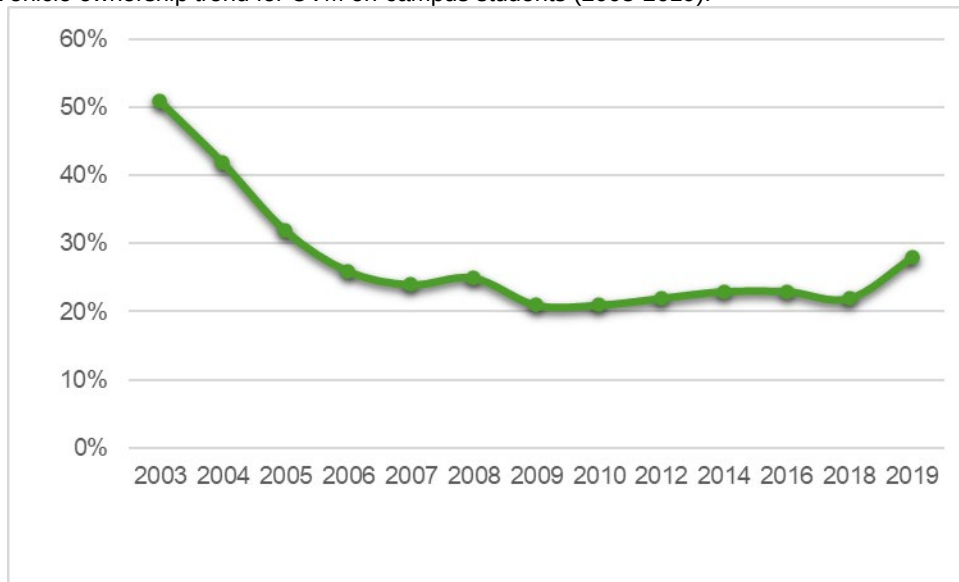


Figure 4-5. Vehicle ownership trend for UVM on-campus students (2003-2019).



TDM Strategies

Permits & Other Regulated Uses

UVM uses a permit allocation system designed to regulate demand in core areas. As of December 2019, UVM issued 6,953 permits for single occupancy vehicles (3,720 for employees, 3,233 for students). UVM also issued 36 carpool permits, with 75 total participants. Employee permits within the core campus are more expensive than permits for outer areas and are assigned based on seniority. Cost of employee permits is progressive, meaning higher paid

employees pay a higher cost for their parking permit (up to a certain point). All on-campus students are discouraged from bringing cars to campus and first-year students are prohibited from bringing cars to campus unless the student can prove a need such as work or medical reasons. Resident student permits are priced higher than commuter student permits. Only students living farther than a half-mile of CATS shuttle stops are eligible for a commuter permit. Off-campus students within a half-mile of CATS shuttle stops may be eligible for an evening commuter permit.

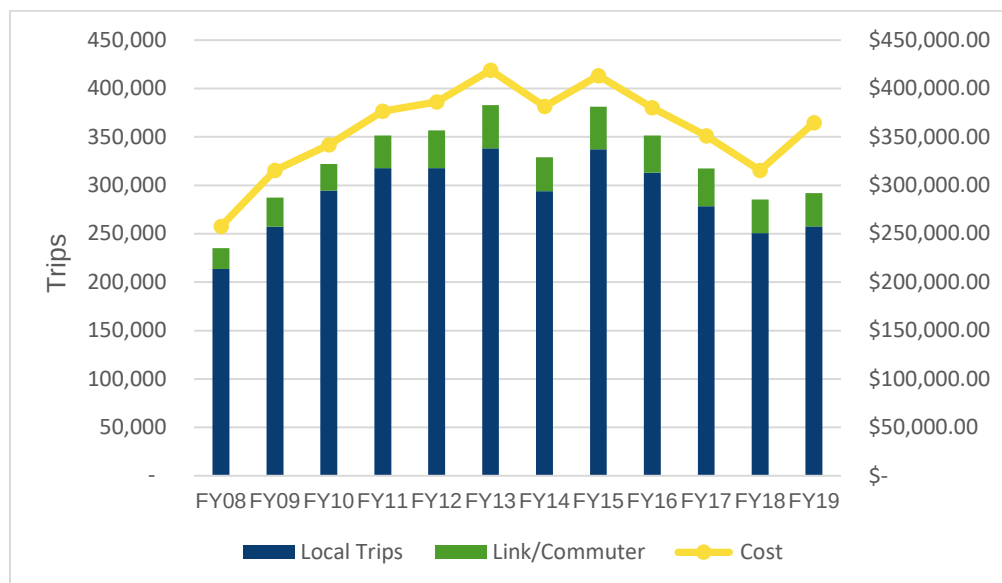
Starting in Fall 2020, anyone requesting a permit will be required to complete a TDM module, which outlines all possible alternative modes available to university affiliates. The intention of this module is to educate those driving about other transportation options that reduce parking demand. The impact of this module will be assessed in the 2021 JIPMP Annual Update. Throughout UVM's campus there are visitor parking lots that are paid for via the ParkMobile app. UVM students are prohibited from parking in these spaces during metered hours. All parking lots are monitored by UVM Transportation and Parking Services and citations are issued for vehicles found incompliant with regulation.

Currently, UVM has 218 fleet vehicles. These vehicles are identifiable by parking stickers and are kept at their respective department location. Temporary business placards are provided to other service/vendor vehicles as needed during the day. Over time, UVM has reduced their fleet, and projects this trend to continue into 2025.

Transit

In 2003, UVM joined the CATMA Unlimited Access Program, which provides unlimited free access on existing GMT public transit services to staff, faculty, and students. UVM receives a 28% discount per ride from GMT by being a part of this program. Ridership and associated cost to the university are displayed in Figure 4-6.

Figure 4-6. UA Trips by UVM students, faculty, and staff with associated cost (2008 -2019).



On-Campus Shuttles

UVM also provides free access to the CATS campus shuttle system to all university affiliates to promote safety and more energy-efficient transportation. The CATS service schedule is depicted in Table 4-9.

Table 4-9. CATS Shuttle Schedule.

Routes	Days	Times	Runs Every (Minutes)	Buses Running
Redstone Express	Mon - Fri	7:45am - 4:45pm	15	1-2
Daytime	Mon - Fri	7:30am - 6:30pm	10	3
Evening	Mon - Thurs	6:15pm - 11:45pm	30	1
Weekend	Sat - Sun	11:30am - 6:30pm	30	1
Off-Campus	Sun - Thurs	6:30pm - Midnight	30	1
Off-Campus (Weekend)	Fri - Sat	6:30 pm - 10:00pm	15	2
Off-Campus (Late-Night)	Fri - Sat	10:00pm - 3:00am	10	3

Bicycle Infrastructure & Parking

UVM is one of only 25 universities nationally recognized as a Gold-level Bicycle Friendly University as of November 2018. UVM has bike racks located throughout campus, indoor bicycle parking and pumps in most residence halls, and three fix-it stations. UVM Bikes, a student club, operates a bike co-op on campus overseen by TPS advisors. The co-op leases bikes and offers bike mechanic services to UVM students and employees.

Car Sharing Service

UVM has a partnership with CarShare Vermont via CATMA's Campus Programs Contract. UVM contributes \$20,000 annually to CarShare Vermont so that students and employees without long-term parking permits can receive a subsidized membership to CarShare services. The Campus Programs Contract is responsible for about 30% of CarShare Vermont's total membership. There are two CarShare hubs located on UVM's campus at the Royal Tyler Theater and the Redstone Lofts.

Parking Cash Out

During the 2019-2020 academic year, the Center for Research on Vermont ran the Give Up Your Permit Program, which encouraged 30 UVM employees to give up their parking permit in exchange for a \$75 gift card and a parking pass allowing for 12 uses for emergencies/occasional use. There are plans to continue and expand this program in the future.

Planning Studies

The University of Vermont has a dedicated commitment to sustainably and creatively planning transportation for the campus. Over recent years, UVM has undergone multiple planning studies

which all have a goal of reducing the number of SOVs on campus. The following are the most recent and relevant studies:

- [UVM Active Transportation Plan](#)
- Nelson Nygaard Parking & Transportation Plan

NOTE: The Supplement provides more detailed data referred to in this report.

5. University of Vermont Medical Center

The UVM Medical Center is an academic medical center providing high quality care and regional referral services for patients throughout Vermont and Northern New York. UVM Medical Center is a member of the UVM Health Network, which includes facilities in Burlington, as well as other communities in Chittenden, Addison, Fairfax, Washington and Orleans Counties, the Central Vermont Medical Center, Champlain Valley Physicians Hospital, Elizabethtown Community Hospital, Alice Hyde Medical Center, Canton-Potsdam Hospital, Inter-Lakes Health, Home, Health & Hospice (formerly Visiting Nurses Association of Chittenden and Grand Isle Counties), and the UVM Health Network Medical Group. The UVM Medical Center consists of approximately 50 patient care and administrative support sites and 100 outreach clinics, employs over 8,000 people, serves a population of over a million people, and conducts around 1.4 million out-patient procedures every year.

Current Conditions

Users (Employees, Patients, & Visitors)

UVM Medical Center employs a total of 6,338 individuals in Burlington. 6,197 of these employees are assigned to the Medical Center Campus or 1 South Prospect Street. On any given day, 50 Community Based Members, 1-2 Honorary Members and 25-35 Volunteers are on campus. For the purposes of estimating parking demand, institutional staff expect that non-paid staff demand no more than 100 parking spaces on any given day.

In 2019, UVM Medical Center Campus performed approximately 627,777 outpatient procedures, and 1 South Prospect performed approximately 92,917 outpatient procedures. This equates to approximately 2,511 outpatient procedures per day at the Medical Center Campus and 372 outpatient procedures per day at 1 South Prospect.

These requirements will be considered during the planning and design of individual projects. UVM Medical Center provides an optional valet parking service for its Medical Center Campus patients and visitors. This service is available at the patient and visitor entrance Monday thru Friday from 6:00am to 5:00pm. Cars can be retrieved with the valet until 9:00pm.

GSF Requirements and Parking Supply

The Medical Center Campus and 1 South Prospect are in the Shared Used Parking District.

The Medical Center Campus is currently licensed for 580 patient beds or bassinets. Since the number of staffed or occupied beds may vary, the number of licensed beds is used as the basis for this Plan as it is a maximum and invariable number that leads to a conservative estimate. To account for the diverse healthcare functions provided by UVM Medical Center, an effort has been made to distinguish between hospital/ in-patient uses, educational uses, and other uses (e.g. cafeteria, medical office, administrative office, support space, common areas). While there is not a precise method to distinguish between these uses and the square footage associated with each, a reasonable estimate was produced. The GSF, associated required parking, and the current parking supply of both Medical Center Campus and 1 South Prospect are included in Table 5-1. Though UVM Medical Center has a total parking supply of 3,746 spaces, only 2,509 of those spaces are located on-site at the Medical Center Campus and 1 South Prospect. For the purposes of the JIPMP only the on-site supply will be referenced when estimating demand for the UVM Medical Center because it is where there is most concern for parking management.

UVM Medical Center's current on-site parking supply is 2,509 which is 775 spaces less than the minimum required by the CDO and 1,596 spaces less than the maximum allowed.

Table 5-1. Current GSF, parking requirements, and parking supply available at UVM Medical Center (Medical Center Campus and 1 South Prospect).

	Medical Center Campus	1 South Prospect	Total
GSF¹	1,698,739	149,404	1,848,143
In-Patient Beds	580	-	580
Minimum Parking Required	2,985	299	3,284
Current Parking Supply			
On-Site²	2,052	457	2,509
Leased/Offsite Parking Supply	-	-	1,237

¹For Medical Center Campus, only 912,682 GSF counts towards calculating CDO parking requirements because the rest of the GSF accounts for in-patient uses.

²Only on-site parking is counted towards the parking supply.

Demand

Using data collected in the 2019 CATMA Employee Survey and requirements above, it was determined the current parking demand for the UVM Medical Center and 1 South Prospect campuses is 2,330 spaces putting it at a 179-space surplus (margin of error ± 42 spaces)(Table 5-2). The aggregate average of parking counts for UVM Medical Center and 1 South Prospect lots from October 2019 and February 2020 show utilization at 81% (Supplement Figure 4-1) with a maximum utilization rate of 96%. Employees without permits for on-site lots, must park in one of the off-site parking lots, which provide UVM Medical Center employees with an additional 1,237 parking spaces. UVM Medical Center's off-site parking lots average an 84% utilization with a maximum 89%. These off-site lots are a crucial tool through which the UVM Medical Center manages parking demand. It should be noted, UVM Medical Center's satellite lots did not undergo the same lot count process as its on-site lots, but from November 2019 to February 2020, UVM Medical Center's off-site lots were counted at least weekly to get the above utilization rate. The 2019 CATMA Employee Survey asked employees where they prefer to park, and 51 UVM Medical Center employees reported parking on the street.

Table 5-2. Current demand calculation for UVM Medical Center (Medical Center Campus and 1 South Prospect).

UVM Medical Center			
User Group	Number of Potential Users	Peak Parking Demand ¹	
		% of Users	Spaces
Medical Center Campus			
Employees	5,567	17.8%	991
Out-Patients			708
In-Patients			75
Visitors ²			250
Fleet			38
Subtotal			2,062

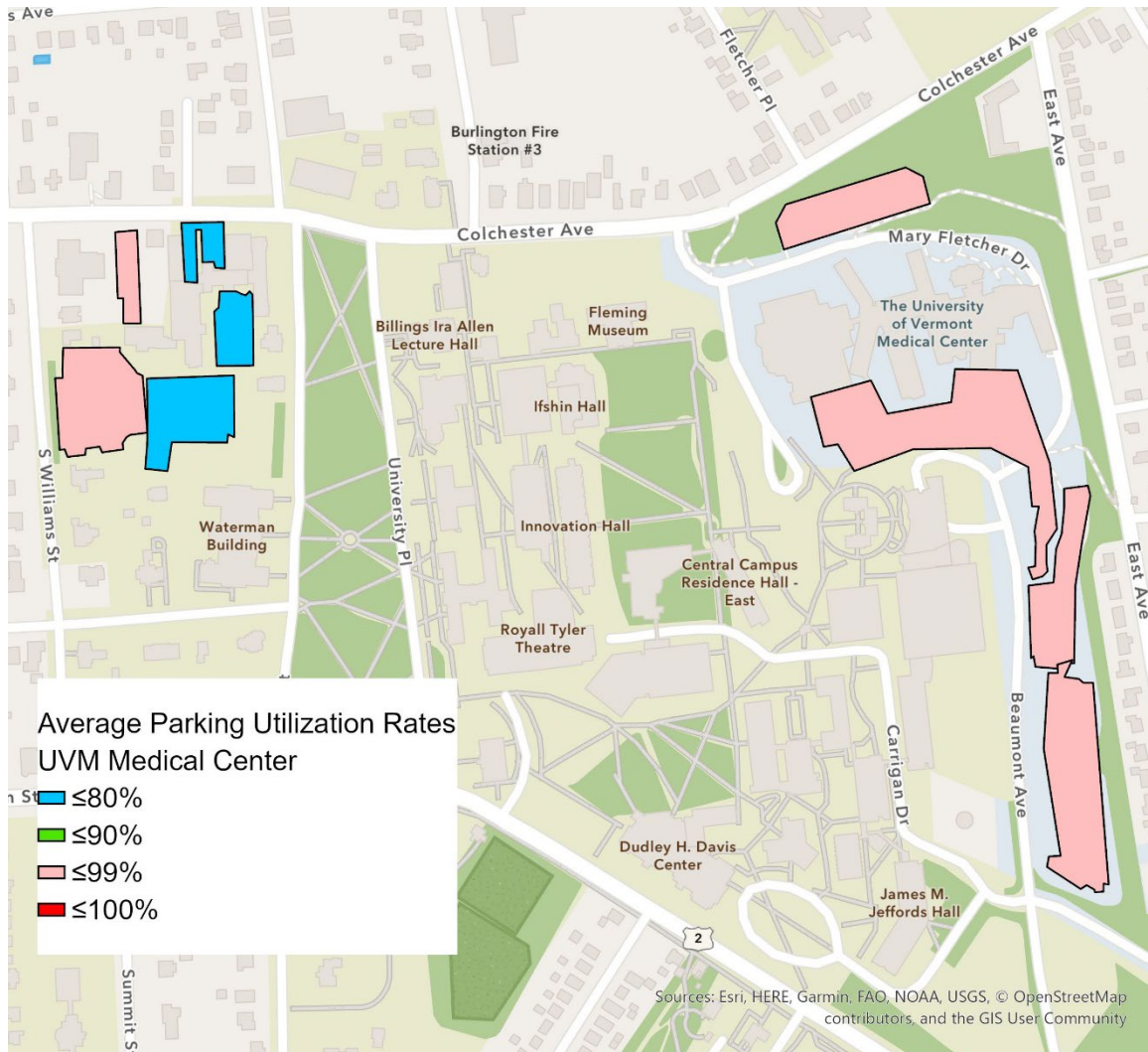
1 South Prospect			
Employees	630	3.7%	24
Out-Patients			236
Fleet			8
<i>Subtotal</i>			268
Total Peak Parking Demand³			2,330
Total Parking Supply			2,509
Net Spaces			179

¹Peak parking demand is calculated from data collected in the 2019 CATMA Employee and Student Transportation Survey using the methodology described in Appendix A. "% of Users" consists only of car users who are on campus at peak time.

²UVM Medical Center volunteers are included in visitor parking demand, because in the 2019 CATMA Employee Survey, volunteers identified they park in the ACC Garage and get a voucher to avoid paying upon their departure.

³Total peak parking demand has a margin of error of ± 42 spaces.

Figure 5-1. Map of average parking utilization rates by lot on UVM Medical Center campus.



Future Conditions

Users (Employees, Patients, & Visitors)

UVM Medical Center expects there to be no significant change in employees, patients, or visitors. As new space needs on the Medical Center Campus are identified, that need is offset by moving existing space users to a satellite location that have a lower need for proximity to the Medical Center Campus. A total of 6,338 full-time, part-time, and per diem UVM Medical Center employees are expected to work across the Medical Center Campus, 1 South Prospect, and other Burlington sites through 2025. There are no expected changes for in-patient and out-patient numbers at any of the UVM Medical Center sites.

GSF Requirements and Parking Supply

UVM Medical Center does not intend to complete any construction projects that would add to the Burlington facilities for the next five years. Employment and procedures are expected to remain at the current conditions.

The future parking inventory for UVM Medical Center across Burlington sites is provided in Table 5-3. UVM Medical Center's future on-site parking inventory of 2,509 is 775 spaces less than the CDO minimum required and 3,067 spaces less than the maximum allowed.

Table 5-3. Future GSF, parking requirements, and parking supply for UVM Medical Center (Medical Center Campus and 1 South Prospect).

	Medical Center Campus	1 South Prospect	Total
GSF	1,698,739	149,404	1,848,143
In-Patient Beds	580	-	580
Minimum Parking Required	2,985	299	3,284
Future Parking Supply			
<i>On-Site¹</i>	2,052	457	2,509
<i>Leased/Offsite Parking Supply</i>	-	-	1,237

¹For Medical Center Campus, only 912,682 GSF counts towards calculating CDO parking requirements.

²Future parking supply is the sum of on-site parking and leased/offsite parking

Estimated Demand

Assuming commute trends stay constant between 2020 and 2025, the estimated future demand for the UVM Medical Center will remain as it is in 2020. It is estimated the Medical Center will have a surplus of 179 parking spaces by 2025 (margin of error of ± 42 spaces) (Table 5-4).

Table 5-4. Estimated future parking demand for UVM Medical Center (Medical Center Campus and 1 South Prospect).

UVM Medical Center			
User Group	Number of Potential Users	Peak Parking Demand ¹	
		% of Users	Spaces
Medical Center Campus			
Employees	5,567	17.8%	991
Out-Patients			708

In-Patients			75
Visitors ²			250
Fleet			38
<i>Subtotal</i>			<i>2,062</i>
1 South Prospect			
Employees	630	3.7%	24
Out-Patients			236
Fleet			8
<i>Subtotal</i>			<i>268</i>
Total Peak Parking Demand³			2,330
Total Parking Supply			2,509
Net Spaces			179

¹Peak parking demand is calculated from data collected in the 2019 CATMA Employee and Student Transportation Survey using the methodology described in Appendix A. "% of Users" consists only of car users who are on campus at peak time.

²UVM Medical Center volunteers are included in visitor parking demand, because in the 2019 CATMA Employee Survey, volunteers identified they park in the ACC Garage and get a voucher to avoid paying upon their departure.

³Total peak parking demand has a margin of error of ± 42 spaces.

Unique Trends & TDM Strategies

Trends

Driving alone continues to be the primary mode of the majority of UVM Medical Center employees at both the Medical Center Campus and 1 South Prospect (Figure 5-3). Medical Center Campus employees are more likely to use UVM Medical Center shuttles from satellite lots than their colleagues at 1 South Prospect. Carpooling is not a highly utilized mode, but over 10% of employees at both locations are carpooling sometimes, which would be an easy population to work with to increase carpooling as primary mode. Unfortunately, the drive alone rate continues to rise following an all-time low in 2010 (Figure 5-4). This rise can be explained by a multitude of factors including lower gas prices and more affordable housing outside of Burlington.

Figure 5-2. Mode Split (2019) for UVM Medical Center Employees by Campus.

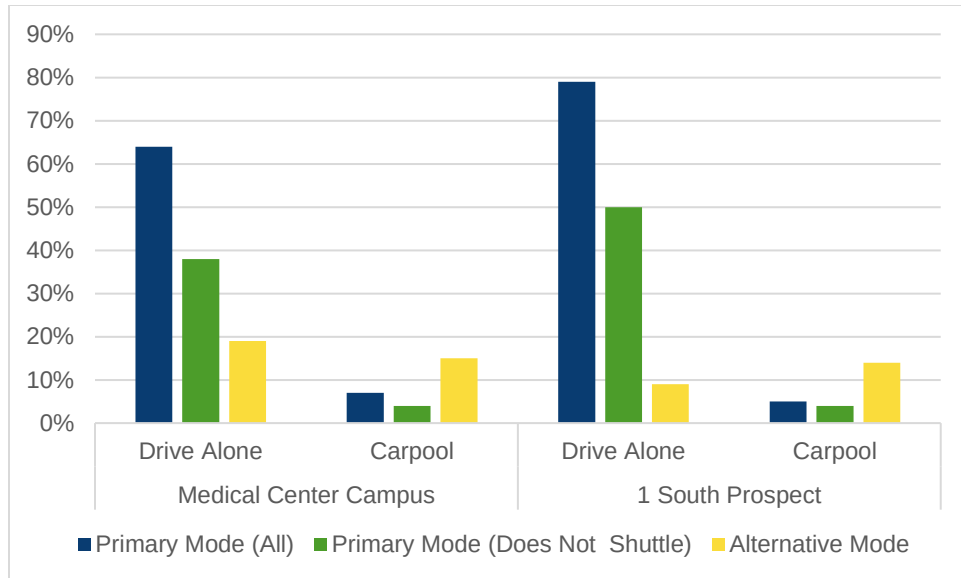


Figure 5-3. Collective mode split (2019) (including sustainable modes) for UVM Medical Center employees.

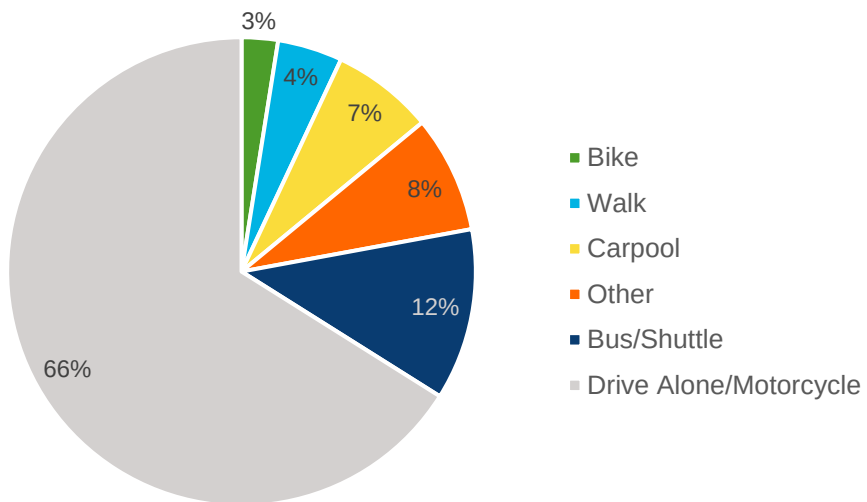
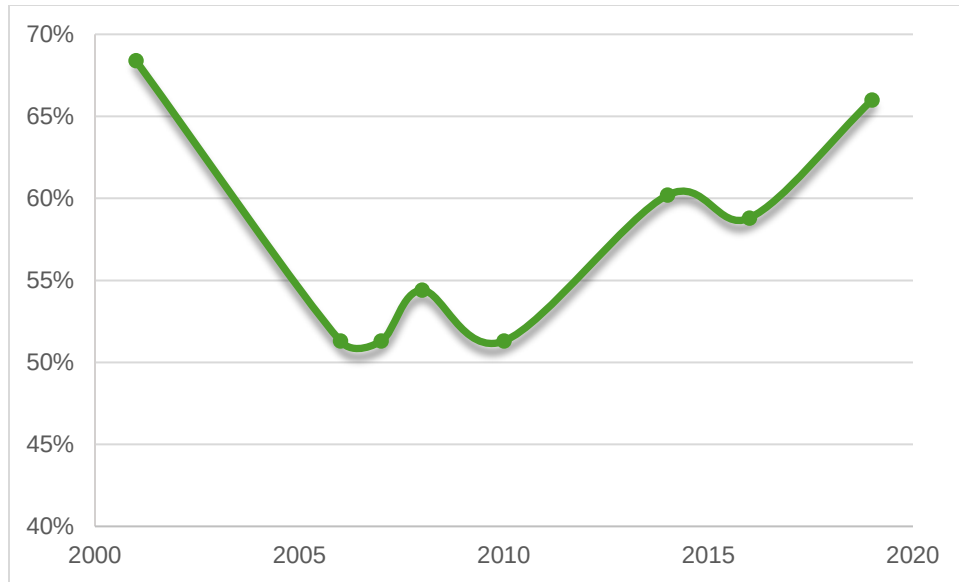


Figure 5-4. Drive Alone rate trend for UVM Medical Center Employees (2001-2019).



TDM Strategies

Permits

During peak demand periods, convenient onsite parking assignments are limited to senior staff, physicians, residents, and those with “business needs” or “medical needs” permits.

Shuttles & Remote Off-Site Lots

UVM Medical Center also uses off-site lots and an effective shuttle system to manage on-site parking demand. Staff without on-site parking permits are required to park in a satellite lot served by a shuttle or use an alternate transportation mode. UVM Medical Center provides off-site parking at Fanny Allen (Colchester), 115 Lakeside Avenue (Burlington), and Technology Park (South Burlington) with regular service direct to the Medical Center Campus. The shuttles summarized in Table 5-6 result in a combined 254 shuttles that operate 254 days per year that equal 74,676 shuttle trips per year.

Table 5-5. UVM Medical Center shuttle schedule.

Shuttle Locations	AM Runs	Midday Runs	PM Runs	Total Runs/Day
Tech Park/Medical Center	21	11	28	60
Lakeside/Medical Center	21	11	28	60
Fanny Allen/Medical Center	21	11	28	60
Catamount/Medical Center	16	14	14	44
Centennial/1 South Prospect	15	0	15	30

Transit

UVM Medical Center has offered a discount on GMT local (50%), commuter and LINK passes (25%) since 1995 (Table 5-7). Employees can purchase these passes via a payroll deduction. Since the early 1980s, GMT buses have served UVM Medical Center well with the Burlington/Essex route, and most recently GMT implemented its Next Gen Plan which included direct service from key originations and destinations in the region. There are 10 GMT transit routes that stop at the Medical Center Campus.

A 25% discount on ferry tickets for employees who live in New York is also provided by UVM Medical Center.

Table 5-6. Average number of transit passes sold monthly by UVM Medical Center for selected years (2014 & 2019).

	2019	2014
GMT Monthly		
Local	93	34
Local ADA	0	9
LINK Express	3	8
LINK Express/Commuter	3	3
GMT 10 Ride Pass		
Local	36	98
Local ADA	0	15
LINK Express	72	74
LINK Express/Commuter	34	27
Champlain Ferry		
Car & Driver Monthly Pass	121	110
Passenger 10 Ride Pass	23	28
Motorcycle 10 Ride Pass	0	5

Bike Infrastructure & Parking

UVM Medical Center supports bicycle travel by investing in local and regional bicycle networks. It is recognized as a Bicycle Friendly Employer by the League of American Bicyclists. For example, UVM Medical Center widened the sidewalk along Colchester Avenue between East Avenue and Mansfield Avenue to interconnect with UVM bike paths. The sidewalk along Beaumont Drive is 10 feet wide to function as a shared use path. UVM Medical Center provides on-site shower facilities and over 100-spaces of bicycle parking (covered and uncovered) for its cyclists.

A bikeshare hub is located at the ACC Circle, adjacent to transit stop on main campus, and there is a hub at Waterman Building nearby 1 South Prospect Street.

Carpool Incentive

A carpool parking incentive (on campus parking permit) is available to employees at the Medical Center Campus, Fanny Allen Campus and 1 South Prospect who have two or more employees who commute to work together. There are approximately 1,000 UVM Medical Center employees registered with CATMA as carpoolers.

NOTE: The Supplement provides more detailed data referred to in this report.

6. Conclusion

This JIPMP demonstrates the Hill institutions' ability to actively and collaboratively manage the demand for parking for each of their campuses. All three institutions are well equipped with various TDM strategies provided through CATMA and individually to mitigate changes in demand and mode use.

The projects included in the 2020-2025 JIPMP are likely to be over-estimating parking demand now that policy shifts are occurring as a result of the COVID-19 crisis. All of the institutions will be implementing firmer telework policies for their employees. UVM and Champlain may see a decline in students coming to campus in Fall 2020 with potentially more online courses offered. As employees and students gain the skills to work and learn remotely, the demand for on-campus parking is likely to decrease. At this point, the impact of COVID-19 on parking demand is unknown, but it will be acknowledged further in the Spring 2021 JIPMP Update.

Appendix A: Methodology

Lot Counts

In the data collection process of the 2020-2025 JIPMP, CATMA and the institutions defined a lot count inventory process. In October 2019, the institutions agreed to conduct counts on the same days and times (Tuesday and Thursday at 10:00 AM and 2:00 PM), to control for regular variation in day-to-day travel habits. Following a winter meeting of the institutions and CATMA, these counts were extended for three days (Tuesday, Wednesday, and Thursday) and three times (10:00 AM, 12:00 PM, 2:00 PM). These adjustments were made as a reflection of peak time determined by the CATMA survey data. Moving forward, the institutions will each conduct counts quarterly on these three days and times so that CATMA can have a growing log of utilization rates. This constant and consistent data collection will strengthen our demand estimations in future JIPMPs.

There are advantages and drawbacks to using lot counts or survey data to estimate demand. Though lot counts are an inexpensive method to calculate parking demand, they are also usually only representative of a limited time frame. This limitation means typical peak demand may not be captured due to variability (i.e. seasonal mode change, time-off, etc.), and may underestimate demand. Survey data may overestimate demand because it fails to capture daily variation seen in lot counts. However, survey data can break down demand by user group, understand different mode trends, and can easily forecast future demand patterns. For more information about the advantages and drawbacks of lot counts and survey data for estimating demand, please see Appendix B which was provided by Jonathan Dowds with UVM's Transportation Research Center.

Survey Administration

The 2019 CATMA Student Transportation Survey was launched on October 28, 2019. The 2019 CATMA Employee Transportation Survey was launched on October 29 and October 30, 2019. Direct solicitation emails were sent to employees and students. Table A-1 describes the solicitation process in more detail.

Table A-1. Overview of CATMA's 2019 Transportation Survey solicitation and responses.

	Launch Date	Population Total	Solicitation Total	Total Responses	Margin of Error
Student Survey					
Champlain	10/28/2019	2087	2059	515	4%
UVM	10/28/2019	13850	13960	2892	2%
Employee Survey					
Champlain	10/29/2019	880	705	190	6%
UVM	10/30/2019	4205	4289	1299	2%
UVM Medical Center	10/29/2019	4670	8631	2678	1%

Survey Weighting

With guidance from UVM's Transportation Research Center, the results of CATMA's 2019 surveys were weighted using population parameters provided by the institutions. Survey weighting is intended to weight survey responses in a way that is reflective of the actual

population. This process corrects for segments in population who are either under or overrepresented by those who answered the survey.

Demand Calculation

The demand estimation calculation used in the 2020-2025 JIPMP is very different from that used in previous JIPMPs. This modified calculation was provided by UVM's Transportation Research Center. Rather than finding the peak time on campus for all users and the demand for parking of all users, this modified calculation relies on the peak time on campus for auto-users. This adjustment is reflected by the **peak parking demand percent** listed in each demand calculation (see Table A-2). By making this slight distinction, some overestimation of demand is reduced as well as a reduction in the margin of error.

Peak parking demand percent is calculated by first finding the time the most auto users are on each campus. For employees and off-campus students, auto users are either those who drive alone and half of those carpool as their main mode. For on-campus students, auto users are all individuals who own a car. Then, a proportion is created for each user group (employees, on-campus students, and off-campus students) by taking the number of auto users on campus at peak time and dividing it by the total number of individuals in that user group in the survey. That percentage (which is the peak parking demand percentage) is multiplied by the total number of users in that group given by the institution which results in demand (see Figure A-1 for formulas).

Table A-2. Summary of peak parking demand on each campus as identified by the 2019 CATMA Employee and Student Transportation Surveys.

Champlain College	Wednesday	11:30 - 1:30 PM
UVM	Tuesday	11:30 - 1:30 PM
UVM Medical Center	Monday	12:00 -1:00 PM

Figure A-1. Top: Formula for calculating peak parking demand percent for employees and off-campus students. Bottom: Formula for calculating peak parking demand percent for on-campus students.

Peak Parking Demand % =	$\frac{\text{Drive Alone at Peak Time} + \frac{1}{2}(\text{Carpool at Peak Time})}{\text{All Users}}$
Peak Parking Demand % =	$\frac{\text{Own Vehicle}}{\text{All Users}}$

Margin of Error

The margin of error is the range within which a true value may be found given a certain confidence interval. All margins of error reported in the 2020-2025 JIPMP are within a 95% confidence interval. The margins of error were calculated using the Complex Samples modules in SPSS and were found for the peak parking demand percent for each user group. For each of the institution, the composite margin of error was found by summing the squares of each user

group's margin of error and taking the square of root of the sum. Knowing the margin of error is useful, because within a 95% confidence interval, we can know the total parking demand for any institution is above or below a certain percentage of the estimated demand given.

Appendix B: Parking Demand Estimation Overview

Jonathan Dowds
6/1/2020

Parking Demand Overview

Parking demand is a measure of the number of parking spaces required to serve all vehicle trips ending at a given destination over a given period of time, typically measured in space-hours. The parking demand associated with a specific destination depends on a variety of factors, including the number of people traveling to that destination at a given point in time, the modes of travel that are available for travel to that destination, parking prices and other variables that influence the relative attractiveness of available modes. Mode choices are influenced by travel time, cost, reliability, and parking availability among other factors. Thus, parking demand is not static and can increase or decrease with changing circumstances. Deliberate Transportation Demand Management (TDM) policies, utilizing incentives, education and other strategies to alter travel behavior, are one method for reducing parking demand.

Current parking demand can be estimated using parking lot counts or user surveys that collect mode share data.⁶ The Metropolitan Area Planning Council, the regional planning agency serving the Boston Metropolitan area, provides a toolkit for member cities to conduct count-based parking studies for the purpose of determining parking utilization rates and whether demand exceeds supply (MAPC 2019). Both parking counts and user surveys can be used to calculate a per-user parking demand ratio – the ratio of the number of parking spaces used to the total number of users of a destination. Using parking counts to estimate demand becomes less accurate as parking utilization approaches the effective parking capacity. Depending on how the data are collected, the parking demand ratio may be further broken out but sub-groups such as faculty, staff, and students. Future demand can be forecasted by applying these demand ratios to a projection of the future user base (potentially with adjustments for planned changes that are expected to impact the demand rate such as new transit or bike options). For planning purposes, parking demand has frequently been estimated using parking generation factors from the Institute of Transportation Engineers (ITE) and Urban Land Institute (ULI) but these figures have been criticized for their lack of geographic specificity and tendency to over-estimate parking needs (Litman 2016; Kimberly-Horn 2016). Other methods for forecasting parking demand include the use of land use or gravity models.

Parking Demand Concepts and Terminology

Capacity/Supply: The capacity, or supply, of parking is equal to the number of parking spaces within a lot or study area.

Effective capacity: A parking lot's effective capacity is the number of vehicles can practically be expected to park at that lot. It is lower than the raw number of spaces in a lot to account for spaces that are blocked by other vehicles or obstacles and for users' finite willingness to search for a free parking space. Estimates for "effective capacity" vary but several sources consider 85-90% to be the highest practical utilization rate (MAPC 2019; UVA 2019).

⁶ Note that the terms "parking counts" and "parking surveys" are often used interchangeably to refer to a tally of the number of vehicles parked within a specific study area. To avoid confusion with respect to the CATMA Student and Employee Transportation Surveys, this memo will refer to counts of parked vehicles as "parking counts" or "lot counts" and reserve the word "survey" for user surveys similar to the 2019 CATMA student and employee survey efforts.

Latent parking demand: Latent parking demand refers to the additional number of parking spaces that would be utilized if the price were lower or if more parking capacity was available. Waitlists for permits and on-street parking or illegal parking in nearby neighborhoods are two indicators of latent demand. Latent demand can be reduced by TDM measures that increase the attractiveness of modes that do not require parking.

Parking demand ratio: The parking demand ratio is equal to the proportion of users of a destination that utilize parking. It can be used to forecast future parking demand in conjunction with estimates of the number of users that will travel to a destination.

Parking utilization/occupancy rate: The parking utilization rate is the percentage of parking spaces that are being used at a particular time.

State of Practice for Institutional Parking Plans in Higher Education

There is no single standard for parking demand estimation used by institutions of higher education. For university parking plans, lot counts appear to be the most common method for estimating current parking utilization but user survey are also used for this purpose. Examples of different approaches to developing institutional parking plans are described below.

The University of Virginia (UVA) completed a parking master plan in July of 2019 that utilizes a similar set of methodologies to the JIPMP (UVA 2019). The UVA parking plan covers the UVA student body, faculty and staff and UVA Health. Primary modes share usage for faculty and staff were collected with a survey conducted by the UVA Center for Survey Research and were used to calculate parking demand ratios for these user groups. Student parking demand ratios were calculated based on vehicle counts. These parking demand ratios were applied to population projections developed by the University based on historical trends and other factors. For additional context, parking occupancy rates for individual lots and across the UVA campus are also reported. The plan includes 18 strategies for addressing expected parking shortfalls. Salem State University (SSU) also completed a campus parking study in 2018 (Salem State University 2018). This study used lot counts as the basis for estimating current and future parking demand. It complemented these data with an online survey for the SSU community and surrounding neighborhoods to collect mode choice data as well as feedback on parking problem areas. Parking counts were conducted for two days in September of 2017 and included a count of the type of permit displayed by each vehicle. Parking counts were also conducted on a section of adjacent roadway, with all vehicles parked on-street assumed to be associated with SSU. Future parking demand was forecasted by applying a 2% annual growth rate (the projected rate of growth in enrollment) to the peak demand seen in the lot counts. The University of Rhode Island's (URI) "Transportation and Parking Master Plan" for its Kingston Campus, completed in 2018 (VHB 2018), and Michigan Tech's "Campus Transportation & Parking Plan," completed in 2011 (Carl Walker, Inc. 2011), are additional examples of parking plans created primarily using lot count data but neither includes a strong demand forecast element. In addition to on-campus lots, 159 on-street parking spaces in the immediate vicinity of campus are included in the parking inventory and parking counts in the Michigan Tech study.

Colorado State University and North Carolina State University both utilized a parking gravity model, Park+, developed by the consulting firm Kimberly-Horn (Kimberly-Horn 2014; 2017). Park+ uses parking occupancy data collected via lot counts to calibrate a model that estimates the parking demand associated with each building on campus.

Advantages and Drawbacks of Lot Counts

Lot counts are a relatively straightforward and inexpensive method for collecting data about parking demand. Counts are suitable for the direct calculation of the average parking demand ratio across all users when the utilization is below effective capacity. When lots are limited to a single user group or when permit type information is also collected, demand ratios may be calculated separately for different user sub-groups. It is likely that the comparatively low cost of collecting this data contributes to its widespread use in parking planning.

There are a number of drawbacks to using lot counts as the sole sources of parking demand data, however. Lot counts tend to be collected over a limited time frame (one to two days in the examples above). Because of daily, weekly, and seasonal variability in travel behavior, the peak demand recorded in one or two days of observations may not be representative of typical peak demand. Seasonal impacts are likely to be particularly important in Vermont with users whose primary commute mode is a SOV are more likely to opt to use secondary modes such as walking and biking when the weather is favorable. Additionally, lot counts have a limited capacity to accurately capture circumstances where demand approaches or exceeds supply. Vehicle queuing, snow buildup, poorly parked vehicles, and vehicles parked illegally reduce the amount of parking capacity that is available at a given time, creating a reduced *effective* parking capacity. Therefore, parking counts that result in a utilization of 85-95% may indicate that supply is insufficient and latent demand exists. Counts that do not account for parking on surrounding streets or users who chose not to park due to capacity issues will fail to fully capture the entire demand for parking.

This combination of factors suggests that short duration lot counts will tend to under-estimate parking demand. Over time, continuing lot counting programs, such as the one implemented by the Hill Institutions, are less likely to suffer from these short-comings than one-off lot counts and will more accurately reflect parking demand.

Finally, lot counts also fail to provide information about mode splits, latent parking demand, and users perceptions of their transportation options. While this information may not be essential to estimate current parking demand, it is very valuable for understanding and managing future parking demand.

Advantages and Drawbacks of User Surveys

As with parking lot counts, user surveys offer both advantages and drawbacks for estimating current and future parking demand. Advantages to user surveys include improved ability to differentiate between the parking demand for different user groups and to capture on-street parking as well as to collect information on user satisfaction and latent parking demand. For calculating current total parking demand, surveys are especially valuable because they can easily and comprehensively be used to estimate the parking demand that is being met using parking spaces outside of the count area. While lot counts are highly effective at capturing the total demand for parking at isolated lots and lots that are far below capacity, they are less effective when the area of study is embedded within an environment that includes other parking options, such as on-street parking or parking lots for unaffiliated entities. In these circumstances, especially when parking utilization is high, parking prices are high, or the effective capacity is reduced by something like snow buildup, lot counts will miss users who opt to park on nearby streets rather than within institutionally provided parking areas or who choose not to park at all due to the capacity issues. While it is possible to conduct parking counts on nearby streets, in a setting like Burlington it would difficult to determine with certainty what vehicles are affiliated with one of the Hill institutions. By contrast, a user survey such as that

conducted by CATMA can ask directly about parking at locations other than institutionally provided parking lots, enabling a direct estimation of the entire parking demand.

Surveys also offer advantages for forecasting future parking demand because demand can be tracked by user group with greater specificity that can be achieved with most lot counts. Within the university context, for example, the percentage of users that require parking is likely to vary among faculty, staff and students. When parking lots are not restricted to a single user group, a simple lot count will only produce a single, overall estimate of the percentage of users that require parking but will not capture difference in parking demand between different user groups. If these different user groups are projected to increase at different rates, using this overall parking demand ratio to estimate future parking demand will be less accurate than applying user-group specific parking demand ratios.

Conversely, because the CATMA Survey asks respondents about their *typical* travel/parking behavior, it does not fully capture the day-to-day variations in behavior that impact total parking demand.⁷ For example, on any specific day, some employees/student will be sick or traveling and will not be on campus or need parking. Users whose primary mode is driving alone will sometime use other modes (decreasing the need for parking) and users whose primary mode is not driving will sometimes drive (increasing the need for parking). The net effect is that this survey method may overstate parking demand.

Finally, survey offer the advantage of providing information about user satisfaction and latent parking demand as well as the modes share data used to collect parking demand. While this information may not be essential to estimate current parking demand, it is very valuable for understanding and managing future parking demand.

Conclusions

Both parking counts and survey data have advantages and disadvantages for estimating parking demand and there is a degree of uncertainty associated with each. Under these circumstances, it is highly desirable to be able to present parking demand estimates using both methodologies. Demand estimated by the user survey captures parking usage that is met in the surrounding neighborhoods and does not reduce demand to account for share users who are not on campus due illness, vacation or other occasional telecommuting. Consequently, it will provide an estimate of the highest, annual peak parking demand. Overtime, on-going lot counts will provide an increasingly accurate representation of peaking parking utilization but will not capture parking in the surrounding neighborhoods so will provide a lower bound estimate of parking demand.

References

Carl Walker, Inc. 2011. "Campus Transportation & Parking Plan Final Report." Michigan Tech. <https://www.mtu.edu/transportation/campus-transportation-and-parking-plan-for-michigan-tech-final-report-1-.pdf>.

⁷ Other travel surveys, such as the National Household Travel Survey, ask respondents about their behavior on a specific day (e.g. "how did you get to work on XX/YY?"). With a sufficiently large sample, this approach would capture day-to-day variation.

Kimberly-Horn. 2014. "Colorado State University Parking and Transportation Master Plan." Colorado State University.
https://www.fm.colostate.edu/files/forms/Parking_Transportation_Master_Plan_Study.pdf.

———. 2016. "Parking Generation - Replacing Flawed Standards with the Custom Realities of Park+." White Paper Series Vol. #3. Kimberly-Horn. https://www.kimley-horn.com/wp-content/uploads/2017/02/PARK_Plus_ParkingGen.pdf.

———. 2017. "NCSU Transportation Master Plan." November 2017.
<https://transportation.ncsu.edu/wp-content/uploads/2019/01/18Transportation-Master-Plan.pdf>.

Litman, Todd Alexander. 2016. "Parking Management." Victoria Transport Policy Institute.
https://www.vtpi.org/park_man.pdf.

MAPC. 2019. "How to Do a Parking Study." <https://www.mapc.org/resource-library/how-to-do-a-parking-study/>.

Salem State University. 2018. "Campus Parking Study." Salem State University.
<https://records.salemstate.edu/sites/records/files/reports/2018-05/Campus%20Parking%20Study%20Final%20Report-April%202018.pdf>.

UVA. 2019. "UVA Parking and Transportation Master Plan." University of Virginia.
<https://officearchitect.virginia.edu/pdfs/UVATPPlan2019.pdf>.

VHB. 2018. "Transportation and Parking Master Plan." The University of Rhode Island.
<https://web.uri.edu/planning/files/TransportationParking-Master-Plan-Final-by-VHB-March-2018.pdf>.



2020 - 2025

Institutional Parking Management Plan

Institutional Supplement



Submitted on: October 13, 2020

Prepared for: City of Burlington
Planning Commission

Submitted by: Chittenden Area
Transportation Management
Association

In Cooperation with: Champlain
College, University of Vermont,
and University of Vermont Medical
Center

Table of Contents

1. Purpose	1
2. Champlain College.....	1
3. University of Vermont.....	6
4. UVM Medical Center	10

List of Tables

Table 2-1. Champlain College parking lot counts.	1
Table 2-2. All infrastructure included in Champlain College's GSF calculation and parking supply.	1
Table 2-3. Additional Champlain College infrastructure that is not included in GSF calculation or parking supply.	3
Table 2-4. Current & Future Employment and Enrollment for Champlain College.	4
Table 2-5. Champlain College permit types, cost, and number of permits issues (December 2019).	4
Table 2-6. Citations given by Champlain College Transportation.	5
Table 3-1. University of Vermont parking lot counts.	6
Table 3-2. Infrastructure (by building use) included in UVM's GSF calculation.	6
Table 3-3. UVM's parking supply by campus.	7
Table 3-4. Current & Future Employment and Enrollment for UVM.	7
Table 3-5. UVM permit types, cost, and number of permits issues (December 2019).	8
Table 3-6. Citations given by UVM Transportation & Parking Services.	9
Table 4-1. UVM Medical Center parking lot counts.	10
Table 4-2. Maximum and average lot utilization for UVM Medical Center off-site lots (November 2019 – February 2020).	10
Table 4-3. GSF of UVM Medical Center buildings.	10
Table 4-4. UVM Medical Center parking supply included in JIPMP.	11
Table 4-5. UVM Medical Center parking supply not included in JIPMP.	11
Table 4-6. Current & Future employment and patient/visitor for UVM Medical Center.	12
Table 4-7. Total permits issued by UVM Medical Center (December 2019).	13

I. Purpose

This document serves as a supplement to the 2020-2025 Joint Institutional Parking Management Plan (JIPMP). Historically, the data in this document has been provided within the JIPMP, but in an effort to streamline the JIPMP, the supplement holds data that is not required by the JIPMP but is useful and informative for the institutions' sustainable planning purposes.

2. Champlain College

Table 2-1. Champlain College parking lot counts.

	10:00 AM	12:00 PM	2:00 PM
10/22/2019	489	-	599
10/24/2019	492	-	532
2/18/2020	494	518	501
2/19/2020	502	500	501
2/20/2020	523	533	528
Average	517		73%
Maximum	599		84%

Table 2-2. All infrastructure included in Champlain College's GSF calculation and parking supply.

Name	Primary Use	GSF	Residential Beds	Parking Spaces
194 St Paul Street	Residential/Retail (4,455 GSF Retail)	175,000	314	0
308 Maple	Residential	5,223	14	0
396 Main	Residential	8,801	39	20
Adirondack House	Residential	4,631	20	0
Aiken Hall	Administrative/Academic	13,701	0	0
Bader Hall	Residential	8,140	22	0
Bankus Hall	Residential	10,432	50	0
Butler Hall	Residential	26,730	89	0
Carriage House	Residential	2,376	15	0

Center for Communications and Creative Media (formerly Hauke/Alumni)	Administrative/Academic	87,187	0	0
Cushing Hall	Residential	9,095	30	7
Durick Hall	Administrative	4,036	0	3
Foster Hall	Administrative/Academic	7,008	0	0
Freeman Hall	Administrative/Academic	11,992	0	0
Garden House (ARC)	Administrative	4,371	0	0
Goodhue Coolidge House	Administrative/Academic	4,054	0	0
Hill Hall	Residential	9,203	40	0
IDX Student Life Center	Administrative/Athletic/ Dining	49,939	0	5
Jensen Hall	Residential	9,972	41	9
Joyce Learning Center	Academic	20,483	0	0
Juniper	Residential	28,732	90	0
Lakeside Campus (Miller Center at Lakeside)	Administrative	39,552	0	267
Lakeview Hall	Residential	18,033	81	0
Lyman Hall	Residential	8,550	44	0
Boardman Hall	Residential	31,932	59	28
McDonald Hall	Residential	10,922	50	0
Miller Information Commons	Academic	29,860	0	42
North House	Residential	5,402	21	10
Pearl Hall	Residential	10,874	50	0
Perry Caretaker's Cottage	Residential	444	1	0
Perry Carriage Barn	Academic	5,546	0	0

Perry Hall	Administrative/Academic	27,847	0	16
Rowell Annex	Administrative	2,882	0	0
Rowell Hall	Residential	9,954	52	33
Sanders Hall	Residential	9,716	37	8
Schillhammer Hall	Residential	7,836	27	0
SD Ireland Family Center for Global Bus & Tech	Administrative/Academic	24,390	0	0
Skiff Hall	Administrative	12,493	0	15
Skiff	Administrative/Academic	3,354	0	0
South House	Residential	12,608	51	12
Summit Hall	Residential	15,271	51	28
The Gallery	Academic	633	0	0
Valcour Hall	Residential	30,028	91	0
West House	Administrative	3,718	0	0
Whiting Hall	Residential	9,975	44	0
Wick Hall	Administrative/Academic	5,265	0	0
Subtotal		838,191	1,453	503
Leased Facilities¹/Lots				
115 Lakeside Lot				175
371 Main	Residential (temporary)	13,326	30	21
158 South Willard	Residential (temporary)	10,900	29	11
Total Campus Parking Spaces				710

Table 2-3. Additional Champlain College infrastructure that is not included in GSF calculation or parking supply.

Name	Primary Use	GSF	Parking Spaces
194 St Paul St	Retail	N/A	67
390 Maple St	Residential	3,768	2
436 Maple St	Residential	4,297	2
115 Summit St (President's House)	Residential	3,487	2
270 South Willard St (Provost's House)	Residential	7,478	2
Total		19,030	75

Table 2-4. Current & Future Employment and Enrollment for Champlain College.

	Current (2020)	Future (2025)
Employment		
On-Campus		
Full-time	377	380
Part-time	415	350
Contracted	88	100
<i>Subtotal</i>	<i>880</i>	<i>830</i>
Off-Campus		
Full-time	2	380
Part-time	244	350
Dublin and Montreal Campuses	68	100
Total	1,194	1,660
Enrollment		
On-Campus		
Full-time Undergraduates	2,024	2,020
Part-time Undergraduates	54	60
Full-time Graduates	4	0
Part-time Graduates	5	0
<i>Subtotal</i>	<i>2,087</i>	<i>2,080</i>
Off-Campus		
Full-Time Graduates	543	590
Part-Time Graduates	85	100
Full-time Undergraduate Continuing Professional Studies	451	410
Part-time Undergraduate Continuing Professional Students	1,253	1250
Total	4,419	4,430

Table 2-5. Champlain College permit types, cost, and number of permits issues (December 2019).

Type	Users	Cost Per Semester	Permits Issued
Zone 1	Employees	Free	264
	Off-Campus Students		165

Zone 2	On Campus Students	\$150	233
Zone 3	Full-Time Off Campus Students		27
	Full-Time Employee	\$170	61
	Part-Time Off Campus Student		2
	Part-Time Employee	\$75	12
Zone 4	Full-Time Off Campus Students		14
	Full-Time Employee	\$200	50
	Part-Time Off Campus Student		2
	Part-Time Employee	\$90	5
Zone 5	Education majors & other students with work requirements	\$225	23

Table 2-6. Citations given by Champlain College Transportation.

Year/Semester	# of Valid Citations Issued	Funds Collected	Cumulative Funds (Since 2004)
2006-2007	-	\$ 57,390	\$ 113,390
2007-2008	-	\$ 44,175	\$ 157,565
2008-2009	-	\$ 57,195	\$ 214,760
2009-2010	-	\$ 42,165	\$ 256,925
2010-2011	-	\$ 38,550	\$ 295,475
2011-2012	-	\$ 51,065	\$ 346,540
2012-2013	1,574	\$ 43,840	\$ 390,380
2013-2014	1,519	\$ 41,680	\$ 432,060
2014-2015	1,069	\$ 30,600	\$ 462,660
Summer 2015	111	\$ 5,585	\$ 468,245
2015-2016	1,326 105 warnings	\$ 31,475	\$ 499,720
Summer 2016	32	\$ 2,300	\$ 502,020
2016-2017	1,935 467 warnings	\$ 26,481	\$ 528,501
Summer 2017	156 46 warnings	\$ 995	\$ 529,496
2017-2018	2,073	\$ 28,502	\$ 557,998

	274 warnings		
	261		
Summer 2018	44 warnings	\$ 2,795	\$ 560,793
2018-2019	1,435	\$ 20,625	\$ 581,418
Summer 2019	245	\$ 2,575	\$ 583,993

3. University of Vermont

Table 3-1. University of Vermont parking lot counts.

	10:00 AM	12:00 PM	2:00 PM
10/22/2019	3799	-	3706
10/24/2019	3696	-	3651
2/18/2020	3831	3893	3795
2/19/2020	3888	3942	3833
2/20/2020	3846	3958	3819
Average	3820		80%
Maximum	3958		83%

Table 3-2. Infrastructure (by building use) included in UVM's GSF calculation.

Building Use	Accessory Buildings	Total Buildings	GSF	Residential Beds
Mixed Uses				
Academic/Administrative/Student Support	0	3	242,857	0
Academic/Research	9	71	1,927,762	
UVM/UVMMC Academic Research	1	7	253,458	
Administration	8	31	509,030	
Athletics	8	17	406,252	
Student Support	3	20	507,179	
Residential				
Residential Academic	0	3	110,961	5,906
Residential Dining	0	4	260,062	
Residential Central Campus	2	8	212,341	
Residential Redstone Campus	0	14	409,117	
Residential Trinity Campus	0	12	147,174	
Residential University Heights Campus	0	11	592,343	

Total	31	201	5,578,536	5,906
--------------	-----------	------------	------------------	--------------

Table 3-3. UVM's parking supply by campus.

Parking Lot	Capacity	Leased Spaces	Usable Spaces
Athletic Commuter	1,674	0	1,674
Core Central	56	0	56
Core East	884	-100	784
Core North	369	0	369
Core South	193	0	193
Core West	434	-47	387
Commuter Lots	808	-485	323
Redstone Campus	619	0	619
Trinity	314	20	334
Off-Site	200	0	200
Total	5,551	-612	4,939

Table 3-4. Current & Future Employment and Enrollment for UVM.

	Current (2020)	Future (2025)
Employment		
Staff		
Full-time	2,218	2,335
Part-time	158	170
Faculty		
Full-time	1,352	1,375
Part-time	411	420
<i>Non-Burlington Employees¹</i>	<i>219</i>	<i>219</i>
<i>Subtotal</i>	<i>3,920</i>	<i>4,081</i>
Enrollment		
Undergraduate	10,700	10,800
Graduate and Certificate	1,627	1,800
Medical Student	478	500
Non-Degree Continuing Education	743	750
<i>Subtotal</i>	<i>13,548</i>	<i>13,850</i>
Total	17,468	17,931

¹These employees are subtracted when determining the subtotal of employees because it is unknown whether these employees are faculty/staff or part-time/full-time.

Table 3-5. UVM permit types, cost, and number of permits issues (December 2019).

Category	Type	Cost	Permits Issued
Employee Permits			
Green	Pre-Tax Payroll Deduction	0.64%	2,848
	Affiliate	\$ 329	
	Affiliate 30-Day	\$ 41	
White	Pre-Tax Payroll Deduction	0.48%	
	Affiliate	\$ 247	
	Affiliate 30-Day	\$ 31	
Brown	Pre-Tax Payroll Deduction	0.32%	
	Affiliate	\$ 165	
	Affiliate 30-Day	\$ 21	
Silver (Off-Site)	Pre-Tax Payroll Deduction	Free	
	Affiliate		
	Affiliate 30-Day		
Occasional Use	Permit 6-12 Days	Free	872
	Brown (Peripheral)	\$ 2	
	White (Proximate)	\$ 3	
	Green (Main)	\$ 4	
Student Permits			
Residential	30-Day Black, Blue, Purple, and Red	\$ 55	1,442
	Temporary (1 Semester)	\$ 180	
	Black, Blue, Purple, and Red	\$ 330	
Commuter and Graduate Students/Medical Students (1st & 2nd Year)	30-Day Brown	\$ 19	1,540
	30-Day Gold	\$ 12	
	Gold - Evening	\$ 69	
	Gold - Evening (1 Semester)	\$ 45	
	Brown - Day & Evening	\$ 115	
	Brown - Day & Evening (1 Semester)	\$ 73	
Medical Students (3rd & 4th Year)	Yellow - Day & Evening	\$ 329	67
	30-Day Yellow	\$ 27	
Occasional Use			174
Carpool	Green		26
	White		6

Table 3-6. Citations given by UVM Transportation & Parking Services.

Violation	Fine	Citations Issued	Funds Collected
No Valid Permit	\$ 50	2,460	\$ 123,000
Habitual/Warning-No Permit	\$ 50	309	\$ 15,450
Habitual Offender-No Permit	\$ 110	360	\$ 39,600
Restricted Area	\$ 30	1,825	\$ 54,750
Habitual/Warning Restricted Area	\$ 30	266	\$ 7,980
Habitual Offender- Restricted Area	\$ 90	373	\$ 33,570
Expired Space	\$ 25	1,020	\$ 25,500
Habitual/Warning-Expired Space	\$ 25	166	\$ 4,150
Habitual Offender-Expired Space	\$ 85	231	\$ 19,635
Unauthorized Permit	\$ 80	42	\$ 3,360
Habitual Offender Unauthorized Permit	\$ 140	2	\$ 280
Falsified Information	\$ 80	1	\$ 80
Handicap Space	\$ 80	35	\$ 2,800
Permit Not Displayed	\$ 30	39	\$ 1,170
Relocating at Owner's Expense	\$ 55	2	\$ 110
Roadway	\$ 80	2	\$ 160
Total		7,133	\$ 331,595

4. University of Vermont Medical Center

Table 4-1. UVM Medical Center parking lot counts.

Medical Center Campus			
	10:00 AM	12:00 PM	2:00 PM
10/22/2019	1,983	-	1,121
10/24/2019	1,970	-	1,169
2/18/2020	1,549	1,590	1,608
2/19/2020	1,560	1,575	1,633
2/20/2020	1,540	1,601	1,636
Average		1,580	77%
Maximum		1,983	97%
1 South Prospect			
10/22/2019	425	-	432
10/24/2019	412	-	403
2/18/2020	414	422	434
2/19/2020	433	423	410
2/20/2020	393	375	411
Average		415	91%
Maximum		434	95%
Both Campuses			
Average		2,043	81%
Maximum		2,408	96%

Table 4-2. Maximum and average lot utilization for UVM Medical Center off-site lots (November 2019 – February 2020).

Lot Name ¹	Maximum Utilization	Average Utilization
UVM Catamount East	100%	90%
UVM Centennial	92%	77%
UVM Jeffords Lot	100%	93%
Technology Park	100%	84%
115 Lakeside Lot	92%	80%
Fanny Allen	100%	96%
Daily Aggregate of All Satellite Lots	89%	84%

¹Counts for the UVM Commuter West could not be provided. These lots are counted in UVM Medical Center's supply but are not used in lot utilization due to lack of data.

²These lot counts were not a part of the formalized process instituted by CATMA in October 2019. These counts reflect the average and maximum lot counts from November 2019 to February 2020. In the future, satellite lots will follow the same lot count process as on-site lots.

Table 4-3. GSF of UVM Medical Center buildings.

Building Use	GSF
Medical Center Campus	
Hospital (In-Patient)	786,057
Education	35,597
Other	877,085

<i>Subtotal</i>	1,698,739
1 South Prospect	
Other	149,404
Other Burlington Sites¹	
Other	58,477
Total	1,906,620

¹Other building sites are not included in GSF for JIPMP calculations.

Table 4-4. UVM Medical Center parking supply included in JIPMP.

Location	Number of Spaces
Medical Center Campus	
ACC Garage	1,224
ACC Loading Dock	21
ER Lot	47
ED Ambulance Bay	5
ED Ambulance Parking	4
McClure Parking Garage	317
Patrick Loading Dock	9
South Lot	425
<i>Subtotal</i>	<i>2,052</i>
1 South Prospect	
Lot A	47
Lot B	178
Lot D	197
Pearl Street Lot	35
<i>Subtotal</i>	<i>457</i>
On-Site Total	2,509

Table 4-5. UVM Medical Center parking supply not included in JIPMP.

Location	Number of Spaces
Other Burlington Sites	
95 St. Paul Street	18
112 Colchester Avenue	8
128 Lakeside Avenue	38
184 Pearl Street	12
195 Colchester Ave	40
199 Main Street	24
<i>Subtotal</i>	<i>140</i>
Off-Site Lots	

UVM Catamount East	285
UVM Centennial	200
UVM Jeffords Lot	100
UVM Core West	47
Fanny Allen Campus	155
Technology Park	200
115 Lakeside Ave	250
<i>Subtotal</i>	<i>1,237</i>
Off-Site Total	1,377

Table 4-6. Current & Future employment and patient/visitor for UVM Medical Center.

	Main Campus	1 South Prospect	Other Burlington Sites	Total
Current (2020)				
Full-time				
Day Shift	2,382	423	113	2,918
Evening Shift	300	9	0	309
Night Shift	595	8	0	603
Rotating Shift	794	39	7	840
Part-time				
Day Shift	492	68	10	570
Evening Shift	63	3	0	66
Night Shift	76	0	0	76
Rotating Shift	139	14	3	156
Other				
Per Diem Employees	726	66	8	800
<i>Employee Subtotal</i>	<i>5,567</i>	<i>630</i>	<i>141</i>	<i>6,338</i>
Non-Employee Users				
Out-patients	1,381	460		
In-Patients	500			
Visitors	360			
Current Total	7,808	1,090	141	9,039
Future (2025)				
Full-time				
Day Shift	2,382	423	113	2,918
Evening Shift	300	9	0	309
Night Shift	595	8	0	603
Rotating Shift	794	39	7	840
Part-time				

Day Shift	492	68	10	570
Evening Shift	63	3	0	66
Night Shift	76	0	0	76
Rotating Shift	139	14	3	156
Other				
Per Diem Employees	726	66	8	800
<i>Employee Subtotal</i>	<i>5,567</i>	<i>630</i>	<i>141</i>	<i>6,338</i>
Non-Employee Users				
Out-patients	1,381	460	0	1,841
In-Patients	500	0	0	500
Visitors	360	0	0	360
Future Total	7,808	1,090	141	9,039

Table 4-7. Total permits issued by UVM Medical Center (December 2019).

Location	Permits Issued
Medical Center Campus	
ACC permits	481
McClure Residents, Nurse practitioners, Phys Assistants, Midwives	564
Physicians (ACC permits)	1,458
Carpools (956 participants)	478
Business Needs	347
115 Lakeside, day shift	790
115 Lakeside, rotator	492
Fanny Allen Shuttle Lot	467
Fanny Allen/Rotators	163
Centennial/Day	106
Centennial/Rotators	36
South Lot	443
UVM Catamount East/Day	505
UVM Catamount East/Rotators	125
UVM Jeffords Lot/Day	184
UVM Jeffords Lot/Rotators	18
Evening/Night	1,417
1 South Prospect	
Centennial Day	512
Centennial Rotator	81
Pearl	17
Taft	70

Burlington Planning Commission

149 Church Street
Burlington, VT 05401
Telephone: (802) 865-7188
(802) 865-7195 (FAX)
(802) 865-7144 (TTY)

www.burlingtonvt.gov/pz

*Andy Montroll, Chair
Bruce Baker, Vice-Chair
Yves Bradley
Alexander Friend
Emily Lee
Harris Roen
Jennifer Wallace-Brodeur*



TO: Burlington Development Review Board
FROM: Burlington Planning Commission
DATE: DATE
RE: 2020-2025 Joint Institutional Parking Management Plan

Draft for Discussion

The Joint Institutional Parking Management Plan (JIPMP) is prepared by CATMA on behalf of the University of Vermont (UVM), Champlain College (CC), and the UVM Medical Center (UVMHC). It is a parking supply and demand planning tool, enabled by the *Burlington Comprehensive Development Ordinance (CDO)*, for the purpose of ensuring that streets in nearby neighborhoods are not unfairly burdened by the parking demands of the Institutions, and to recognize the ability for the Institutions to manage parking in a comprehensive and creative way. This report allows the Institutions to demonstrate parking demand and, when lower than requirements outlined in the *CDO*, receive what amounts to a parking waiver from those standards when permitting projects listed in the report. This report may be approved by the DRB for a period of up to five years, with annual updates reported to the City.

The Planning Commission first received a presentation on the 2019-2024 JIPMP in March 2019, where future parking deficits were projected for both UVM and CC. During the spring and summer 2019, City staff and the Commission provided feedback that informed a number of revisions to this plan. However, based on concerns about applicability of survey data and outstanding planning and data collection efforts by CATMA and the institutions, the 2019-2014 report was withdrawn and substantially revised.

On October 13, CATMA presented a comprehensively revised 2020-2025 JIPMP and addressed the Commission's earlier concerns. Most notably, an updated survey instrument and new survey data, a coordinated process for collecting parking utilization counts, and refinements to methodologies for calculating peak demand have improved the clarity and foundation of the future demand projections. On the supply side, the scope of off-site parking facilities has been narrowed to better reflect the Hill Area for UVMHC, and additional parking supply has been identified by UVM.

With these updates, all institutions project that they will be able to meet future parking demand. However, it is noted that UVM is still in the process of updating both its campus transportation and housing plans. Further, while the report does address strategies for managing UVMHC staff demand, it does not estimate or project any change to the number or behaviors of patients and visitors. These are incredibly important pieces of information to answer key questions about future parking supply and demand.

CATMA also noted that this report is based on pre-COVID-19 conditions. It remains committed to providing an update in spring of 2021, but the Planning Commission recognizes that this may not fully represent a permanent future condition. The 2021 report will provide updated data on any COVID-related impacts to enrollment, employment, parking demand, and telehealth, telework, and remote learning to the extent that it is available. However, it may be several years before the lasting impacts of any changes are fully understood.

As such, annual monitoring and reporting to the City continues to be an important tool for evaluating the actual conditions against the report's projections. If monitoring demonstrates that demand exceeds these projections, or the available supply, CATMA and the institutions should offer specific responses, demand-reduction strategies, or additional parking supply. The Commission requests updates from staff if the annual updates from CATMA indicate that ongoing performance differs significantly from the plan.

Because campus planning efforts remain underway, if the institutions pursue any additional on-campus housing that is not planned for in the 2020-2025 JIPMP that will generate additional parking demand, the institutions should offer new or expanded TDM measures to offset this demand, and if new parking supply is warranted, it should be provided through satellite parking facilities.

Finally, while the updated report indicates that UVM expects it will be able to meet future demand, the Commission continues to recommend that it consider implementing a policy that either prohibits sophomores from bringing cars to campus, or requires their storage in new/expanded satellite parking areas, and consider changes to staff parking areas to maximize capacity (such as through valet or tandem parking).

With these specific points for your consideration, the Planning Commission recommends that the Development Review Board approve the 2020-2025 JIPMP.

TO: Burlington Planning Commission
FROM: Meagan Tuttle, Comprehensive Planner, City Planning
DATE: October 8, 2020
RE: Joint Institutional Parking Management Plan 2020-2025

The Joint Institutional Parking Management Plan (JIPMP) is prepared by CATMA on behalf of the University of Vermont (UVM), Champlain College (CC), and the UVM Medical Center (UVMHC). The Planning Commission received presentations on earlier versions of this report between March and June 2019. Staff has engaged with CATMA over the last 18 months to review and provide feedback.

Initial reports projected significant deficits for parking supply for UVM and CC over the course of the planning period. Subsequent updates demonstrated improving forecasts, but ongoing deficits for UVM. Due to this forecast, as well as ongoing planning and data collection by CATMA and UVM, staff and the Planning Commission recommended that the JIPMP be approved for only one year and that its applicability be limited to projects with a minor impact to parking. This draft also included a number of further recommendations.

In the fall of 2019, CATMA withdrew the previously submitted 2019-2024 JIPMP, and has worked over the last 9 months on a new survey and methodology, additional data collection, and a comprehensive overhaul to the report. At the meeting on October 13, 2020, CATMA will present the 2020-2025 JIPMP.

In reviewing the update, staff evaluated it for not only its conclusions regarding future parking supply relative to demand, but also for the applicability of previous recommendations. Those recommendations have been addressed by the updated report in the following ways. Based on the updated report and the following review, staff has provided a new draft recommendation memo for the Planning Commission's consideration.

Data Collection

- CATMA work with the Institutions to administer a fall 2019 member survey that addresses gaps in the 2018 survey methodology, to create an updated baseline dataset to project demand. The survey should include questions that enable CATMA to more confidently predict primary mode and peak demand windows.
 - *The updated report is based on CATMA's fall 2019 member survey, which included updated questions to predict primary mode. Additionally, a new methodology was used to estimate peak demand times.*
- CATMA should coordinate the administration of this survey with DPW so that on-street parking usage data in neighborhoods surrounding campus can be collected during the same window of time (streets without any parking regulations).
 - *CATMA attempted to coordinate with the City, but the City was unable to complete counts during the same period of time.*
- CATMA should work with UVMHC to develop and implement a process for routinely collecting, storing and reporting parking utilization data, and to develop a methodology for estimating patient and visitor parking demand.
 - *Lot counts were coordinated for the update and for future quarterly monitoring.*
 - *It is staff's impression that this report does not address patient and visitor demand, but rather focuses on managing employee demand & behavior.*

Transportation Trends

- Both CC and UVM saw increases in drive-alone trips by students that live within half a mile of campus from 2016-2018. CATMA should work with the Institutions and the City to identify specific measures to significantly reduce this number over the next five years. Further, additional surveying or data analysis uncovering factors contributing to this trend should be provided (e.g. Changes to routes, frequency, or predictability of campus shuttle or GMT service; lack of safe bike/pedestrian routes; availability of inexpensive or free parking resources in close proximity to campus destinations; etc.)
 - *2019 survey indicated that Drive Alone rates among students within ½ mile of campus declined; however, report notes that statewide, and across all CATMA members surveyed, Drive Alone rates have been increasing.*

Managing Supply

- The report does not discuss any anticipated change in parking supply at the Lakeside Avenue Lot resulting from the construction of the Champlain Parkway. By the 2020 update, this should be analyzed and if a loss of parking supply is anticipated, specific strategies should be offered.
 - *CATMA has indicated that there is not an anticipated loss of supply.*
- If the Institutions pursue additional on-campus housing that is not anticipated in the current JIPMP that will further increase the parking deficit, the Institutions should accommodate that increased demand through additional supply of satellite parking.
 - *While the update does not project a deficit, this recommendation continues to be applicable, as well as employing additional TDM measures.*

Champlain College

- There is some disagreement with the assertion that the projected parking deficit for CC does not warrant specific demand-reduction strategies. However, CC's current commitments to parking management and enforcement are noted. If monitoring demonstrates that demand does exceed supply, then CC should offer specific demand-reduction strategies or additional parking supply.
 - *The updated report does not indicate a deficit. However, monitoring and making changes to supply/TDM measures in the annual reports will still be applicable.*

University of Vermont

- UVM suggests that it could discontinue parking space leases to UVMMC, to eliminate a substantial portion of its future deficit. Given the projected surplus for UVMMC, the Commission strongly recommends that UVM deploy this strategy, which underscores the importance of this joint planning process and the power of the Institutions' collective action to manage parking. If utilized, the spring 2020 update should include an update on impact to UVMMC's supply.
 - *The updated report has refined the scope of UVMMC parking facilities counted in the supply to more accurately reflect the demand in the core campus areas. The projected surplus for UVMMC is, therefore, much lower and this strategy is not included in UVM's approach to increasing supply. Even without this strategy, UVM has identified an additional 400 spaces of parking supply.*
- Further, UVM should consider implementing a policy that either prohibits sophomores from bringing cars to campus, or requires their storage in new/expanded satellite parking areas, and consider changes to staff parking areas to maximize capacity such as through valet or tandem parking.
 - *UVM may consider additional strategies following the Campus Transportation Plan.*
- If annual monitoring for UVM demonstrates that demand exceeds supply, then UVM should employ additional demand-reduction strategies or offer new parking supply to its members.
 - *This is the purpose of the annual reporting to the City on JIPMP performance.*

Burlington Planning Commission

149 Church Street
Burlington, VT 05401
Telephone: (802) 865-7188
(802) 865-7195 (FAX)
(802) 865-7144 (TTY)

www.burlingtonvt.gov/pz

Andy Montroll, Chair
Bruce Baker, Vice-Chair
Yves Bradley
Alexander Friend
Emily Lee
Harris Roen
Jennifer Wallace-Brodeur

Burlington Planning Commission

Wednesday, October 28, 2020, 6:45 P.M.

Remote Meeting via Zoom

Draft Minutes

Members Present	A Montroll, A Friend, B Baker, H Roen, E Lee, Y Bradley, J Wallace-Brodeur, C Mason, J Hanson, Z Hightower
Staff Present:	D White, M Tuttle, S Gustin
Attendance:	Cheri Campbell, Joe Speidel, William Gonyaw, Emily Nottonson, Amy Magyar, Eric Hanley, Lucas Jensen, Abbot Stark, Julia Marks, Deb Ward Lyons, Erhard Mahnke, Sharon Bushor, Amanda, Paul, Loranger, Dan Goossen, Rolf Danielson

I. Agenda

Call to Order	Time: 6:49pm
Agenda	No Changes

II. Public Forum

Name	Comment
No Comments	

III. Proposed CDO Amendment: Short Term Rentals

Action: N/A		
Motion: N/A	Second: N/A	Vote: Approved Unanimously
Staff updated the committee on changes to the proposal and answered questions from prior meetings. Slides are posted at: https://www.burlingtonvt.gov/CityPlan/PC/Agendas		
Committee Discussion:		
- Could discontinuance for non-conforming STRS be 6-months instead of a year? - Some committee members suggested that the ordinance should start by being more restrictive to see how many units will be impacted in the city. - A commissioner asked what policy interest is served by allowing non-owner-occupied properties to host STRs, and noted that each unit that is an STR used to be long-term housing. - A commissioner expressed concern that renters are not part of the discussion, and taking more housing off-line is a risk at a time when city has prioritized importance of addressing housing. - Committee wanted more information about whether a nightly fee would require a charter change and what rate would be permitted, more information about the housing replacement fee is calculated, and difference between a one-time fee vs. an ongoing tax. - A commissioner questioned whether to allow Scenario 6 (all units in a building are STRs) and whether the goal is to raise money or deter conversion to STRs. - Committee requested more information about the number of new housing units in Burlington (historic and expected), vacancy rate trend, and changes to tax rates over time.		

IV. STR Public Forum

Name	Comment
D Ward Lyons	Request to allow off-site host for STRs, and to consider single-units when host lives nearby as a duplex or ADU. STR has been easier to manage and better impact on neighborhood than previous long-term situations. Want to confirm City RMT rate. STR is not the solution to the City's housing crisis.
A Magyar	Additional RMT is applicable to all STRs, vs. replacement fee wouldn't apply to many of the scenarios. Consider offering conditional use for whole unit non-owner occupied STRs, maybe with a limit to very small number in the City.
E Hanley	Would like to clarify how the proposal applies to a two-unit property in regards to whether the host lives on the property or not.
A Stark	Have lived in Burlington since 2000, always had a housing crisis. STR does not have that much of an impact, compared to other factors. STR has been necessary to make property ownership and maintenance possible, and maintain below-market rents for tenants. Request to allow 2 STRs in a 4 unit property to promote mixed-income neighborhoods. There are STR benefits to hosts and community.
E Mahnke	Concerned about scenarios 5a/5b/6 impact on affordable housing, and taking rental housing off the long-term market. Housing crisis is a protracted problem, for Burlington and state, and this will make it worse. Concerned about tenants as hosts. Housing replacement fee ranges don't actually get close to the cost to create/subsidize. Concerned with allowing STRs on non-owner occupied property.
S Bushor	Don't think the city has a good handle on how many STRs are out there, concerned about enforcement. How are 2 nd homeowners considered in this proposal? Some hosts are doing good things for long-term tenants but not guaranteed. How do we control STRs if you can't revoke zoning permits? Would prefer timeline to discontinue be 6 months instead of a year.
J Marks	Vacancy rate in Burlington has been the same for last decade, data doesn't support that STRs are cause of problem nor would stringent regulation be the solution. With rate of housing growth and same vacancy rate, maybe housing situation has improved. STR is not making a ton of money, hard for STR hosts to see the city want to take more revenue.
L Jensen	STR is not about making more money, but other benefits to city and keeping other rental unit at lower rate. Discussion feels like a step back to months ago. Can documented preservation of affordable housing be used to afford opportunity to create an STR? Request to treat two-unit properties like 3+ unit properties with regard to allowing host off-site.
Amanda	Have purchased and reinvested in a 3-unit property in Burlington which are now long-term rental housing. Have a garage with a bedroom using as an STR but don't live on the site, so it has not taken anything away from long-term housing. Concerned about how VT residents can afford a living, and STR is part of that.
Paul	Working with hosts who are not commercial operations, they are Vermonters doing the best they can for their property and make ends meet. COVID is impacting people's income and ability to afford property. Don't think fear about large amounts of housing being converted will be reality. Reconsider allowing single-unit STR without the host on site.
W Gonyaw	Allow more housing development in residential areas and housing strategies such as UVM housing more students. Housing shortage has been going on for decades, STRs don't contribute significantly. Allow STRs for properties without host on site; why is it ok for multi-units but not others? Tax instead of housing replacement is a

Wednesday, October 28, 2020

	good idea, will housing replacement be refunded if STR goes away. Use STR to support low-income tenant and keep up property.
--	--

V. Commissioner Items

Action: N/A		
Motion: NA	Second: NA	Vote: NA
- Next meeting is November 10, 2020 at 6:30pm - E Lee invited other Commissioners to join a discussion of the JIPMP with CATMA - H Roen requested to hear more about expectations for post-COVID changes to parking demand for institutions in the JIPMP		

VI. Minutes & Communications

Action: Approved the minutes and accepted the communications		
Motion by: A Friend	Second: H Roen	Vote: Approved Unanimously
• Minutes Approved: October 13, 2020 • Communications filed enclosed in agenda packet, and additional communications posted: • Letter from D. Lyons • Four Communications regarding Certificates of Public Good for AT&T wireless antenna installations in downtown.		

VII. Adjourn

Adjournment		Time: 8:33 pm
Motion: H Roen	Second: J Wallace-Brodeur	Vote: Approved Unanimously

ACT 250 NOTICE
MINOR APPLICATION #4C1148-1
10 V.S.A. §§ 6001 - 6093

On October 12, 2020, Gardenview Associates, Inc., 349 South Willard Street, Burlington, VT 05401 filed application number 4C1148-1 for a project generally described as a two-lot subdivision with Lot 1 containing the existing Willard Street Inn and Lot 2 containing a proposed 3-bedroom single family residence and 1-bedroom auxiliary dwelling. The Project is located at 349 South Willard Street in Burlington, Vermont. The application was deemed complete on October 20, 2020 after the receipt of supplemental information.

The District 4 Environmental Commission is reviewing this application under Act 250 Rule 51—Minor Applications. A copy of the application and proposed permit are available for review at the office listed below. The application and a draft permit may also be viewed on the Natural Resources Board's web site (<http://nrb.vermont.gov>) by clicking on "Act 250 Database" and entering the project number "4C1148-1."

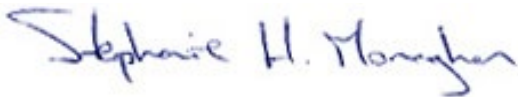
No hearing will be held and a permit may be issued unless, on or before November 16, 2020, a person notifies the Commission of an issue or issues requiring the presentation of evidence at a hearing, or the Commission sets the matter for a hearing on its own motion. Any person as defined in 10 V.S.A. § 6085(c)(1) may request a hearing. Any hearing request must be in writing to the address below, must state the criteria or sub-criteria at issue, why a hearing is required and what additional evidence will be presented at the hearing. Any hearing request by an adjoining property owner or other person eligible for party status under 10 V.S.A. § 6085(c)(1)(E) must include a petition for party status under the Act 250 Rules. Prior to submitting a request for a hearing, please contact the district coordinator at the telephone number listed below for more information. Prior to convening a hearing, the Commission must determine that substantive issues requiring a hearing have been raised. Findings of Fact and Conclusions of Law may not be prepared unless the Commission holds a public hearing.

If you feel that any of the District Commission members listed on the attached Certificate of Service under "For Your Information" may have a conflict of interest, or if there is any other reason a member should be disqualified from sitting on this case, please contact the District Coordinator as soon as possible, and by no later than November 16, 2020.

If you have a disability for which you need accommodation in order to participate in this process (including participating in a public hearing, if one is held), please notify us as soon as possible, in order to allow us as much time as possible to accommodate your needs.

Parties entitled to participate are the Municipality, the Municipal Planning Commission, the Regional Planning Commission, affected state agencies, and adjoining property owners and other persons to the extent that they have a particularized interest that may be affected by the proposed project under the Act 250 criteria. Non-party participants may also be allowed under 10 V.S.A. Section 6085(c)(5).

Dated at Essex Junction, Vermont this 23rd day of October, 2020.



By: _____
Stephanie H. Monaghan, District Coordinator
111 West Street
Essex Junction, VT 05452
802-879-5662
stephanie.monaghan@vermont.gov



LAND USE PERMIT AMENDMENT

State of Vermont

Natural Resources Board

District 4 Environmental Commission

111 West Street

Essex Junction, VT 05452

<https://nrb.vermont.gov/>

[phone] 802-879-5614

This is a **PROPOSED** permit; please submit any written comments to Stephanie H. Monaghan, 111 West Street, Essex Junction, VT 05452 by November 16, 2020.

A permit will NOT be issued until the District Commission receives and reviews the following information:

1. Wastewater System & Potable Water Supply Permit issued by the ANR-DEC Drinking Water and Groundwater Protection Division.

CASE NO: 4C1148-1

Gardenview Associates, Inc.
349 South Willard Street
Burlington, VT 05401

LAWS/REGULATIONS INVOLVED

10 V.S.A. §§ 6001 - 6111 (Act 250)

The District 4 Environmental Commission hereby issues Land Use Permit Amendment #4C1148-1, pursuant to the authority vested in it by 10 V.S.A. §§ 6001-6111. This permit amendment applies to the lands identified in Book 931, Page 283, of the land records of the City of Burlington, Vermont, as the subject of a deed to Gardenview Associates, Inc.

This permit specifically authorizes the two-lot subdivision with Lot 1 (±1.166 acres) containing the existing Willard Street Inn and Lot 2 (±0.337 acres) containing a proposed 3-bedroom single family residence and 1-bedroom auxiliary dwelling. Construction is not approved on Lot 2 until a permit amendment is obtained. The Project is located at 349 South Willard Street in Burlington, Vermont.

Jurisdiction attaches because the Project constitutes a material change to a permitted development or subdivision, and thus requires a permit amendment pursuant to Act 250 Rule 34. In addition, the Project is proposed in a Vermont Neighborhood Development Area within the City of Burlington pursuant to 24 V.S.A. § 2793d.



1. The Permittee, and its assigns and successors in interest, is obligated by this permit to complete, operate and maintain the project as approved by the District 4 Environmental Commission (the "Commission") in accordance with the following conditions.
2. The project shall be completed, operated and maintained in accordance with the conditions of this permit and the permit application, plans, and exhibits on file with the Commission and other material representations.

The approved plans are:

Sheet P1 - "Proposed Subdivision," dated 11/14/15, last revision 9/1/16 (Exhibit #007);

Sheet C1.0 - "Proposed Conditions Site Plan," dated 10/6/20 (Exhibit #008);

Sheet C2.0 - "Details," dated 10/1/20 (Exhibit #009);

Sheet C3.0 - "Erosion Control Notes and Details," dated 10/1/20 (Exhibit #010);

Sheet C4.0 - "Site Specifications," dated 10/1/20 (Exhibit #011);

Sheet C4.1 - "Site Specifications," dated 10/1/20 (Exhibit #012);

Sheet C4.2 - "Site Specifications," dated 10/1/20 (Exhibit #013);

Sheet C4.3 - "Site Specifications," dated 10/1/20 (Exhibit #014);

Sheet C4.4 - "Site Specifications," dated 10/1/20 (Exhibit #015); and

Sheet C1.1 - "Proposed EPSC Plan," dated 10/19/20 (Exhibit #016).

3. All conditions of Land Use Permit #4C1148 are in full force and effect except as further amended herein.
4. The Permittee shall comply with all of the conditions of the following Agency of Natural Resources Permit:
 - a. Wastewater System and Potable Water Supply Permit (**permit #**) issued on (**date**) by the ANR Drinking Water and Groundwater Protection Division.
5. Any nonmaterial changes to the permit listed in the preceding condition shall be automatically incorporated herein upon issuance by the Agency of Natural Resources.
6. Representatives of the State of Vermont shall have access to the property covered by this permit, at reasonable times, for the purpose of ascertaining compliance with Vermont environmental and health statutes and regulations and with this permit.
7. A copy of this permit and plans shall be on the site at all times throughout the construction process.
8. No change shall be made to the design, operation or use of this project without a permit amendment issued by the Commission or a jurisdictional opinion from the District Coordinator that a permit is not required.

9. No further subdivision, alteration, and/or development on the tracts of land approved herein shall be permitted without a permit amendment issued by the Commission or a jurisdictional opinion from the District Coordinator that a permit is not required.
10. Pursuant to 10 V.S.A. § 8005(c), the Commission may at any time require that the permit holder file an affidavit certifying that the project is in compliance with the terms of this permit.
11. The conditions of this permit and the land uses permitted herein shall run with the land and are binding upon and enforceable against the Permittee and their successors and assigns.
12. Prior to any construction on Lot 2, the Permittee, its assigns or successors, shall submit an application for a permit amendment addressing Criterion 8 for aesthetics.
13. Construction of the single family residence and auxiliary dwelling on Lot 2 by the Permittee or persons associated with him pursuant to 10 V.S.A. § 6001(14)(A)(iii) or (iv) is not authorized until a permit amendment is issued and application fee is paid based on estimated construction costs associated with the lot.
14. Construction hours shall be limited to Monday through Friday from 7AM to 6PM, and Saturdays from 8AM to 5PM. There shall be no construction on Sundays or holidays.
15. The Permittee shall apply and maintain water and/or other agents approved by the Watershed Management Division in the Project's Erosion Prevention and Control Plan on all roadways or disturbed areas within the project during construction and until pavement and/or vegetation is fully established to control dust.
16. A stabilized construction entrance must be installed and maintained as shown on Exhibit #008 (Proposed Conditions Site Plan) at the intersection of Spruce Street and the Project driveway. At a minimum, this entrance must be constructed and maintained in accordance with the specifications as described in the Vermont Department of Environmental Conservation's *Low Risk Site Handbook for Erosion Prevention and Sediment Control* (February 2020). No further clearing or construction may occur until the stabilized construction entrance is complete.
17. The Permittee and all subsequent owners or lessees shall install and maintain only low-flow plumbing fixtures in any buildings. Any failed water conservation measures shall be promptly replaced with products of equal or better performance.
18. At a minimum, the Permittee shall comply with the Vermont Department of Environmental Conservation's *Low Risk Site Handbook for Erosion Prevention and Sediment Control* (February 2020).
19. The Permittee shall comply with Exhibits #001a and 010 (Schedule B; and Erosion Control Notes and Details) for erosion prevention and sediment control. The Permittee shall prevent the transport of any sediment beyond that area necessary for construction

approved herein. All erosion prevention and sediment control devices shall be periodically cleaned, replaced, and maintained until vegetation is permanently established on all slopes and disturbed areas.

20. All mulch, siltation dams, water bars and other temporary devices shall be installed immediately upon grading and shall be maintained until all roads are permanently surfaced and all permanent vegetation is established on all slopes and disturbed areas. Topsoil stockpiles shall have the exposed earth completely mulched and have siltation checks around the base.
21. All areas of disturbance must have temporary or permanent stabilization within 14 days of the initial disturbance. After this time, any disturbance in the area must be stabilized at the end of each workday. The following exceptions apply: i) Stabilization is not required if work is to continue in the area within the next 24 hours and there is no precipitation forecast for the next 24 hours. ii) Stabilization is not required if the work is occurring in a self-contained excavation (i.e., no outlet) with a depth of 2 feet or greater (e.g., house foundation excavation, utility trenches).
22. All disturbed areas of the site shall be stabilized, seeded, and mulched immediately upon completion of final grading. All disturbed areas not involved in winter construction shall be mulched and seeded before October 15. Between the periods of October 15 to April 15, all earth disturbing work shall conform with the "Requirements for Winter Construction" standards and specifications of the Vermont Department of Environmental Conservation's *Low Risk Site Handbook for Erosion Prevention and Sediment Control* (February 2020).
23. A copy of the approved erosion prevention and sediment control plan shall be on the site at all times during construction.
24. In addition to conformance with all erosion prevention and sediment control conditions, the Permittee shall not cause, permit or allow the discharge of waste material into any surface waters. Compliance with the requirements of this condition does not absolve the Permittee from compliance with 10 V.S.A. (§§ 1250-1284) Chapter 47, Vermont's Water Pollution Control Law.
25. Any extracted stumps shall be disposed of on-site above the seasonal high water table and not in any wetland, or at a state-certified stump and inert waste disposal facility, so as to prevent groundwater pollution.
26. Prior to any site work, the Permittee shall install and maintain temporary fencing along the tree line to be retained as depicted on Exhibit #008.
27. Pursuant to 30 V.S.A. Section 51(e), the Permittee and/or subsequent lot owner, at a minimum, shall construct the single family homes in accordance with Vermont's

Residential Building Energy Standards (RBES) Stretch Code effective at the time of construction.

28. Manufactured housing (mobile homes) shall, at a minimum, meet the requirements of Title VI of the National Manufactured Housing Construction and Safety Standards Act of 1974 (42 U.S.C. Sections 5421-5426).
29. The installation and/or use of electric resistance space heat is specifically prohibited without prior written approval from the District Environmental Commission.
30. The Permittee, upon completion of the construction of each residential building and prior to use or occupancy, shall submit to the District Commission a copy of the certification submitted to the Public Service Department as described under 30 V.S.A. § 51(f).
31. The Permittee shall provide each prospective purchaser of any interest in this Project a copy of the approved plot plan, Potable Water Supply and Wastewater System Permit, and the Land Use Permit Amendment before any written contract of sale is entered into.
32. The Permittee shall reference the requirements and conditions imposed by Land Use Permit #4C1148-1 in all deeds of conveyance and leases.
33. Pursuant to 10 V.S.A. § 6090(b)(1), this permit amendment is hereby issued for an indefinite term, as long as there is compliance with the conditions herein. Notwithstanding any other provision herein, this permit shall expire three years from the date of issuance if the Permittee has not commenced construction and made substantial progress toward completion within the three-year period in accordance with 10 V.S.A. § 6091(b).
34. All site work and construction shall be completed in accordance with the approved plans by **October 1, 2024**, unless an extension of this date is approved in writing by the Commission. Such requests to extend must be filed prior to the deadline and approval may be granted without a public hearing.
35. The Permittee shall file a Certificate of Actual Construction Costs, on forms available from the Natural Resources Board, pursuant to 10 V.S.A. § 6083a(g) within one month after construction has been substantially completed. If actual construction costs exceed the original estimate, a supplemental fee based on actual construction costs must be paid at the time of certification in accordance with the fee schedule in effect at the time of application. Upon request, the Permittee shall provide all documents or other information necessary to substantiate the certification. Pursuant to existing law, failure to file the certification or pay any supplemental fee due constitutes grounds for permit revocation. The certificate of actual construction costs and any supplemental fee (by check payable to the "State of Vermont") shall be mailed to: Natural Resources Board, 10 Baldwin Street, Montpelier, VT 05633-3201; Attention: Certification.

36. Failure to comply with any condition herein may be grounds for permit revocation pursuant to 10 V.S.A. sec. 6027(g).

Dated at Essex Junction, Vermont, this ____ day of November, 2020.

By _____
Parker Riehle, Vice Chair
District 4 Commission

Members participating in this decision:

Kate Purcell

Pam Loranger

Any party may file a motion to alter with the District Commission within 15 days from the date of this decision, pursuant to Act 250 Rule 31(A).

Any appeal of this decision must be filed with the Superior Court, Environmental Division within 30 days of the date the decision was issued, pursuant to 10 V.S.A. Chapter 220. The Notice of Appeal must comply with the Vermont Rules for Environmental Court Proceedings. The appellant must file with the Notice of Appeal the relevant entry fee required by 32 V.S.A. § 1431.

The appellant must also serve a copy of the Notice of Appeal on the Natural Resources Board, 10 Baldwin Street, Montpelier, VT 05633-3201, and on other parties in accordance with Rule 5(b)(4)(B) of the Vermont Rules for Environmental Court Proceedings.

Decisions on minor applications may be appealed only if a hearing was held by the district commission. Please note that there are certain limitations on the right to appeal, including appeals from Administrative Amendments and interlocutory appeals. See 10 V.S.A. § 8504(k), 3 V.S.A. § 815, and Vermont Rule of Appellate Procedure 5.

For additional information on filing appeals, see the Court's website at:

<http://www.vermontjudiciary.org/GTC/environmental/default.aspx> or call (802) 951-1740. The Court's mailing address is: Vermont Superior Court, Environmental Division, 32 Cherry Street, 2nd Floor, Suite 303, Burlington, VT 05401.

Y:\NRB\Essex\DISTRICTS\DIST4\PROJECTS\4C1001-4C1250\4C1148\4C1148-1\Published Documents\District Commission Documents\4C1148-1 draft permit.docx

CERTIFICATE OF SERVICE

I hereby certify on this 23rd day of October, 2020, a copy of the foregoing ACT 250 MINOR NOTICE #4C1148-1, was sent by U.S. mail, postage prepaid to the following individuals without email addresses and by email to the individuals with email addresses listed.

Note: any recipient may change its preferred method of receiving notices and other documents by contacting the District Office staff at the mailing address or email below. If you have elected to receive notices and other documents by email, it is your responsibility to notify our office of any email address changes. All email replies should be sent to NRB.Act250Essex@vermont.gov

Gardenview Associates, Inc.
c/o Larry Davis
349 South Willard Street
Burlington, VT 05401
larry@willardstreetinn.com

Billy Roberts
Civil Engineering Associates
10 Mansfield View Lane
South Burlington, VT 05403
broberts@cea-vt.com

Katherine Schad, Town Clerk
Chair, Selectboard/Chair, Planning Commission
City of Burlington
149 Church Street
Burlington, VT 05401
burlingtontownclerk@burlingtonvt.gov; lolberg@burlingtonvt.gov

Chittenden County Regional Planning Commission
110 West Canal Street, Suite 202
Winooski, VT 05404
permitting@ccrpcvt.org

Agency of Natural Resources
1 National Life Drive, Davis 2
Montpelier, VT 05602-3901
ANR.Act250@vermont.gov

Dept. of Public Service
112 State Street, Drawer 20
Montpelier, VT 05620-2601
barry.murphy@vermont.gov; PSD.VTDPS@vermont.gov

VTrans Policy, Planning & Research Bureau
Barre City Place
219 N. Main Street
Barre, VT 05641
AOT.Act250@vermont.gov

Agency of Agriculture, Food & Markets
116 State Street, Drawer 20
Montpelier, VT 05620-2901
AGR.Act250@vermont.gov

Division for Historic Preservation
National Life Building, Drawer 20
Montpelier, VT 05620
scott.dillon@vermont.gov; james.duggan@vermont.gov
ACCD.ProjectReview@vermont.gov

FOR YOUR INFORMATION

District #4 Environmental Commission
Parker Riehle, Vice Chair
Kate Purcell/Pam Loranger
111 West Street
Essex Junction, VT 05452

Natural Resources Conservation Service
68 Catamount Park, Ste. B
Middlebury, VT 05753
marybeth.whitten@vt.usda.gov

Winooski NRCD Office
617 Comstock Road, Suite 1
Berlin, VT 05602
whiterivernrcd@gmail.com

Ethan Tapper, County Forester/FPR
John Gobeille/Toni Mikula, ANR/Dept. of Fish & Wildlife
111 West Street
Essex Junction, VT 05452
ethan.tapper@vermont.gov
john.gobeille@vermont.gov; toni.mikula@vermont.gov

Seven Days Classified Ad Section
255 South Champlain Street, PO Box 1164
Burlington, VT 05402
classifieds@sevendaysvt.com

Green Mountain Power Corporation
163 Acorn Lane
Colchester, VT 05446
kim.jones@greenmountainpower.com

Vermont Gas Systems
PO Box 467
Burlington, VT 05402
efficiency@vermontgas.com

Efficiency Vermont
128 Lakeside Ave., Suite 401
Burlington, VT 05401
pics@veic.org

Champlain Water District
403 Queen City Park Road
South Burlington, VT 05403
mike.barsotti@champlainwater.org

ADJOINING LANDOWNERS

Available via:
<https://anrweb.vt.gov/PubDocs/ANR/Planning/4C1148-1/Application%20Documents/001a%20Act%20250%20Application%20and%20Cover%20Letter%20rev%2010-16-20.pdf>

Dated at Essex Junction, Vermont, this 23rd day of October, 2020.



Jessica Mason
Natural Resources Board Technician
802-879-5614
Jessica.Mason@vermont.gov

Y:\NRB\Essex\DISTRICTS\DIST4\PROJECTS\4C1001-4C1250\4C1148\4C1148-1\Published Documents\District Commission Documents\4C1148-1 COS minor notice.docx

Meagan Tuttle

From: Amy Magyar <takeaimer@yahoo.com>
Sent: Thursday, November 05, 2020 1:22 PM
To: Meagan Tuttle
Subject: Comments for Nov 10th Short Term Rental Ordinance Consideration

[WARNING]: External Message

Good afternoon Meagan,

I wanted to be sure to go on record in support of non-primary-residence, single detached, whole dwelling short term rentals in the city of Burlington. And I hope that the joint committee members have a chance to read this before our meeting on Nov. 10th.

Over the last year, there has been quite a great deal of discussion around being fine with multi-unit dwelling non-primary residence permission, but when it comes to a whole unit that does not have the owner on the property for any amount of time during the year, it has become a fear based, "they will ruin our neighborhood" argument that I thought we put to rest back in January. But alas, I heard it again during our last meeting and I would like to address it head on.

And to make sure any bias I may have on the subject be completely transparent, I will NOT benefit from having this part of the ordinance be considered. Quite the contrary...they will be my competition as I am a primary residence, single standing whole unit short term rental. But I felt it was more important to make sure our STR ordinance is one that is a win-win for all sides of the table, as well as financially sound for the city. I felt it was time for **some reflection on what we are so afraid of when it comes to single standing, non-primary resident units.**

After the last meeting, I got together with Deb Lyons to enjoy the last of the temperate nights and took a socially distanced walk around her neighborhood. As we walked, I noticed the warm lights coming from each of the houses and for the first time, I realized the diversity of the styles of homes spread around Burlington. Different architecture, styles, and designs. But I also saw the diversity of who was sitting in their living rooms, at their dining room tables, or who was on their front porches enjoying the evening like we were. It was a mix of renters and home owners enjoying their homes and it was a diverse mix of who made up the neighborhood. It made me realize that the beauty of our city, is that we are more diverse than I originally thought. Sure, there is plenty of room to continue to create an open community for all race, religion, gender, belief, or dog lover vs. cat lover. All are welcome. All live in Burlington. But no matter the makeup of our neighborhoods, everyone living there wants to be a part of a community. And they have chosen Burlington. **That is what makes a neighborhood a strong one.**

I thought of my own, often coveted, family friendly, ideal neighborhood, the 5 Sisters in the south end of Burlington. What I love about it is that it is a mix of rentals and home owned. On Halloween, I couldn't have been more proud of what I saw as I walked the streets - home owners and renters alike created unique ways to deliver candy. The rental homes, which are actually quite plenty in my neighborhood, were just as involved in handing out candy as the home owners were. In fact, I saw a short term rental property who has been housing a small family for three weeks putting candy out in their driveway as well....short term renters participating in Halloween? You bet. **It isn't how long someone is staying in a neighborhood that makes a neighborhood more or less desirable. It is how they feel living in it.** And it was very clear to me last weekend.

So, it made me wonder as we consider regulating short term rentals, what are we SO afraid?

One of the aspects of the regulating STRs has been to ensure the "fabric" of the neighborhood is untouched by the impact of short term rental whole unit. And that the "feel" of the neighborhood is intact. But what does fabric and feel look like in reality? And what is the actual impact of having short term renters visit a neighborhood? I assume it means that the neighborhood feels more like a place for homes and not hotels. And that desire to have the visitors blend into the neighborhood. That generally, the neighborhood remains "as intended."

I think it is important for the committee to understand that, we, the owners of short term rentals are proud that our homes are in neighborhoods and are well taken care of, family friendly, and a safe place to visit. That is what is attractive to the families we rent to. For the many reasons we discussed as to why families choose short term rentals over hotels, they are

looking for neighborhoods that feel relaxing and homey. Thus, it is imperative for us to ensure that our neighborhoods do stay "homey." We are rated by our guests on that fact. We WANT the neighborhoods to remain untouched. We don't want a retraction of the feel of the neighborhood. We want to encourage the strong feeling of community. But I also want to point out, with Burlington having a wonderful mix of rentals and home owners, having short term renters join the mix shouldn't detract from the feeling of the neighborhood. If nothing else, they may even add to the feel.

I also realize that there is a fear, that, "Given the high turn-over of guests, short-term rentals may bring about nuisance impacts such as traffic, noise, and trash to neighborhoods." This fear, especially if you look at the rates of grievance filed to the city for short term rentals vs long is unfounded. As hosts, we work hard to maintain order, reduction of unsightly trash, and noise pollution, because again, we are rated on how our homes keep our guests safe and happy. I think there is more issue with noise pollution coming out of long term rentals next to short term rentals that have often been an issue for a host. Rather than vice versa.

So I ask it again, what is wrong with having a family from out of town want to experience a neighborhood in Burlington? What are we afraid of? Especially when it comes to not having a host on property or who lives on the property for at least half the year. Does that mean that the home will fall in disrepair? **We find quite the opposite.** There is always someone who visits the property to ensure that the home is cleaned and turned over for the next guest. And that includes how the home overall feels. **So the fear that having a short term, primary resident NOT living on the property is unfounded for most of the short term rentals in Burlington.** The care that is given to these homes doesn't change whether the person lives on the property or not. The guests don't feel a difference. They feel the care that is given to the home. And they rate the host based on that care. So again, I ask, what are we so afraid of by not having the owner of the short term rental on the property?

Thank you for sharing my thoughts with the joint committee and for considering, at least a set number of whole unit, non-primary-residential owner properties with approval by the DRB. If we are so scared of ruining a neighborhood, limit the number the city can have. But don't remove them completely. When Burlington was first thinking about how to handle STRs they kept referencing Portland Maine and how they have been handling short term rentals. As a reminder, they DO allow non-primary-residential, single standing whole unit rentals in their city. They have a cap on the number of overall rentals, but they allow them. And as far as I know, Portland has not become a city less desirable after the ordinance was passed in 2017. In fact, their real estate has boomed since the ordinance of short term rental has gone into effect. Home sales were up 23% from year 2018 to 2019 and is well on its way to surpassing that number in 2020. People WANT to live in Portland Maine. And because those buying homes/condos are not able to turn them into STRs because of the cap of the number of STRs, they are moving in and living there because of the fabric and feel of the neighborhoods. They aren't put off by living next to a whole unit, non-primary residence short term rental. They live among long term renters, short term rentals that are primary residence as well as non primary residence. Portland has not fallen into an undesirable city. And Burlington won't either.

So I ask for the final time, what are we so afraid of?

Cheers,
AM

Meagan Tuttle

From: Barbara Headrick <barbara.headrick@gmail.com>
Sent: Monday, November 09, 2020 3:56 PM
To: Andrew Montroll; Alexander Friend; Emily Lee; Harris Roen; Jack Hanson; Maxwell Tracy; Meagan Tuttle
Subject: Fwd: Comments regarding draft version of JIPMP 2020-2025
Attachments: UVM parking deficits will be larger than UVM portrays.pdf; Utilization Rate at UVM Parking Lots.pdf; How UVM's TDM needs improving.docx; Updated comments re JIPMP 2020-2025.pdf; Evening parking deficits due to events.pdf; What the City Municipal Development Plan recommends.pdf

[WARNING]: External Message

Hello,

Provided below are documents that I am submitting as public comment regarding the JIPMP. There are a total of 6 documents attached of which I emailed four to Meagan on Friday. Each provides an analysis of different aspects of UVM's JIPMP and you may find these analyses helpful. If you don't have time to review the documents, here are the key highlights:

1. In the evening, without any PFG events, UVM currently has a 551 net parking space surplus. But this equates to having 87% of the parking spaces filled. Therefore, UVM's on-campus parking is at effective capacity before considering any PFG event parking demand.
2. Based on UVM 's 2017 data for the number of tickets sold to non-students for sold-out basketball and hockey games, I calculated that UVM has a parking deficit for PFG events. The parking space deficit for men's basketball games is (66) parking spaces. The parking space deficit for sold out men's hockey games is (401) parking spaces.
3. When the PFG renovation and expansion is completed, UVM's plan is to host 5,000 person events, 6,300 person events, and 7,300 persons on the Athletic Campus. I know this from UVM memos, UVM Trustee meeting minutes, and by participating in the Act 250 Commission hearing for the PFG's Act 250 permit. For events of this size, UVM will have respective parking space deficits of (550), (827), and (1,046).
4. Even if an unrealistic assumption is made that 100% of on-campus students will attend the PFG events (in order to assume as small as possible the demand for event parking), UVM's parking lot utilization rates will exceed 85%. Even in the best case and unrealistic scenario of filling seats with on-campus students to the greatest extent possible, UVM will have evening parking space deficits when UVM resume hosting events in the PFG complex. Therefore, UVM's parking and demand analysis should not focus just on daytime parking demand.
5. UVM's parking demand will peak midday because of commuters, but also in the evening when hosting PFG events. The JIPMP should provide a parking supply and demand analysis for both of these peak demands in order to be consistent with the language of CDO. CDO Article 8.3.3 states: " ... an Institutional Parking Management Plan shall include... an analysis of the anticipated parking demand by user group, time of day and/or demand by use; "
6. UVM's 2014-2019 JIPMP forecast for 2019's peak daytime parking was a 748 parking space surplus. But UVM's new estimate (based on Fall 2019 data) is that UVM has 185 +/- 210 spaces available. The forecasting

error is between -300 and -750 parking spaces. Therefore, there is reason to have low confidence in UVM's forecast of having 255 +/- 204 parking spaces in year 2025. Based on the magnitude of their prior forecasting error, a parking space deficit in year 2025 is likely.

7. In the 2014-2019 JIPMP, UVM forecast 1,505 fewer students for 2019 than what UVM actually enrolled in 2019. By under-estimating student enrollment for 2019, UVM also underestimated what its parking demand would be in 2019. The error translates into -358 parking spaces. This indicates that the year 2025 forecasted parking surplus of 255 spaces +/- 204 spaces is probably too optimistic, and that UVM will likely have deficits in 5 years unless they change their parking management.

8. Over the past three years, UVM sharply increased the number of permits it issued to students and employees. In Fall 2019, UVM issued 19% more parking permits than it did in Fall 2018. In Fall 2018, UVM issued 9% more on-campus parking permits than it did in Fall 2017. The cumulative increase is significant.

9. UVM's daytime peak parking lot utilization rates, based on their 10/13/2020 JIPMP data, ranges from 91% to 100% full. Therefore, even in the best case scenarios (with UVM's margin of errors added in), UVM's parking demand exceeds its effective capacity. UVM needs an additional 800 parking spaces today to reduce its utilization rate to 84%.

10. Despite the increase in permits issued, there was unmet parking demand on-campus during the 2018-2019 academic year. UVM people were advertising in Front Porch Forum for parking spaces near campus because they couldn't obtain an on campus parking permit. This unmet parking demand is not captured in UVM's JIPMP demand numbers. The 192 UVM drivers who park on the street are only the ones who "prefer" to park on the street. Their 192 cars are in the parking demand numbers; but the ones who wanted to buy a permit and couldn't because UVM capped the number of permits it would sell and the drivers who could not find a parking space on campus are unmet demand for on-campus parking. This demand is not captured in UVM's demand numbers. So UVM's current daytime peak demand is greater than what it says and UVM's net parking space availability is less than what UVM estimates.

11. Excluding off-site parking (which has already been subleased to the auto-dealer and was unpopular with students because hours of access are limited), UVM currently has a parking deficit. For UVM to reduce its current utilization rate to 84% (because UVM's on campus parking reaches effective capacity when lots are 85% full), UVM needs another 1,226 parking spaces today. Similarly, UVM's peak daytime parking deficit in Year 2025 will be about (1700) spaces.

12. In order to be consistent with CDO, UVM should not be allowed to use on-street parking for its needs. In order to reduce SOV driving, no on-street parking should be made available to UVM. Any on-street parking, even for visitors, enables UVM students and employees to continue their SOV driving habits. CDO 8.1.1 states: "The purpose of this article is to ensure there are adequate parking and loading facilities to serve the use or uses of the property." and "Reduce congestion in streets and contribute to traffic safety." (Note: on-street parking is not a facility and on-street parking enables SOV driving. CDO 8.1.15 and the Municipal Development plan have the objective of reducing dependence on the SOV.

13. UVM's clear choices are to either build a parking lot for the PFG complex (near the I-89 exchange) that can also be used by daytime commuters, or implement a robust satellite park and ride program and provide these UVM commuters with fast direct UVM bus shuttle service from remote towns to campus. I recommend UVM shuttles for the remote lots because commuting by GMT is too slow due to multiple stops, and it is also costly for more inconvenience. UVM might want to consider offering free shuttle service from remote towns into Burlington. The expense of doing so might be less than building a garage and UVM would be able to use its land for revenue-generating purposes instead of parking lots. This remote park and ride plan was part of

UVM 2006 Master Plan, but it was never implemented. This TDM program seems necessary now and it would be environmentally the right thing to do.

14. UVM did not disclose in the 2014-2019 JIPMP, nor in the 2020-2025 JIPMP, nor in any of the annual JIPMP updates between 2014 and 2019, nor in the DRB review of the PFG project, that Gutterson's seating capacity is increasing by 2,000 seats. One of the attached reports shows a VT Business press release regarding this detail and it was also mentioned during a UVM Board of Trustee meeting in March 2017. UVM intends to use this increase in seating capacity to host larger events. In the attached report is a screen-shot of a memo from UVM to the Act 250 Commission saying that if Gutterson and the Tarrant Multipurpose Center are used at the same time for an event, UVM will limit the event to no more than 5,000 attendees at the same time. If the event is held in just Gutterson, the seating capacity is 6,300. UVM confirmed this 6,300 Gutterson seating capacity with the Act 250 Commission during the hearing but the UVM memo did not say that UVM would limit the number of attendees if an event only uses Gutterson. UVM has also stated it believes it has the right to host as many as 7,300 visitors at one time on the Athletic Campus. Events with 5,000 to 7,300 visitors exceeds 100% of UVM's on-campus parking inventory. The JIPMP should include a specific plan for how UVM will find enough parking spaces for these 5,000 to 7,300 person events without using on-street parking.

15. One of the highest priority recommendations in the City's residential parking plan is for UVM to reduce the number of commuters driving SOV into Burlington by establishing the remote (outside of Burlington) park and ride TDM program. The city incorporated the Residential Parking plan into the Municipal Development Plan, so if the DRB wants to avoid requiring UVM to build the number of parking spaces required by CDO, and help advance the MDP goal of reducing SOV driving, then the DRB can look to the MDP and Article 8 when reviewing the JIPMP to require as a condition of future permits that the remote satellite parking plan be implemented. Metrics and timelines are critical as are consequences for non-compliance or insignificant progress.

16. It seems prudent to not approve the 5-year JIPMP, but instead have UVM apply for parking waivers on a permit by permit basis. This would allow us to evaluate how well UVM is managing its parking demand before granting more permits and parking waivers.

17. The JIPMP for 2020-2025 includes many loopholes and these need to be eliminated before the report goes to the DRB. For example, there is loophole language in the JIPMP cover letter to the DRB and the JIPMP report that fails to exclude the use of neighborhood streets to provide UVM with parking supply. Other language in the report creates loopholes for excluding parking deficits caused by projects mentioned in the JIPMP report. See comments # 7, #8, #9 in the attachment titled: "Updated comments regarding JIPMP 2020-2025". This report provides by page suggested edits to the JIPMP.

18. Please ask UVM to resume providing the granular detail that will make it possible for us to see how it came to the numbers provided in the JIPMP. For example, UVM needs to resume providing the table titled: "Parking spaces by lot." It was last provided in the March 2019 version of the JIPMP and was in all previous JIPMP. It would also be helpful to see the list of survey questions asked to collect the parking data.

19. Please ask UVM to break out Redstone Lofts and Redstone Apartments parking supply and demand from the rest since these lots are not available to the rest of the UVM population. The portrayal of UVM's supply and demand would be more accurate and transparent if the demand and supply for these two building's parking lots and the student counts in these two buildings were shown in separate tables. And how many of the students living in those buildings (which received parking waivers from the DRB) are parking on the street?

Thank you for considering these comments and the attached analysis.
Barbara

----- Forwarded message -----

From: **Barbara Headrick** <barbara.headrick@gmail.com>

Date: Fri, Nov 6, 2020 at 2:56 PM

Subject: Comments regarding draft version of JIPMP 2020-2025

To: Meagan Tuttle <mtuttle@burlingtonvt.gov>

Meagan,

Provided below are documents that I would like to share with the Planning Commission regarding UVM's Joint Institutional Parking Management Plan. It is okay with me if you want to include these in the meeting's on-line documents as public comments.

Thank you,

Barbara

Original: 10/13/2020. Updated 10/29/2020.

Planning Commissioners,

Please consider these comments regarding CATMA's draft 2020-2025 JIPMP. Thank you.

Comment	Page #	CATMA memo	Comment	Suggestion
1. Updated with minor edits	Planning Dept's cover letter to Planning Commission (10/8/2020) Last sentence on page 1.	CATMA is indicating here that it has not considered visitor parking <u>demand for the hospital. Nor did CATMA consider UVM's PFG Complex event parking demand.</u> "It's staff's impression that this report does not address patient and visitor demand but rather focuses on managing employee demand and behavior."	Excluding visitor parking demand is a major flaw in this JIPMP report because UVM had an on-campus parking deficit in 2019 (before co-vid). In 2018-2019, many people said they could not find parking on campus. Examples: - Former City Councilor Dave Hartnett said there UVM had an on-campus parking deficit during UVM basketball games. - Act 250 Commissioner said she could not find an on-campus parking spot when she had a meeting on campus. - Students were advertising in FPF and knocking on doors to see if they could rent parking spaces in homeowners' driveways. UVM intends on hosting up to 5000 visitors to events in the renovated PFG complex. See attached letter from UVM to Act 250 Commission saying they will do this. This increases parking demand above what we have seen in past (max 4000 person sold out hockey games); and UVM already has a parking deficit. Because of co-vid, 2020-21 parking demand is not representative of the next 5 years.	Require CATMA to revise the report in order to provide a parking space supply and demand analysis for those times of day when UVM hosts basketball games, hockey games. UVM needs to be transparent about the overlap in parking demand for commuters and athletic events. Also ask UVM to provide a parking space demand and supply analysis for the scenario where it hosts up to 5000 persons at one time for a PFG Complex event.

Comment	Page #	Memo to DRB	Comment	Suggestion
2.	Planning Dept's cover letter to Planning Commission (10/8/2020) Page 2, top paragraph about identifying reasons for SOV trend		The CATMA response does not address the Planning Commission's request.	Ask CATMA to revise the report to include a study that addresses the Planning Department's question. CATMA should postpone submitting to the City the revised version of this 2020-2025 JIPMP until this SOV trend factor study and other Planning Commission suggestions are incorporated.
3.	Planning Dept's cover letter to Planning Commission (10/8/2020) Page 2, 2nd paragraph. Regarding: additional on-campus housing.	The following text creates a loophole for what should cause UVM to increase its parking supply through satellite parking <i>".... that is not anticipated in the current JIPMP"</i>	These italicized words should be deleted from the sentence in order to have the sentence read as follows: If the institutions experience an on-campus parking deficit for any reason, including for projects mentioned in this JIPMP, the Institutions should accommodate that demand with increased supply of satellite parking. The objective is to have none of UVM and UVMMC parking on adjacent/nearby city streets.	

Comment	Page #	Text in JIPMP	Comment	Suggestion
4. comment updated	Planning Dept's cover letter to Planning Commission (10/8/2020) Last section, CATMA's response to first bullet point	".... UVM has identified 400 additional parking spaces"	<u>UVM has already subleased the 200 parking spaces on Pine Street to a car dealership until at least August 2021.</u> Therefore, these spaces should not be included in UVM's presentation of its current parking supply. UVM creates the impression, when referring to the Spring 2021 survey, is that it wants to extend this lease into future years... potentially for the next 5 years. On page 7 of the supplemental report, UVM says that it will lease 200 to 400 parking spaces in Colchester by year 2025. UVM has not contracted this yet, nor determined how people will transport from there to the Burlington campus. The parking range of 200 to 400 lends support to the impression that UVM wants to sublease the Pine Street parking spaces for more than 1 year. The 192 UVM drivers who are parking on city streets should be required to park on-campus, which means that UVM should not be sub-leasing the Pine Street lot. Furthermore, <u>UVM needs to make the Pine Street lot accessible 24/7 in order to be more comparable to the 200 spaces that it has lost on-campus as a result of the UVMMC Beaumont Avenue Health Services Research Facility project that had a permit condition requiring 200 spaces of replacement parking. (DRB review of 10/1/2019).</u>	CATMA and UVM need to better address the suggestion that the Planning Commission made about reducing the number of parking spaces that UVM leases to UVMMC. Excluding UVMMC satellite lots from UVMMC's total supply of parking is a flaw in this analysis. See comment #19.

Comment	Page #	Text in JIPMP	Comment	Suggestion
5.	PC agenda packet, page 18 Planning Commission cover letter to DRB, page 1 Paragraph 1, Line 4	Re: purpose of JIPMP “.... for the purpose of ensuring that streets in nearby <u>neighborhoods</u> <u>are not unfairly burdened</u> by parking demands of the institutions, ...”	The words “unfairly burdened” provide a loophole for Public Works Commission, that has 2 UVM Transportation employees on it, to lobby for some overflow parking. The institutions are the largest source of traffic and parking demand in our city; and we need the JIPMP to protect the city, not just show UVM’s supply and demand analysis. UVM should not be allowed use city streets as their parking lot. Champlain College’s use of Maple and Willard Streets for parking should stop. Driver access to curbside parking increases SOV driving; which the city and UVM are trying to reduce. Cars parked curbside cause more traffic in neighborhoods, more pollution in rainwater runoff that enters the lake, and reduced safety for bicyclists and pedestrians. Decreasing on-street parking encourages walking and biking.	The wording in CDO Article 8 should be modified to communicate the city’s best interest of having <u>no</u> institutional parking on city streets. Suggested language: “for the purpose of not having institutional parking on city streets”. https://www.nytimes.com/2020/10/07/nyregion/nyc-biking-covid-women.html In NYC, women biking to work increased significantly when traffic volumes declined and regulations reduced curbside parking. Using UVM’s JIPMP data, one can readily calculate that UVM has a parking deficit. (Please refer to comment #14 and #17.) I ask please for the Planning Commission to anticipate and preempt UVM lobbying efforts and Public Works Commission decisions to allow UVM to use city streets for some overflow parking – including event parking demand, which is discussed in comment # 16.

Comment	Page #	Text in JIPMP	Comment	Suggestion
6. Updated with minor edits for clarity	PC agenda packet, page 18 Planning Commission cover letter to DRB, page 1 Paragraph 4, line 2.	Re: Demand forecast “UVM is still in the process of updating both its campus transportation and housing plans.”	UVM is continuously updating these plans which they call “living documents” These plans are never “finalized”. UVM needs to fully transparent with the Planning Commission. The demolition of Coolidge Hall is included in Table 4-6 on page 20, but the square footage of the replacement building that will be larger and is not included in Table 4-6. The 5 year window of the JIPMP report should not be used as a loophole for timing the disclosure and their likely parking impacts – especially if these projects are anticipated and in UVM’s other strategy documents	For example, UVM needs to inform the Planning Commission of its current thinking about what size building will replace Coolidge Hall and include the likely square footage of the new dorm in Table 4-6 on page 20. This UVM plan is documented in the city’s 2018 planBTV for Housing. UVM is also thinking about adding housing to Trinity Campus. And what are UVM’s plans for the Mercy Convent on Mansfield Avenue? All of these construction projects are relevant to forecasting future parking supply and demand and CDO requirements

Comment	Page #	Text in JIPMP	Comment	Suggestion
7.	PC agenda packet, page 19 Cover letter to DRB, page 2 Paragraph 1, line 4.	Regarding what to do if demand for parking exceeds supply... <i>"... or additional parking supply."</i>	The <i>italicized</i> words create a loophole for the institutions because it does not exclude the use of neighborhood streets to provide UVM and UVMMC with additional parking supply.	<u>Add a few words</u> to the end of this sentence so it reads as follows: "... or additional parking supply <u>without using city streets for institutional parking needs.</u> "
8. Highlighted text added	PC agenda packet, page 19 Cover letter to DRB, page 2 Paragraph 2 line 2	"that is not planned for in the 2020-2025 JIPMP"	This is a loophole. This loophole is extremely concerning because it makes it possible for UVM to have a parking deficit due to the PFG Complex, or any other listed project, and not be required to address the parking deficit	Delete this caveat from the text.

Comment	Page #	Text in JIPMP	Comment	Suggestion
9.	PC agenda packet, page 19 Cover letter to DRB, page 2 Paragraph 2 line 1	Re: what will trigger the institutions to arrange more satellite parking “... if the institutions plan any additional on-campus housing ...”	This is too narrowly limiting the cause of a future parking deficit and the resulting need for a remote satellite parking solution	Suggested text: “.... <u>If, for any reason</u>, one or more of the institutions experience an on-campus parking deficit, the relevant institutions agree to eliminate this parking deficit by implementing a robust and successful satellite parking program so that all overflow parking is located outside of Burlington. The city does not want to see overflow parking on city streets.”

Comment	Page #	Text in JIPMP	Comment	Suggestion
10. Edited the comment column.	PC agenda packet, page 40 JIPMP page 16 Paragraph 3 line 3	Regarding the number of buildings on campus, UVM states: “Redstone Lofts, Redstone Student Apartments, and Centennial Court Faculty/Staff Apartments, and their associated parking spaces, are not included in this total.	On page 19 of the JIPMP, UVM includes the 600 students living in Redstone Lofts and Redstone Apartments in student numbers when calculating parking demand and supply. The data in the table is wacky with them being included in the student count but their parking demand and supply supposedly being excluded from the analysis. This inconsistency give the impression that the demand and supply findings are not accurate. The data as presented doesn't give a true picture of the number of cars that students have on-campus.	Only students who live in Redstone Apartments and Redstone Lofts can purchase a permit for parking in those building's parking lots. Hence, there should be a separate chart added to the JIPMP that shows the number of students living in these building, the number of parking spots in these building's parking lots, the number of parking permits sold for these parking lots, and the net parking space availability in these parking lots. The Table 4-4 on page 19 of the JIPMP, and other tables that show parking supply and demand for the rest of the campus should be modified to clearly show that the student count living in Redstone Apartments and Redstone Lofts, and the associate parking, is excluded from the parking space supply and demand numbers for the rest of the campus. If there is a parking space deficit at Redstone Lofts and Redstone Apartments, then this deficit and the deficit for the rest of the campus need to be summed to reveal UVM's total parking deficit. This is important because if there are students who live in these buildings but can't buy a permit to park at the building because all the spots were already sold, then they impact the demand for on-street parking. And this overflow parking demand should be shifted from on-street to remote satellite parking lots.

Comment	Page #	Text in JIPMP	Comment	Suggestion
11 Highlighted text is edited	PC agenda packet, page 40 JIPMP page 16 Footnote #2 under Table 4-1	“Off-site parking is located at 351 Pine Street and is used for long term parking.” (200 spaces)	This is an important footnote because In the Supplemental Report on page 7, (agenda packet page 78), UVM reports that 0 of the 200 leased parking spaces are being used. These 200 Long term parking spaces on Pine Street should not be included in UVM’s parking supply count because: (1) UVM has already subleased the parking spaces to an auto-dealer for one year; and hints that it wants to extend this sublease contract. (2) This is car storage rather than parking. Viable parking spots provide 24/7 access to one’s car on an as-need basis.	Do not allow UVM to lease these parking spaces for the entire 5 year 2020-2025 period because if we use UVM’s data, UVM currently has a 225 parking space deficit. (See calculation below) The following UVM data is from JIPMP page 17 and its supplemental report page 7: UVM’s estimate parking space surplus today = 185 But deduct from this the: Margin of Error (210) parking spaces Pine St car storage (200 spaces) = UVM’s current parking deficit of (225) spaces. The margin of error is not variability according to UVM, but rather uncertainty inherent in surveys. The JIPMP should be modified to include the above calculation as this outcome is within the 95% level of confidence range of their forecast. Per UVM’s data, this deficit will grow over the next 5 years. As part of the JIPMP review, suggest to UVM that it change its policy so that drivers have 24/7 access to their cars if they park in the Pine Street lot. Limit the lease to the auto-dealer till August 2021, while also excluding these spaces from UVM’s calculation of its current parking supply because the spaces are not viable under UVM ‘s access policy.

Comment	Page #	Text in JIPMP	Comment	Suggestion
12	PC agenda packet, page 41 JIPMP pg 17	"Housing Master Plan – Phase 1"	This indicates that UVM has already developed some ideas for Phase 2.	Ask UVM to provide its latest version of the Housing Master Plan – Phase 2 (and 3?). Even if a final version is not ready, draft versions are relevant to understanding UVM's 5-year parking supply and demand.
13 Minor edits for clarity	PC agenda packet, page 41 JIPMP pg 17	Virtue Field Outdoor Seating – Phase 3 is carried forward to 2020-2025 JIPMP	The parking needed for this project is not listed in Table 4-6 on pages 19-20 of the JIPMP. Perhaps UVM made a typo by listing Virtue Field Phase 2 instead of Phase 3 in Table 4-6 on page 20.	Phase 3 should be listed in Table 4-6 because a waiver has not yet been issued. The report should include a description of each project planned for 2020-2024. Is Virtue Field Phase just support space and no additional seating? UVM needs to modify the draft JIPMP to include event parking demand in its analysis of on-campus parking demand. Since students attend athletic events for free and UVM has athletic event ticket sales data, UVM can calculate how many people are driving to campus for UVM athletic events. Given the expansion of the PFG Complex, visitor event parking is an important to evaluate via a parking supply and demand analysis.

Comment	Page #	Text in JIPMP	Comment	Suggestion
14 Highlighted text edited to exclude 192 on-street parkers since UVM says they are included in its tally of total parking demand Green text is new and very important.	PC agenda packet, page 41 JIPMP pages 17	“Using the Fall 2019 CATMA Employee Student Surveys, .. along with the information above, it was determined that the current parking demand for UVM is 4,754, putting it at a 185-space surplus (margin of error 210 spaces. “	<i>UVM’s 185 +/- 210 parking spaces represents an estimate range because of uncertainty (not variability) implicit with surveys.</i> UVM’s prior JIPMP reports (past 10 years) have overstated UVM’s net parking supply by as much 1200 parking spaces. (See Example #2 in my analysis titled UVM Parking Deficits will be larger than portrayed.) Given that this is the first year of UVM using a new methodology, we have no evidence that the new methodology will result in an accurate forecast. Accuracy is important since UVM wants to use the JIPMP to obtain CDO parking space waivers. Bad forecasts will harm the city and adjacent neighborhoods because UVM will lobby to use adjacent streets for overflow parking demand.	The following UVM data is from JIPMP page 17 and its supplemental report page 7. UVM’s estimate parking space surplus today = 185 But deduct from this the: Margin of Error (210) parking spaces Pine St car storage (200 spaces) = UVM’s current parking deficit of (225) spaces. In Appendix B, on page 42, UVM states that a parking lot utilization rate of 85% or higher indicates that UVM is at its effective parking capacity and that demand exceeds supply. During the 10/13/2020 Planning Commission meeting, Jon of UVM commented that 185 surplus parking spaces equals only 5% of UVM’s parking supply. This means that UVM’s parking lots are currently have a 95% utilization rate and are full beyond their effective parking capacity. This also means that parking demand exceeds supply. This point, UVM probably having a parking space deficit, needs to be emphasized when providing comments to the DRB.

--	--	--	--	--

Comment	Page #	Text in JIPMP	Comment	Suggestion
15.	PC agenda packet, page 42 JIPMP pages 18	Figure 4-1 uses pink to show parking lots that are already at 91% to 99% full. This includes the lots on the Athletic Campus.	In Appendix B, the UVM Transportation department says that parking lot utilization at 85% or more indicate the parking supply is insufficient and that there is a parking space deficit. Parking deficits result in overflow parking on neighborhood streets and one of the reasons for the city's review of the JIPMP is prevent this from happening. See JIPMP page 42, 2nd paragraph, last 4 lines. Therefore, looking at the map on JIPMP page 18, one can see in green and pink all the parking lots where there is excess parking demand. It would be good for this table to be revised so that the legend includes a break at 85%.	UVM should revise the draft JIPMP to provide this Figure 4-1 for parking demand when UVM has sold out basketball games. Also or sold out UVM Hockey games. The lots serving the PFG Complex are already at the full capacity threshold based on actual utilization rates exceeding 91% and as high as 100%. (See separate table.) This means that overflow parking demand is already impacting neighborhood streets. This is a problem that needs a remedy. The problem will get worse when the PFG project is completed because UVM told the Act 250 office in a letter that it will hosting up to 5,000 persons at one time at the PFG Complex. This is 2000 more event attendees than a sold out hockey game. It is very important for the JIPMP to have a section that provides a supply and demand analysis that includes event parking demand. UVM has ticket sales data. UVM used its ticket sales data to justify the PFG capital investment. It can use this same data to forecast event parking demand.

Comment	Page #	Text in JIPMP	Comment	Suggestion
16.	PC agenda packet, page 44 JIPMP pages 20	Zero parking spaces are associated with Virtue Field Phase 3 And Zero parking spaces are associated with the PFG Complex renovation.	Using UVM's data, UVM has an on-campus parking deficit (calculated above to be 225 spaces). The DRB should not grant UVM any parking waivers for 2020-2025. It would be best for UVM to first implement a remote satellite parking program, and after this program is up and running and diverting thousands of cars to the remote lots, UVM can come before the DRB again to apply for a parking waiver for its planned construction projects.	. The Act 250 Commission was concerned enough about the PFG parking demand to require UVM to provide annual parking updates. The Act 250 Commission has reserved the right to address UVM parking shortages that result from the PFG project through 2024. Simce Gutterson's seating capacity is increasing by 2000 seats, where will UVM have the additional 2000 visitors park? Siince the largest event will be 7,300 instead of 4,500, where will UVM park these additional 3,000 visitors? Listing only the Tarrant portion of the complex in Table 4-1 doesn't reflect the future impact of this entire PFG complex. Even though UVM already has a CDO parking waiver from the DRB for the PFG project, (because UVM did not clearly communicate to the DRB its intent to host 5000 person events) the parking demand associated with these events should be in the JIPMP. We need the JIPMP to include event visitor parking demand so parking deficits are anticipated and avoided. The city should delay approving the JIPMP (and granting parking waivers) until UVM includes in the JIPMP a plan for a significant remote satellite parking program for its commuters; and a parking plan for all PFG events.

Comment	Page #	Text in JIPMP	Comment	Suggestion
17. Minor edits to suggestion	PC agenda packet, page 45 JIPMP pages 21 Estimated Demand, Lines 1 and 4	Future Parking Demand « The estimated future demand for UVM will rise.” “... will increase UVM’s estimated future parking surplus to 255 (margin of error +/- 204 parking spaces.)	UVM provided an estimate range which has a margin of error (204 spaces) that is about the same size as the forecasted surplus (255 parking spaces. This is large enough a difference to be considered a surplus. Furthermore, the 255 parking space surplus is inflated because it includes 200 non-viable parking spaces on Pine Street that UVM wants to sublease to an auto dealer for the next 5 years. Exclude the Pine Street spaces and UVM’s data forecasts a 149 parking space deficit for Year 2025. This deficit is likely because it is within the forecast range that has a 95% confidence level.	Table 4-8 shows Peak Parking Demand of 4,867 parking spaces versus Peak Parking Supply of 5045. UVM needs to emphasize that 255 parking spaces minus a 204 parking space margin of error and minus the 200 limited access parking spaces on Pine Street, results in UVM forecasting a 149 parking space deficit. The size of the deficit will increase upon consideration of events at Virtue Field and the PFG complex.

Comment	Page #	Text in JIPMP	Comment	Suggestion
18.	PC agenda packet, page 45 JIPMP pages 21 Table 4-8	60% of employees drive to campus. On-campus students 5516 + Off-campus students 8,334 = Total # students of 13,850	UVM needs to provide park and ride direct to campus shuttle service to reduce the number of employees (60%) who are driving to Burlington from surrounding towns. The student count includes the Redstone Lofts and Apt students but the parking spots are excluded. Table 4-8 needs to be expanded into two sections: 1) to isolate the student count and parking supply and demand for the Redstone Lofts and Redstone Apartment buildings; and 2) to show a forecast of parking supply and demand for all other students. These two populations' demand and supply are distinct, but both can cause overflow parking on the street.	Require UVM to include in this JIPMP a detailed plan for a providing direct shuttle service to campus from remote park and ride lots outside of Burlington. The remote (outside of Burlington) remote parking plan should have metrics and a timeline for reducing the number of employees who drive to campus. Given the adverse impact of UVM parking and traffic on the city, which will grow worse with larger and more frequent events at the renovated PFG complex, and additional student housing projects, the city should not approve the JIPMP until this remote (outside of Burlington) satellite parking plan and direct commuter shuttle service to campus is included in the JIPMP. It would create confidence in UVM's willingness to manage its overflow parking demand if it included these remote (outside of Burlington) satellite parking plans in its JIPMP

Comment	Page #	Text in JIPMP	Comment	Suggestion
19.	PC agenda packet, page 18 Planning Commission cover letter to DRB, page 1 Paragraph 3, line 5.	“the scope of off-site parking facilities <u>has been narrowed</u> to better reflect the Hill area for UVMMC.”	Last year, when UVM reported an existing, parking deficit, the Planning Commission suggested that UVM reduce the number of parking spaces that it is leases to the UVMMC. UVM should not dismiss this suggestion because UVM’s data indicates that it currently has a parking deficit and that this deficit will grow larger. (See comments # 14 and #17.) In this JIPMP, on page 30, the off-site parking spaces have been excluded when calculating the total number of parking spaces available to UVMMC. This was done to paint a picture that UVMMC UVMMC needs to lease spaces from UVM. And UVM probably wants to continue this practice in order to receive this revenue stream, especially if UVM can use city streets for its overflow parking demand.. Unlike UVM’s remote lots on Pine Street, the UVMMC’s remote parking lots are very popular. On page 29 of the JIPMP, UVMMC reports at 85% utilization rate of 1,237 remote parking spaces. Since these spaces are viable for drivers, because of the direct shuttle service UVMMC provides and 24/7 access to one’s car, the supply of these parking spaces should not be excluded from Table 5-2 on page 29. UVMMC could adopt policies to have more employees park in remote lots so that UVM could lease fewer parking spaces to UVMMC.	This is relevant because the Planning Commission recommended last year that UVM discontinue leasing parking spaces to UVMMC (for UVMMC commuter use) in order for UVM to meet its own on-campus parking needs and not have a parking space deficit.

Comment	Page #	Text in JIPMP	Comment	Suggestion
20	PC agenda packet, page 50 JIPMP, page 26 Table 4-9	UVM indicates that it operates 1-2 buses on South Prospect Street (Redstone Express)	UVM and the So Prospect neighborhood came to an agreement in 2011 that limited UVM's bus operations on S. Prospect south of Maple Street. The agreement includes only 1 Redstone bus on our residential street and no other buses. In recent years, UVM has sometimes been running two buses on our street. We protest this adverse impact on our neighborhood and quality of life. The bus is unnecessary because it drives students only 5 city blocks- about equal to the distance from city hall to the north end of Church Street. The Redstone bus does not reduce student car use because students parking options are limited to the one lot where they have a parking permit and they can't park in any other parking lots until after 6:00pm. UVM's Redstone bus is harming Burlington residents. And costing taxpayers money. The bus is too large for our street (30,000 pounds exceeds the city weight limit of 24,000 pounds), which causes significant road deterioration, and the bus drives by our homes 100x a day (every 3 minutes) and this is a great nuisance besides causing a lot of toxic pollution. The bus is redundant because UVM operates 3 buses on campus that serve the same bus stops. The on-campus buses are nearly as fast as Redstone "Express" bus – arriving just one minute later. Plus, from an environmental perspective, UVM and the students should be embarrassed to be causing carbon pollution by riding a bus instead of walking or biking from Coolidge Hall to Tyler Theatre.	Because of Table 4-9, we don't want the city's approval of the JIPMP to void the 1 bus limit that is the basis of UVM's agreement with South Prospect Street residents. Please ask UVM to replace the 1-2 notation in row 1 of Table 4-9 with "1". Given the growing focus on doing what's best for our environment, residents of South Prospect Street are trying to convince UVM that it should stop running the Redstone Express bus on South Prospect, south of Maple. Because of co-vid, the bus is currently not running. We are loving the quiet and clear air that has come with the bus's absence.

Comment	Page #	Text in JIPMP	Comment	Suggestion
21			If and when the JIPMP 2020-2025 is approved by the DRB, I hope it does not curtail the Act 250 Commission's rights regarding a reconsideration of UVM parking needs – as described in the Act 250 permit for the PFG project	Does a comment to this effect need to be added to the JIPMP if the DRB accepts UVM's JIPMP?

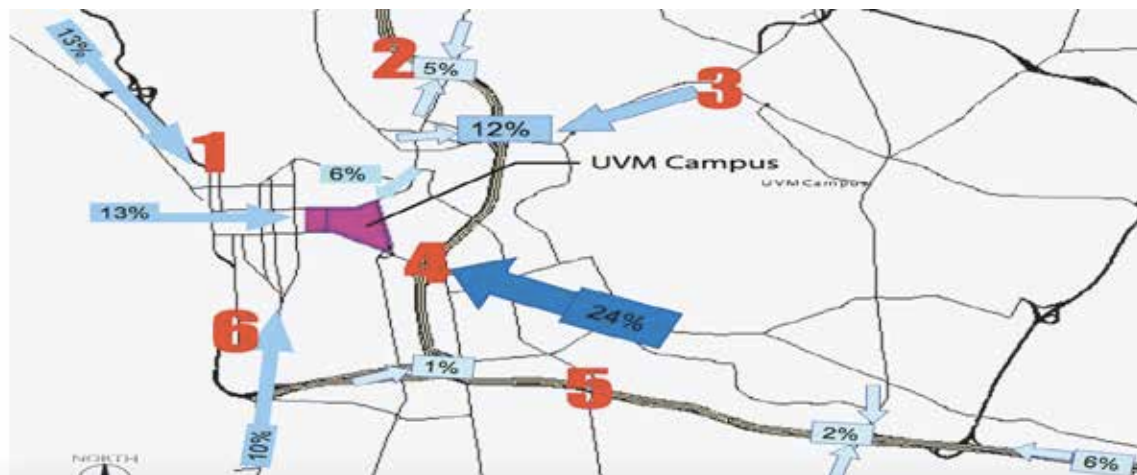
Why and How UVM's TDM programs need improving 11/6/2020

A. Remote satellite parking lot strategy needs to be implemented

In 2006, UVM 's Campus Master Plan included the following text on page 84:

Parking will be relocated to Regional Parking Intercept Park & Ride Lots strategically located on high-traffic approaches to campus. These intercept lots are connected to campus destinations with a reorganized and expanded shuttle system.

The percentages noted on the diagram represent a percentage of the total number of commuters projected to drive to campus on each major route on any given day.



https://www.uvm.edu/~plan/chapter_4_71_86.pdf

Given that the 10/13/2020 version of the JIPMP for 2020-2024 refers to only 200 spaces on Pine Street (which have already been sub-leased to an auto-dealer); and 200 spaces that UVM *plans on* leasing in Colchester in Year 2025, it seems that UVM has not implemented the envisioned Regional Parking Intercept Lot program.

UVM needs to move commuter and student cars to remote lots in order to free up on-campus parking spaces for event visitors coming to the PFG Complex.

If Gutterson is going to accommodate 6,300 people when it uses 2000 temporary seats, the number of parking spaces needed for Gutterson is 1,575 if 4 people arrive in every car. Assuming 4 per car is too optimistic.

- Ø It underestimates the number of parking spaces needed for events.
- Ø Do not accept comments from UVM that the additional parking will be unnecessary because the attendees will be on-campus students. Not all events in the new PFG Complex will be geared towards students and/or employees because UVM wants to rent the space to generate revenues.

Therefore, UVM needs more parking freed up on campus in order to be ready to accommodate event visitor parking demand. If UVM required a total of 2400 commuter and student to use remote (outside of Burlington) satellite lots on a daily basis, that would reduce but not eliminate the parking deficits that will occur as a result of events at the renovated/expanded PFG project. By shifting 2400 cars to remote satellite lots, UVM could host basketball and hockey games and probably avoid creating parking deficits.

B. Don't allow UVM to build parking lots along residential streets that are on the periphery of campus.

Parking lots create more traffic on city streets (which causes the city to spend more on street repair and maintenance) and more traffic also harms neighborhood (safety, walking/biking habits, air quality).

Because of the statement shown below, which was found in a UVM transportation planning document, we need to advise UVM to focus its TDM on remote lots and not the creation or expansion of peripheral lots unless the peripheral lot is adjacent to I89 exit 14 and won't cause traffic on Burlington residential streets.

According to Association for the Advancement of Sustainability in Higher Education, one of the most popular ways to cut down on congestion is to close off central areas of campus to cars. This isolates traffic flow around the perimeter of the campus, where satellite parking lots are located. An investment must be made in alternative parking areas, and larger schools may need a public transit option, which UVM currently has. In the long term, there are likely significant savings in reducing the need for road maintenance within the campus.^{vii}

.....

C. CDO directs institutions and city to avoid using on-street parking for institutional parking needs

On streets near the university, UVM commuters, students and visitors will fill curb-side parking. Some do this for convenience, others park on-street to avoid paying UVM for a parking permit.

On-street parking encourages SOV driving habits and the municipal plan has the goal of reducing SOV driving.

Therefore commuter and student parking should move to remote lots so that their SOV driving habits are discouraged while also freeing up on-campus parking spaces for PFG visitors and for better uses of land by UVM. This would mitigate adverse impacts that the university and its event traffic and parking demand will have on adjacent streets.

The PFG Project will double the number of days of heavy traffic from 84 to 172 per year

UVM forecast number of PFG Events/year. UVM under-reported the number of home games for Men's Basketball, Women's Basketball, and Women's Hockey. I added these in to match the number of home games in 2017.

D) UVM's TDM needs to address event traffic as well as daily traffic and parking demand.

	Number of PFG Events			Number of Days per Event		Number of Days with Event Traffic		
	Actual	UVM Forecast		Attendee	Event Traffic	Actual	UVM Forecast	
	2017 (a)	Moderate	Aggressive	Days	Days	2017 (a)	Moderate	Aggressive
NON-SCHOOL USES								
Conventions/Tradeshows	0	2	4	2.5	3.5	0	7	14
Consumer Shows	0	2	4	1	1	0	2	4
Meetings	0	5	6	1.5	1.5	0	8	9
Banquets	0	6	8	1	1	0	6	8
Other	0	6	8	1	1.5	0	9	12
Subtotal: Non-School Events	0	21	30			0	32	47
SCHOOL-USES								
UVM Men's Basketball	21	4	6	1	1	21	4	6
UVM Women's Basketball (b)	16	0	0	1	1	16	0	0
UVM Men's Hockey	18	18	18	1	1	18	18	18
UVM Women's Hockey	18	6	8	1	1	18	6	8
Commencement	2	2	3	2	2	2	2	6
Concerts (L)	0	4	6	1	1	0	4	6
Concerts (S)	0	4	6	1	1	0	4	6
Family Events	0	4	6	1	1	0	4	6
Speaking Events	0	8	10	1	1	0	8	10
Amateur/Exhibition Sports	0	2	4	1	1	0	2	4
Conference/Regional Tournaments	3	3	4	1	1	3	3	4
High School Graduations	3	4	5	1	1	3	4	5
High School Basketball Tournaments	3	4	5	1	1	3	4	5
Subtotal: Number of Indoor Events	84	63	81			84	63	84
Total before adding missing events		84	111				95	131
Add in Women's Basketball		16	16	1	1		16	16
Add in Men's Basketball shortage		17	15				17	15
Add in Women's Hockey shortage		12	10				12	10
TOTAL NUMBER for PFG EVENTS	84	129	152			84	140	172

Add UVM Varsity Teams outdoor events:

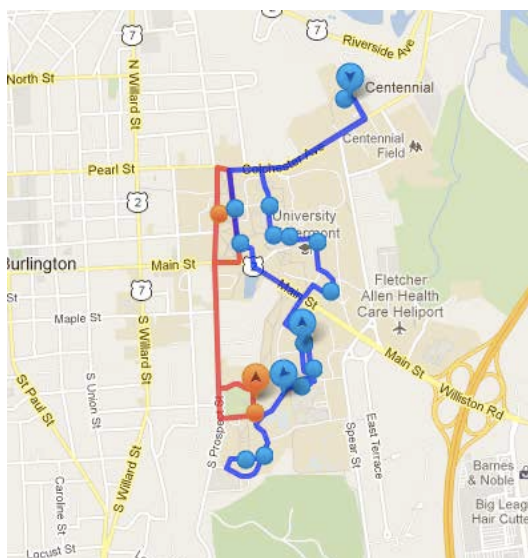
ARCHIE POST ATHLETIC COMPLEX								
UVM Men's Soccer	9	9	9	1	1	9	9	9
UVM Women's Soccer	9	9	9	1	1	9	9	9
UVM Women's Field Hockey	9	9	9	1	1	9	9	9
UVM Men's Lacrosse	5	5	5	1	1	5	5	5
UVM Women's Lacrosse	6	6	6	1	1	6	6	6
Men's Track & Field				1	1	0	0	0
TOTAL NUMBER ARCHIE COMPLEX	38	38	38			38	38	38
ATHLETIC CAMPUS TOTAL								
	122	167	190			122	178	210

As a result of the PFG project, the UVM Athletic Complex (indoor and outdoor venues) is expected to cause 210 days/year of event traffic. This is up from 122 days of traffic in 2007. This doubles of the # of days of event traffic.

E) UVM should recognize that its shuttles do not reduce student driving and hence are not an effective TDM program. The UVM shuttles only serve on-campus points. Students couldn't drive to their destination if the shuttles stopped operating. This is because student parking options are very limited even if they have a parking permit. Students have either a Red, Black or Purple parking permit and they cannot park in a lot other than the one where they have a permit. For example students that have a red permit for parking in the South Campus cannot park in the Central and Trinity campuses because one needs a black or purple permit to park there. Same is true in reverse for students who live on the Trinity or Central campuses. Rather than using UVM shuttles to transport students very short distances across campus, UVM should stop the Redstone Bus route and instead use this bus to bring commuters into Burlington from remote (outside of Burlington) parking lots. This would encourage students to walk or bike on campus and this would reduce UVM's carbon footprint, student fees, and UVM expenses.

Provided below is a map of the stupid (in red) Redstone Bus route. Notice that it has 4 bus stops (Coolidge Hall, Tyler Theatre, Billings, Waterman Hall) and all but Waterman is also served by 3 buses that UVM operates on-campus. Notice that the route is very short and that the bus drives around the University Green and the Redstone Green all day. This is flat terrain, a short distance, and very easy to walk or bike.

This is relevant to the JIPMP because UVM mentions its shuttles as a TDM program in the JIPMP. If UVM were to re-allocate these buses in order to serve remote satellite parking lots (and provide non-stop/fast transport to campus unlike GMT buses), UVM could reduce the number of SOV commuters and students looking for parking on-campus.



(in

UVM's parking lot utilization rate exceeds 85% (effective capacity) in all scenarios

- In the 2019-2025 JIPMP, UVM states that a parking lot utilization rate of 85% indicates that the lots are at effective capacity
- Thus, a utilization rate of 85% or higher indicates that demand probably exceeds supply
- In all scenarios, even the most optimistic, UVM's parking lot utilization rate is 91% or higher
- UVM needs to lease 800 to 1000 parking spaces to reduce its parking lot utilization to 84%

Estimated Net Supply Range		Low end of Estimated Range		Middle of Estimated Range		High end of Estimate	
		Low #	Utilization %	Mid #	Utilization %	High #	Utilization %
Year 2020 Estimate (JIPMP page 17)	A 185 space surplus +/- 210 space margin of error (Includes 200 spaces on Pine St)	185-210 = less than zero. There is a parking space deficit. ^a	100% utilization. No parking spaces available on campus.	185 spaces	95% ^b Full. This indicates parking demand exceeds effective capacity. ^c	185+210 = 395 spaces available across campus	92% ^d Full. Demand probably exceeds supply due to location
Year 2021 Forecast (page 21)	A 255 space surplus +/- 204 space margin of error ^e (Includes 200 spaces in Colchester and 200 on Pine Steet)	255-204 = 51 parking spaces available across campus. ^f	99% of parking spaces on campus are full	255 parking spaces	95% Full. This indicates parking demand exceeds effective capacity.	255+204 = 459 spaces available across campus.	91% Full. Demand probably exceeds supply due to location.

Footnotes:

- UVM parking deficits will increase the number of on-street parkers. The number of UVM drivers parking on-street most likely exceeds UVM's survey findings given UVM's 91% to 100% parking lot utilization rates.
- During the 10/13/2020 Planning Commission meeting, UVM said 185 net available spaces equals only 5% of UVM's total parking supply. This means that 95% of the spaces are full and UVM's parking demand exceeds its effective capacity.
- On page 42 of JIPMP, UVM says "... parking counts that result in a utilization of 85% or higher may indicate that latent demand exceeds supply." Therefore, UVM needs to reduce the number of cars coming to Burlington so that the utilization rate is reduced to 84%.

- (d) Even in the most optimistic scenario (see blue highlighted columns above), UVM's utilization rate is 92%. The utilization rate calculation uses UVM's current available parking supply of 4,939 spaces. (See page 16, Table 4-1 of the JIPMP.)
- (e) The Year 2025 forecast assumes that UVM drivers have access to 400 off-site leased spaces.
- (f) The low end of the UVM forecast indicates that only 51 parking spaces or 1% of spaces may be available across campus in Year 2025. If UVM extends its sub-lease of the 200 Pine Street spaces to an auto-dealer, it needs to replace these with 200 spaces with other off-site spaces in order to have 51 spaces net available. This net supply number is too small because it means that UVM's parking is at capacity. See table below to understand why UVM needs to lease 800 to 1000 spaces to reduce its utilization rate to 84%.

To reduce Parking Lot Utilization to 84% (just below 85% threshold), UVM needs to lease 800 to 1000 off-site parking spaces:

	UVM's Parking Supply (net of 612 spaces it leases to UVMC)	To achieve 84% utilization rate, this would be the max number of cars parked in all UVM on- and off campus lots.	Estimated parking demand per JIPMP	Number of parking spaces that UVM needs to lease to satisfy its parking demand estimates.
Year 2020 (page 16)	4,939 includes 200 spaces that UVM has leased on Pine Street	4,148 = (4,939 x 84%) Parking supply x 84% utilization rate goal	4,754 From JIPMP page 19, Table 4-4.	4,754 – 4,148 = 606 parking spaces need to be leased in addition to the 200 parking spaces that UVM current leases on Pine Street = 800 leased parking spaces needed
Forecast 2025 (page 21)	5,045 includes 200 spaces on Pine Street and 200 spaces in Colchester	4,237 = (5,145 x 84%) Forecasted parking supply X 84% utilization rate goal	4,867 From JIPMP, page 21, Table 4-8.	4,867 – 4,237 = 630 parking spaces need to be leased in addition to the 200 parking spaces that UVM current leases on Pine Street and the 200 spaces that it will lease in the future in Colchester. In total UVM will need to lease 630+400 = 1030 parking spaces by Year 2025.

11/6/2020

UVM Parking Deficits will be larger than UVM portrays

In 2018 UVM requested a permit and parking waiver from the DRB for the currently happening when PFG expansion/renovation project. My impression is that UVM did not communicate clearly enough to the DRB the likely impact of this project on UVM's parking demand. Please see the 5 examples below. Given that the PFG project is still under construction and that resulting parking impacts are in our near future, the following information is relevant to the DRB and Planning Commission while reviewing UVM's JIPMP for 2020-2025. By better understanding the parking impacts of the PFG project, the DRB and Planning Commission will be able to see that UVM's parking deficits will be larger than UVM is portraying.

The City's review of UVM's JIPMP for 2020-2025 presents an opportunity to cure impacts resulting from:

- i. The DRB providing UVM with parking waivers when UVM already had parking deficits;
- ii. UVM not revealing to the DRB that the PFG project will result in a 2,000 seat capacity increase at Gutterson;
- iii. UVM plans to host significantly larger events on the Athletic Campus than it has in the past (up from 4,500 to 7,300 persons at one time)
- iv. UVM non-disclosure of the number and size of the events it wants to host in the PFG Complex, and the parking deficits that will likely result;
- v. UVM failing to implement the remote satellite parking program that it had aspired to achieving by 2006. (Campus Master Plan 2006: page 84)

Provided below are five examples where I believe UVM might have misled the DRB in 2018.

Each is detailed on the following pages:

#1. Contrary to UVM statements to DRB in 2018 (when requesting a PFG permit and parking waiver for the PFG project), PFG's event seating capacity is increasing. The increase is an additional 2,000 seats.

#2. Contrary to UVM's statement to the DRB in 2018 about not "requesting" more parking spaces because of parking surplus forecasts, UVM had a parking deficit in 2019 (based on Fall 2018 data) and a parking space deficit forecast for 2024. The deficits reported in the JIPMP did not consider any event parking demand. Thus the JIPMP fails to recognize that parking lot usage could have peak demand times in a day - depending on when the event starts.

#3. Contrary to UVM statements to DRB in 2018, UVM's should have provided the DRB with a traffic study and an updated parking supply and demand analysis when requesting a parking waiver for the PFG project because UVM knew that it would be increasing Gutterson's event seating capacity by 2000 seats.

#4. Contrary to UVM statements to the DRB in 2018, UVM will be using Gutterson and the Multipurpose Event Center concurrently. Their plan is to host a singular event (on multiple occasions)-- not two events in two venues; but one very large event using two venues.

#5. Contrary to UVM promises to the DRB in 2015 to not host indoor and outdoor events concurrently, UVM indicated in 2018 that 7,300 event attendees is the maximum number it would host at one time on the Athletic Campus. (7,300 might involve concurrent use of indoor and outdoor venues.)

Suggested cures for the DRB to consider given that UVM most likely has a parking deficit (based on Fall 2019 information) and that this deficit will get worse when the PFG facility is on-stream for event use

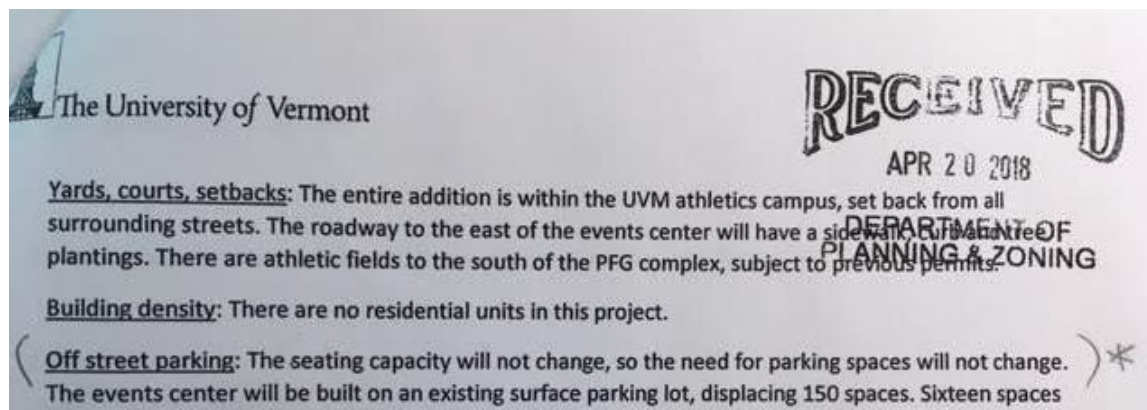
- Not providing UVM with a 5 year (2020-2025) parking waiver; and instead requiring UVM to request parking waivers on a project-by-project basis for the next 5 years.
- Recommending to UVM that it establish and manage a large and robust remote satellite program to serve enough commuter and student cars on a daily basis in order to avoid 2 scenarios: (a) UVM using city streets as its parking lot (which would have many negative repercussions and encourage SOV driving); and (b) the need for more parking lots on-campus. Relocating thousands of commuter and student cars to remote satellite lots is based on the fact that sold out evening basketball games (1,000 attendees) already cause on-campus parking deficits and UVM plans on hosting 5,000 person events in the renovated/expanded PFG facility as a regular course of business. Reducing SOV driving is a major goal of the Municipal Development Plan and the purpose of city ordinance Article 8 is to protect neighborhoods from UVM's overflow parking demand. The city's residential parking strategy document, which was incorporated into the city's MDP, highly recommends that UVM implement a large and robust satellite parking plan.
- It might be prudent for the DRB to identify and communicate steps it might need to implement if UVM fails to establish and manage the municipal develop plan's suggested large and robust remote satellite program. A deadline is necessary and by Fall 2022 seems reasonable. For example, the DRB might want to inform UVM in advance that the DRB might require, as a condition of future permits, that UVM build a 4,000 car parking lot adjacent to the I-89 exchange or on the Jeffords lot in order to serve the PFG Complex if the remote satellite parking program is not successful in preventing the overflow of UVM parking onto city streets.

Example #1: Compare (A) and (B)

Contrary to statements UVM made to DRB in 2018, when requesting a permit and parking waiver for the PFG project, PFG's event seating capacity is increasing. The increase is 2000 seats.

UVM seating capacity before the PFG project was no more than 3,266 attendees for basketball games; no more than 4,035 for hockey games in Gutterson; and no more than 4,500 spectators for concerts and speaking events. Also, UVM did not use Athletic Campus venues concurrently except for a 30 minute overlap for UVM's annual graduation ceremonies in May – but on this day all underclassmen are gone and the police manage road traffic.

- (A) In 2018, when requesting a permit for the PFG project, UVM told Planning and Zoning that "seating capacity will not change, so the need for parking will not change."

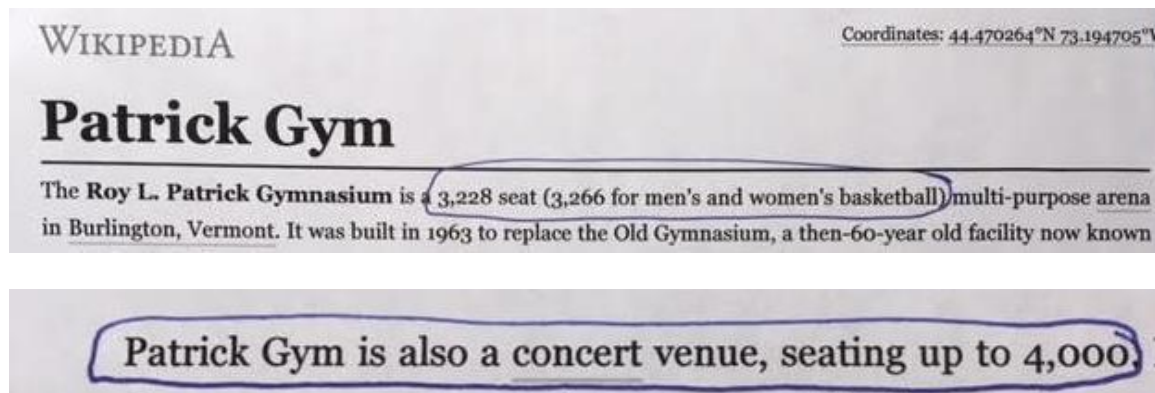


https://www.burlingtonvt.gov/sites/default/files/agendas/SupportingDocuments/Project_Description_OCMC_final_0.pdf

- (B) The UVM statement that seating capacity will not change is misleading because the PFG expansion/renovation will increase event seating capacity by an additional 2000 seats. See the press releases and UVM Trustee minutes provided below.

BEFORE PFG Project

Patrick Gym's seating capacity (2017):

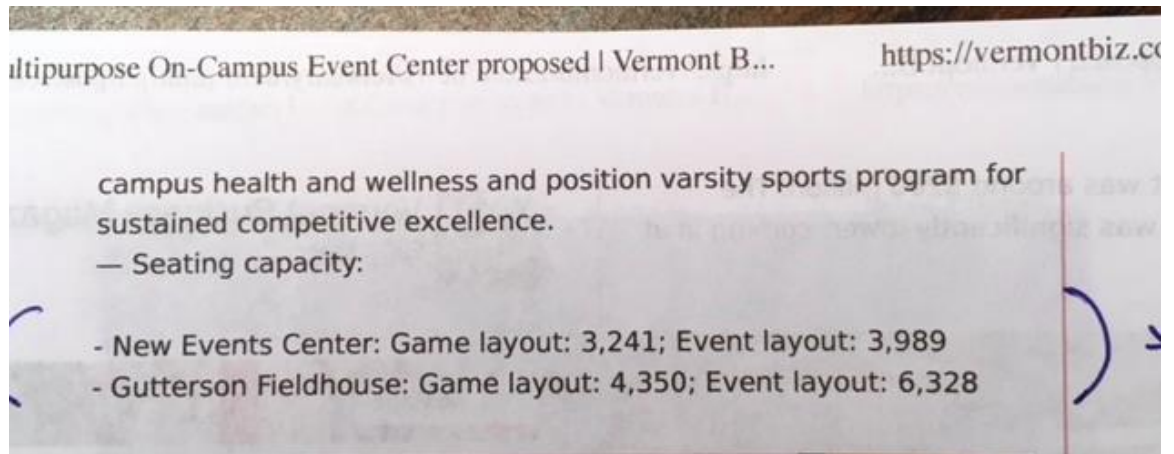


Gutterson's seating capacity (2017):

Ice hockey games: ~ 4,035 spectators
If also use floor space for events: ~ 4,300 event attendees

**** *VERSUS* ****

AFTER the PFG Project



<https://vermontbiz.com/news/february/uvm-multipurpose-campus-event-center-proposed>

UVM Trustees subcommittee minutes EPIR/BFI 2/3/2017, page 5

https://www.uvm.edu/trustees/standing_com/bfi/meetings/2017_feb3jointminutes.pdf

The sixth and final programming component is the renovation of Gutterson Fieldhouse. Goals of the renovation include maintaining and enhancing the historic quality of the facility, achieving 4,000+ spectator seats (mix of bench and chair back seating), a new shared entry/connector with the Events Center, a new south concourse to improve spectator circulation, a renovated entry and public support spaces and the Victory Club overlooking Hockey and Basketball venues. Slides illustrating the game and event layouts with associated seating capacity were displayed, noting that additional floor seating of just under 2,000 would bring the total seating capacity to ~6,300. Slides illustrating the existing condition of the interior of Gutterson Fieldhouse and an interior perspective of a renovated facility were shared.

If 2,000 more people can attend some events after the project, this translates into needing 1000 more parking spaces if it is an event that is not attended by students or employees. If it is a school use event, it means 500 more parking spaces than today, assuming half of the new

attendees will be on-campus students (optimistic) and that visitors who drive to campus will arrive 2 per car (averages out to 4/car like assumed in CDO Article 8).

If the UVM statement is meant to refer only to just the Event Center or just fixed seats (excluding the portable seating capacity UVM uses for speaking events, concerts, conferences, etc.), then the statement is still misleading because both venues total and combined seating capacity is relevant when the DRB is trying to learn what's changing and what will cause parking deficits.

Example 2: Compare (C) and (D)

Contrary to UVM's claim of expecting parking surpluses when requesting a parking waiver for the PFG project, UVM soon after revealed a parking deficit in 2019 and a parking deficit forecast for 2024. And this was before considering any event parking demand.

(C) In July 2018, when requesting a permit and parking waiver for the expansion and renovation of the PFG building, UVM told the DRB that based on the 2014-2019 JIPMP, UVM expected to have a 740 parking space surplus in 2019. UVM told the Act 250 Commission the same thing in October 2018. Evidence: DRB hearing on 7/5/2018. UVM's presentation begins at 40:44.

<https://www.cctv.org/watch-tv/programs/burlington-development-review-board-292>

At 1 hour, 24 minutes into UVM's presentation, UVM's Director of Transportation and Parking says he anticipates a 740 parking space surplus on campus in 2019. Giving the DRB and the Act 250 Commission the impression that UVM had a parking surplus was misleading because:

- By Fall 2018 UVM had 1,507 more employees and students than it had forecast in the 2014-2019 JIPMP.
- UVM had 64 fewer parking spaces in inventory that it had forecast.
- By 2018, UVM had decided that employees working at seven health services locations across campus would be relocated to PFG. This will increase employee parking demand on the Athletic Campus.
- The JIPMP parking analysis does not consider parking demand resulting from events at the PFG complex. Some events, like speaking events, will occur midday, making the missing information all the more relevant.
- Even though the square footage was less in the updated design for the PFG building, the proposed seating capacity of the 2009 and 2018 architectural designs were about equal.

(D) On March 12, 2019, **the day after UVM received its Act 250 permit for the PFG renovation / expansion project**, UVM published its 2019-2024 JIPMP (based on Fall 2018 data) revealing that UVM has a 533 parking space deficit in 2019 and a forecasted 700 parking space deficit for Year 2024. **Instead of a 740 space surplus that UVM told the DRB when requesting a parking waiver, UVM had actually had a 533 parking space deficit in 2019. A forecasting error of 1,273 parking spaces.**

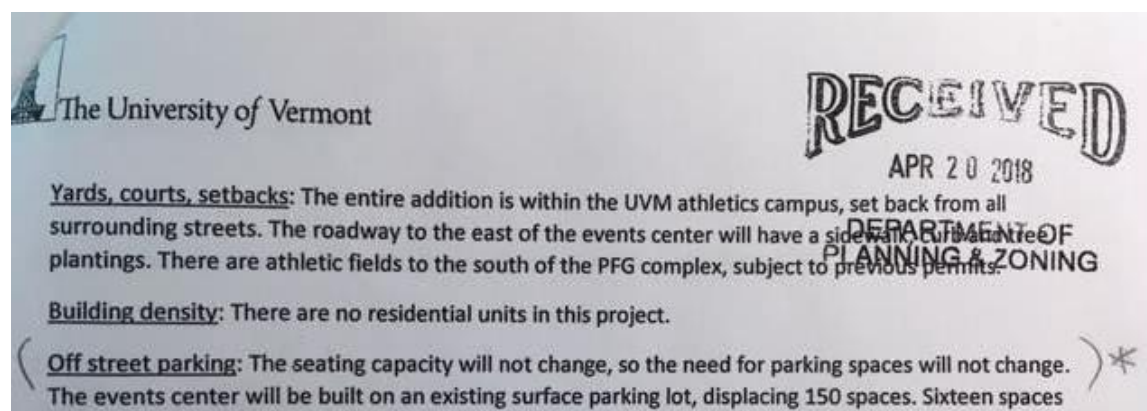
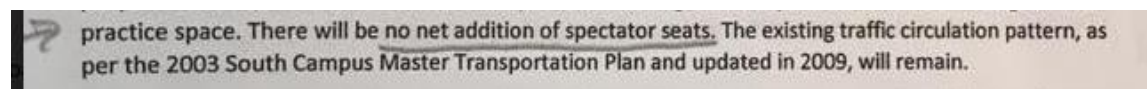
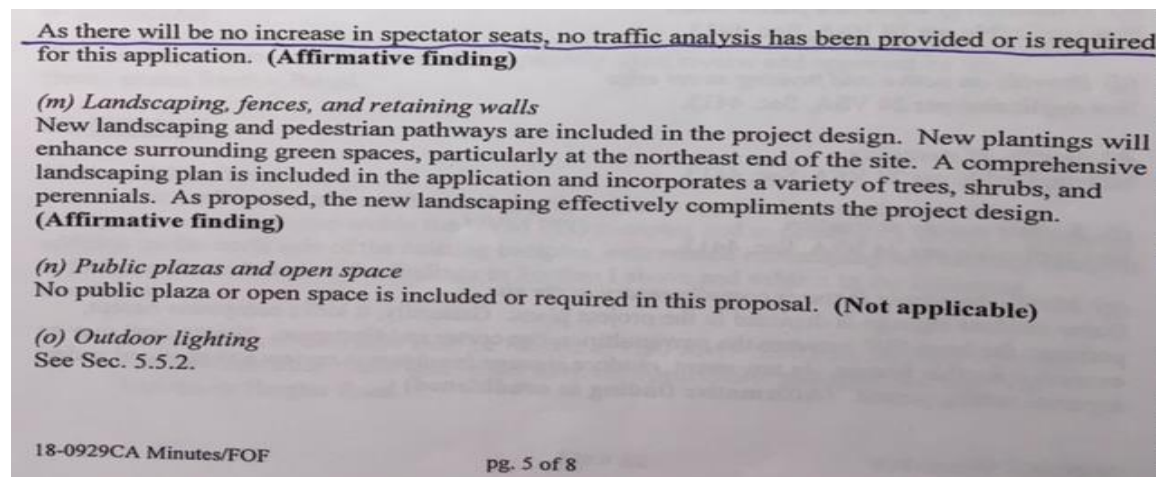
Reference pages 70 and 76 of the March 12, 2019 version of the 2019-2024 JIPMP. These deficits were smaller in the May 2019 version of the report. But key backup detail was removed so the analysis could not be validated.

Example #3: Compare (E) and (F)

Contrary to UVM statements to DRB in 2018, UVM's increase in event seating capacity (at Gutterson) should have triggered UVM to provide the DRB with a traffic study and an updated parking supply and demand analysis.

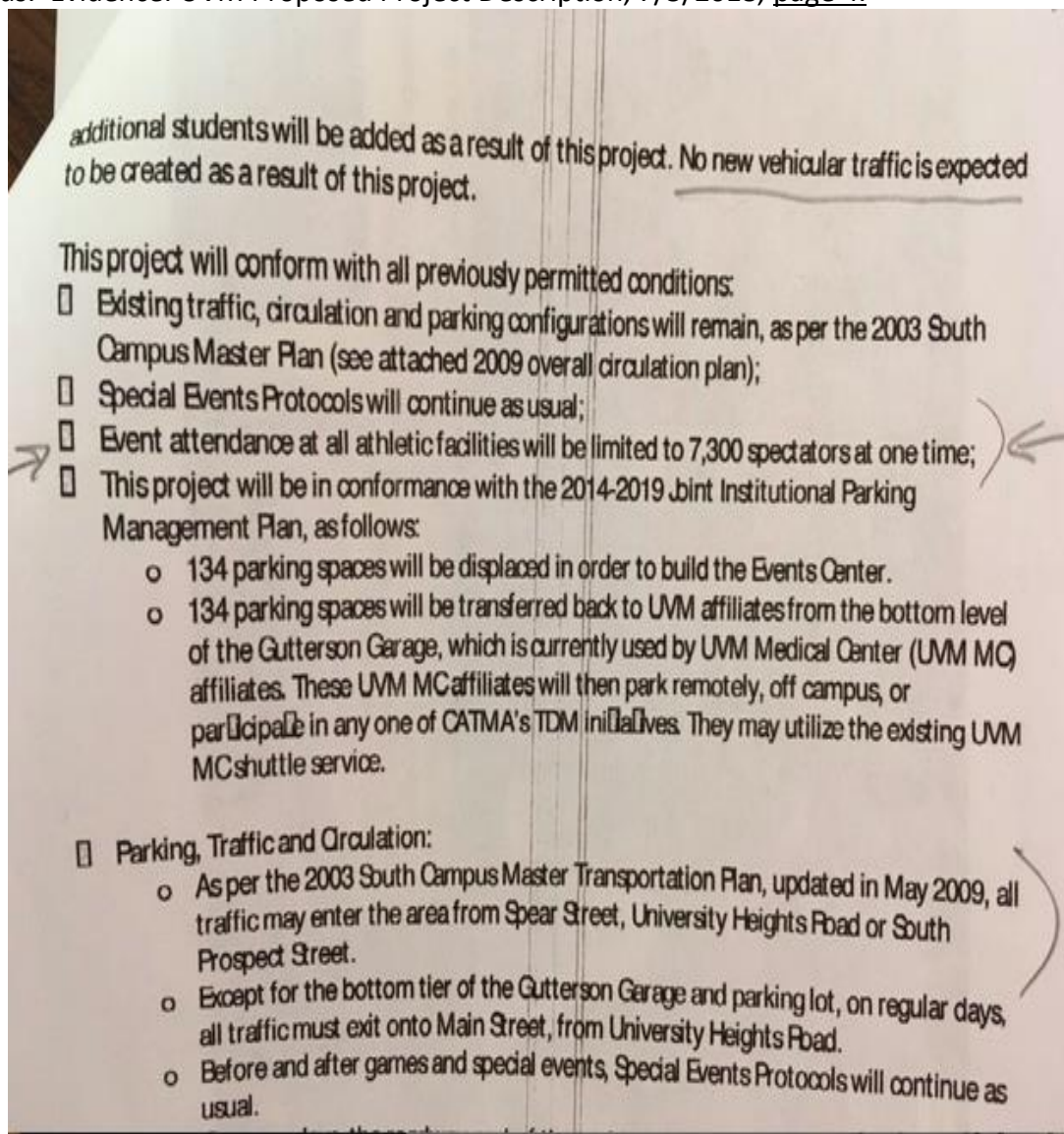
In 2018, UVM requested a permit and parking waiver from the DRB for the renovation and expansion of the PFG building by claiming that there would be no increase in seating capacity and thus no change in parking demand. This UVM statement is misleading because, as shown above, UVM PFG event seating capacity is increasing by 2,000 seats.

(E) The following statement was included in the DRB Findings dated 7/5/18, page 5: **"No increase in number of spectator seats, therefore no traffic study has been provided or is required."**



(F) The DRB finding, which is shown in the 1st screen shot above, and written by the Planning Department for the DRB, is inaccurate because Gutterson's seating capacity is increasing from 4,500 to 6,300 persons for speaking events, concerts, etc. (Reference info in Example #1.)

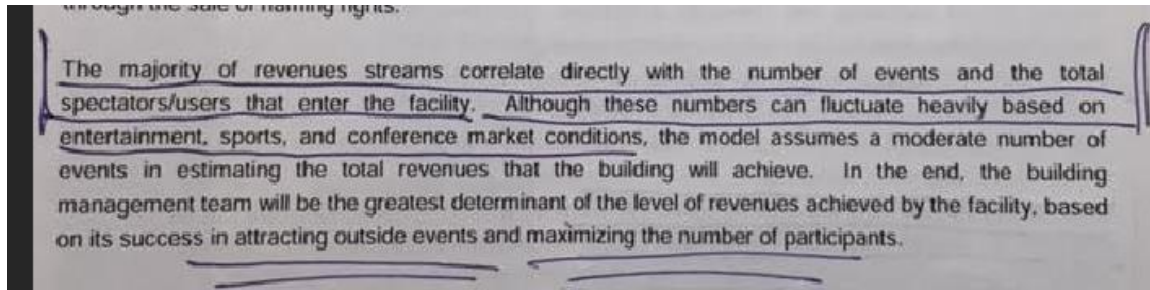
Furthermore, UVM wants to start hosting up to 7,300 persons at the same time on the Athletic Campus. Evidence: UVM Proposed Project Description, 7/5/2018, page 4.



https://www.burlingtonvt.gov/sites/default/files/Agendas/SupportingDocuments/Project_Description_OCMC_final_0.pdf

Hence, UVM should have provided the DRB with a traffic forecast and a parking demand and supply analysis given that UVM except for its graduation ceremony, UVM has never had 7,300 spectators at one time on the Athletic Campus. (During the annual graduation ceremony there is significant police support to manage traffic and close roads; employees have the day off, and parking lots are emptied of all cars except for those belonging to people attending the graduation ceremony.)

Also, according to UVM's strategy /financial forecast for the PFG complex, UVM wants to rent the space, increase the number of events on campus, and host many large events in order to generate revenues.



As a result of the project, there may be 70 more events per year. (Forecast 190 per year versus year 2017 actual of 122 per year on the Athletic Campus). Most events will be 5,000 persons or less (versus 3000 or less before the project); but those rare and exceptionally large events will be 7,300 persons instead of the previous max of 4,500 event visitors at one time.

FINDING

There will be traffic impacts as a result of UVM's plans for the PFG Complex and the traffic and parking impacts need to be mitigated so residents on adjacent streets are not harmed. This is another reason why UVM needs to improve its parking and TDM.

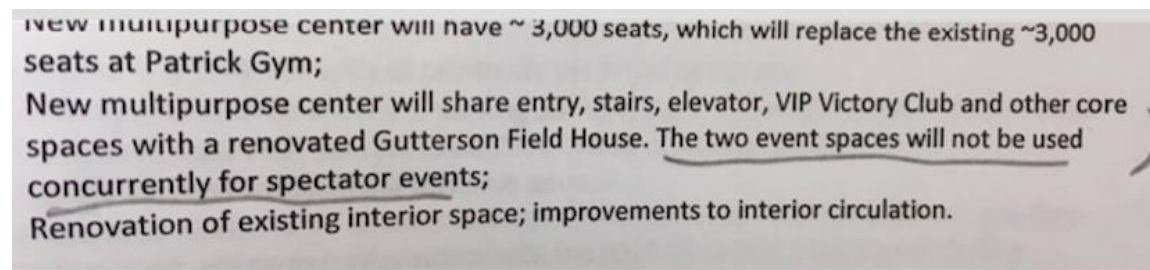
REMEDY

A traffic study is different from a parking supply and demand analysis. **Both types of analysis would have been (and still are) appropriate for the DRB to ask of UVM given that UVM wants to receive a parking waiver for projects that come up during 2020-2025 and the PFG facility project is still under construction.**

EXAMPLE 4: Compare (G) and (H)

Contrary to UVM statements to the DRB in 2018, UVM will be using Gutterson and the Multipurpose Event Center concurrently. Their plan is to host singular events -- not two events in two venues; but one very large event (on multiple occasions) using two venues. It's my impression that UVM was unclear in communicating that this because using both venues allows UVM to increase the size of the event beyond the capacity of one venue. When UVM said that the venues would not be used concurrently for spectator events, one would assume that UVM was not changing its 25 year practice of only hosting 1 event at a time and in 1 venue.

(G) UVM provided a Proposed Project Description to the DRB on 7/5/2018. Refer to page 3:
“The two event spaces will not be used concurrently for spectator events.”



Please note UVM’s use of the word “spectators” in what it told the DRB. Some large events, like conferences, have event visitors that are not spectators, and the number of participants at these kinds of events would not be covered by UVM’s statement referring to spectators. It’s very important for city officials to dissect and probe UVM statements to understand the nuances of their statements and assurances.

(H) In October 2018, UVM told the Act 250 Commission that it wants to host up to 5,000 attendees at the same time by concurrently using the MPEC and Gutterson spaces. This is not for two events happening concurrently in two venues, but for singular events that are very large: one event taking place in two venues.



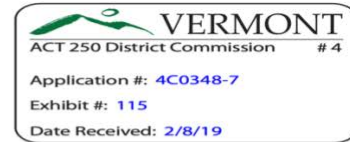
To:
Rachel Lomonaco, Act 250 Coordinator, District 4
111 West Street
Essex Junction, VT 05452

February 7, 2019

Re: Application #4C0348-7, Supplemental Evidence Submittal

Dear Rachel,
As per previous requests, and more recent communication with you, the University would like to submit the following supplemental evidence for this project.

1. The University received the Wastewater System and Potable Water Supply Permit, Exhibit 112: WW-4-0079-2.
2. The University understands the concern from the Act 250 Commission about large spectator events taking place in Gutterson and Tarrant simultaneously. With the exception of commencement and other rare and unusually large events such as Presidential visits, for which we need to have as much flexibility as possible, UVM/Athletics is comfortable committing to a combined spectator maximum of 5,000 at any one time between Gutterson and Tarrant. As the UVM Director of Athletics testified to the Commission, it is not the University's intention to have two large spectator events happening at the same time, but we would want the flexibility to have multiple events going on with smaller capacities, or a large crowd event taking place in



The use of two venues means more attendees and more parking demand than what UVM implied when telling the DRB that the two event spaces would not be used concurrently.

Perhaps some of UVM's statements focus only on fixed seat capacity and not the portable seat capacity, or only to games and not to other kinds of events (such as concerts). Clearly when evaluating how event traffic will impact parking demand, portable seat capacity for events, which is increasing in the renovated facility, must be considered since UVM plans on using portable seats for some kinds of PFG events..

Please note:

The Act 250 Commission's has on-going concerns regarding the size of the parking deficits that will result from UVM's plans for hosting large events at the PFG Complex. This is why the Act 250 Commission wants UVM to provide attendance data for events from 2019-2024. The Act 250 Commission wants to retain the option of requiring UVM to cure parking deficits caused by the expanded/renovated PFG Complex. We need to be careful should the DRB accept UVM's 2020-2025 JIPMP, that any city approval does not curtail any possible cures that the Act 250 office may want to require.

EXAMPLE 5: Compare (I) and (J)

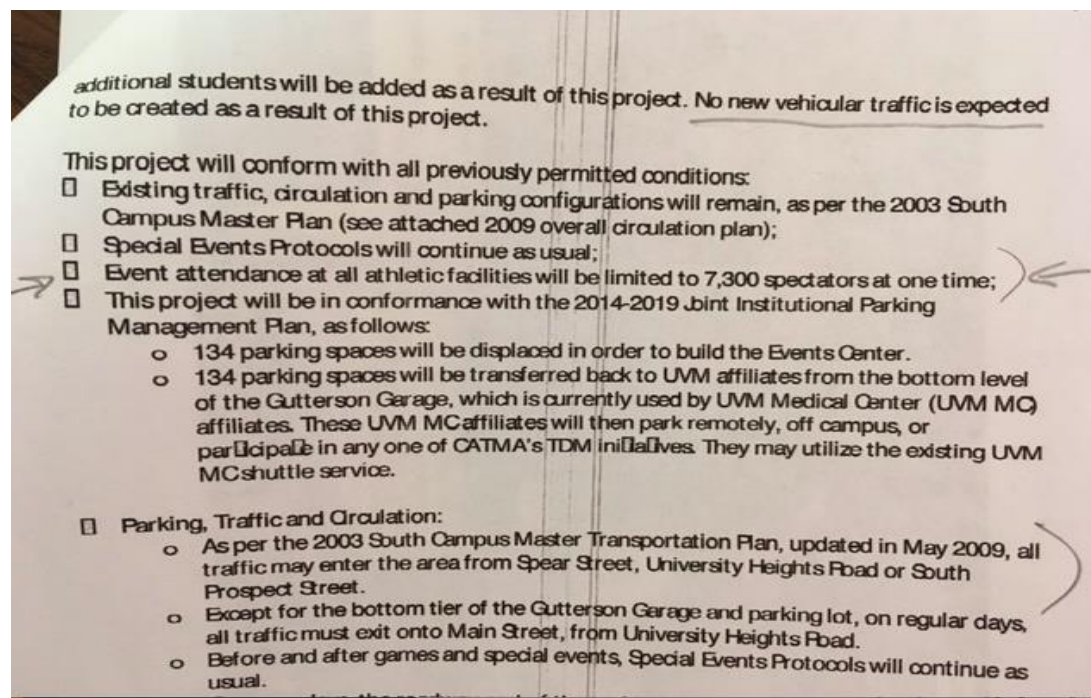
Contrary to UVM promises to the DRB in 2015 (when requesting a parking waiver for Virtue Field's stadium) to not host indoor and outdoor events concurrently, UVM indicates in 2018 that it intends to host up to 7,300 event attendees at one time on the Athletic Campus. (It sounds like 7,300 might sometimes involve concurrent use of indoor and outdoor venues.)

(I) In 2012, UVM requested a permit and a parking waiver a the 2,500 seat stadium that UVM Virtue Field. During the DRB review, UVM said that it will never host indoor and outdoor events

concurrently on the Athletic Campus. The Athletic Director, Bob Corran said: “Indoor and outdoor concurrent events would never happen. Firm commitment. I guarantee it. We would never schedule a game on Virtue Field and a game in Gutterson or Patrick Gym. UVM controls.

Evidence: DRB Meeting, 5/15/12, Virtue Field Phase II Stadium application, Minute 1:37
<https://www.cctv.org/watch-tv/programs/burlington-development-review-board-part-2-1>

(J) In 2018, when requesting a permit from the DRB for the PFG project, UVM presents a different story regarding concurrent use of indoor and outdoor venues. UVM stated: “Event attendance *at all athletic facilities* will be limited to 7,300 spectators at one time.” To host 7,300 spectators at one time, UVM might be signaling that it wants to use indoor and outdoor venues concurrently. This would violate promises UVM made in 2015 when requesting a parking waiver for Virtue Field. Evidence: UVM Proposed Project Description, 7/5/2018, page 4:



https://www.burlingtonvt.gov/sites/default/files/Agendas/SupportingDocuments/Project_Description_OCMC_final_0.pdf

11/6/2020

What the City's Municipal Development Plan recommends for addressing UVM parking demand

One of the goals of CDO Article 8 is to protect neighborhoods adjacent to UVM from UVM's overflow parking demand.

The Municipal Development Plan also includes goals about reducing SOV driving, encouraging bicycle riding, reducing air and water pollution, and recommendations for UVM to implement a remote satellite parking TDM program.

The latter idea gained support in 2015 after what was perceived to be an effort by UVM to gain access to on-street parking for its visitor, commuter, and student parking needs.

City residents strongly opposed any thoughts of UVM turning city streets into their parking lot. This sentiment is unchanged. In 2015, city residents advocated for the resident parking study to include a recommendation that UVM reduce its on-campus parking demand by shifting a significant portion of its student and employee parking to remote satellite (intercept) lots.

If UVM aggressively required that its students and commuters to use remote satellite parking lots on daily basis , this would:

- eliminate UVM's on-campus parking deficits,
- reduce the amount of traffic on streets near the university,
- discourage SOV driving,
- encourage bicycling and walking
- reduce air pollution
- reduce pollution content of rainwater run-off that enters the lake

When the city's work on its residential parking study concluded, one of the highest ranked recommendations in the report was for UVM to create and operate a robust but remote (outside of Burlington) satellite parking program. See page 59:

<https://parkburlington.com/wp-content/uploads/2014/10/Residential-Parking-Study-Draft-Final-Report.pdf>

This recommendation is now part of the City's Municipal Development Plan because the Residential Parking Strategy was incorporated into the MDP in 2018. The remote satellite parking recommendation is shown on the next page...

ENCOURAGE SATELLITE PARKING AND INCENTIVIZE PARKING IN REMOTE LOTS

Incentivize use of satellite parking as part of a long-term transportation demand management strategy for both commuters and students. This strategy is especially important for managing student parking demand and is increasingly important for managing commuter parking.

Category

Parking Experience

Primary Goals

- Balance Parking Needs
- Consider Limited Land Resources

Discussion

In addition to being an employment center drawing significant commuting traffic, Burlington has a significant college/university presence, with major institutions including Champlain College, University of Vermont (UVM), and UVM Medical Center. UVM has 3,650 undergraduate students who live off-campus, with an estimated 2,200 of those students living in Burlington.^v

While student renters have the same residential parking rights as any other renter living in the City, one key way to manage on-street residential parking, particularly in densely populated student areas, is to discourage students from bringing their cars in the first place. Students tend to use their cars less frequently than residents who drive for work on a daily basis, so their cars end up sitting on neighborhood blocks for long periods at a time, preventing needed turnover of spaces for other users. To this end, the City should continue to coordinate with CCTA and the institutions to provide convenient satellite parking

In order to protect our environment and neighborhoods, while also discouraging SOV driving, city residents near UVM strongly opposed DPW ideas of filling streets to 80% capacity with parked cars. As a result this idea was shelved and not implemented on streets near UVM.

In 2006 UVM aspired to the vision of remote satellite parking lots with service to/from campus via UVM Shuttles. (A screen shot from UVM's 2006 Transportation Master Plan is provided in a separate doc titled How UVM can improve its TDM). In 2015, the city asked UVM to pursue implement this. (Reference screen shot above). **It seems that the DRB and City officials need to require the implementation of this TDM program as a condition of future permits.**

Evening Peak Parking Demand = Non-event parking demand plus Event Parking Demand

Finding: UVM will have on-campus parking deficits for evening PFG events. The size of the parking deficit will range from 66 to 1,046 parking spaces. Even if 100% of all on-campus students attend the event (to assume the least possible parking demand), UVM's parking lot utilization > 85%.

Forecast PFG Event Attendance Profile by Event					
5 different scenarios	New Seating Capacity after PFG project	Estimate # of seats (BB and Hockey based on history)		Number who will be arriving by car	Number of parking spaces needed for event
		Filled by non-students who arrive by car	Filled by students who live off-campus		
1. Sold out Basketball games (2022)	3,241	2,139	331	2,469	617
2. Sold out Hockey games (2022)	4,350	3,575	233	3,807	952

CDO Article 8 requires one parking space for every 4 seats.

SCENARIO A: Seat Allocation based on historical %		Based on historical %		Number of parking spaces needed for event
The following will also occur after the project is complete:	New Seating Capacity after PFG project	# who live on-campus or will walk to event	# arriving by car	
3. 5,000 max if event uses Gutterson & Tarrant	5,000	624	4,376	1,094
4. Gutterson's 6300 max seating capacity (i.e. Frozen Four)	6,300	786	5,514	1,378
5. Max of 7,300 visitors on Athletic Campus	7,300	911	6,389	1,597

* The combined seating capacity of the two venues exceeds 8,000 seats if used concurrently (per UVM) but UVM wrote a memo to the Act 250 Commission with a commitment to limit attendance to 5,000 when both venues are used for an event.

Evening Peak demand = Non-event parking demand + event parking demand				
5 different scenarios	METHOD 1 Based on CDO requirement			
	Pre-event net supply of parking spaces	# of parking spaces needed for the event	Net Parking Space Supply/(Deficit)	Parking Lot Utilization Rate
1. Sold out Basketball games	551	617	(66)	100%
2. Sold out Hockey games	551	952	(401)	100%
3. 5,000 max if event uses Gutterson & Tarrant	551	1094	(543)	100%
4. Gutterson's 6300 max seating capacity	551	1378	(827)	100%
5. Max of 7,300 visitors on Athletic Campus	551	1597	(1,046)	100%

SCENARIO B: All on-campus attend the events (completely unrealistic). How many come from off-campus?

5 different scenarios	New Seating Capacity after PFG project	Number of students who live on-campus	# of attendees from off-campus	# of parking spaces needed for the event
1. Sold out Basketball games	3,241	5,366	0	-
2. Sold out Hockey games	4,350	5,366	0	-
3. 5,000 max if event uses Gutterson & Tarrant	5,000	5,366	0	-
4. Gutterson's 6300 max seating capacity	6,300	5,366	934	234
5. Max of 7,300 visitors on Athletic Campus	7,300	5,366	1934	484

Assuming 100% of on-campus students attend event	Parking Space Net supply before any PFG events	# of parking spaces needed for the event	Net # of parking spaces available during event	Parking lot utilization rate
1. Sold out Basketball games	551	0	551	87%
2. Sold out Hockey games	551	0	551	87%
3. 5,000 max if event uses Gutterson & Tarrant	551	0	551	87%
4. Gutterson's 6300 max seating capacity	551	234	318	93%
5. Max of 7,300 visitors on Athletic Campus	551	484	68	98%

Burlington Planning Commission

149 Church Street
Burlington, VT 05401
Telephone: (802) 865-7188
(802) 865-7195 (FAX)
(802) 865-7144 (TTY)

www.burlingtonvt.gov/pz

Andy Montroll, Chair
Bruce Baker, Vice-Chair
Yves Bradley
Alexander Friend
Emily Lee
Harris Roen
Jennifer Wallace-Brodeur

Burlington Planning Commission

Tuesday, November 10, 2020, 6:30 P.M.

Remote Meeting via Zoom

Minutes

Members Present	A Montroll, B Baker, Y Bradley, E Lee, A Friend, H Roen, J Wallace-Brodeur
Staff Present:	D White, M Tuttle, S Gustin, K Sturtevant
Attendance:	Sandy Thibault (CATMA), Kim Furtado (CATMA), Jonathan Dowd (UVM Transportation Research Center), Sharon Bushor, Barbara Headrick, Lani Ravin (UVM), Deb Ward Lyons, Karin Durfee

I. Agenda

Call to Order	Time: 6:31pm
Agenda	No changes.

II. Chair's Report

A Montroll	No report.
------------	------------

III. Director's Report

D White	Staff continues to support the COVID-19 Analytics Team. Council unanimously approved five zoning amendments during its 11/9 meeting.
---------	--

IV. Public Forum

Name	Comment
B Headrick	Concerned UVM has a deficit during the day and in the evening during events. Should provide a parking analysis for different size events for post-construction at PFG. Don't want streets near UVM to be monetized for institutional parking. Don't think the 5-year plan is accurate to use for development review. How has COVID impacted timing of the Gutterson renovation; will there be events larger than 5,000 people; will there be more seating at Virtue Field; and what is location, timing, and capacity of potential UVM garage?
S Bushor	Like the idea of 5-year plan, but don't think it accurately estimates demand; hesitant about it as basis for parking decisions by the DRB. Concerned that UVM considers nearby street parking to meet their demand and city's systematic removal of street parking means this is not guaranteed. Concerned about how much of the 5-year development in the plan is certain, that UVM doesn't take full advantage of satellite parking, and that visitor parking is difficult to use. How are Redstone students and simultaneous on-campus events accounted for in the plan?

V. Joint Institutional Parking Management Plan 2020-2025

Action: Approve recommendation memo with changes, forward to DRB and DPW Commission		
Motion: Y Bradley	Second: A Friend	Vote: Approved Unanimously
Sandy Thibault, Kim Furtado, and Jonathan Dowd presented information in follow-up to Commission questions regarding the 2020-2025 JIPMP.		
Commission comments:		
- Commissioners would like the JIPMP to include off-site parking supply to UVM's analysis, and Redstone demand and supply to be broken out as a user group. - In future reports, would like more data about where people report parking, especially if they are not using UVM's supply. - Commissioners would like City departments and boards/commissions to be more collaborative and to coordinate more closely with CATMA, UVM regarding institution's impact on street parking around campus. Should consider more street parking regulation to control demand for neighborhood parking, limit carbon emissions from transportation sector, etc. - Spring update should include any revised projections on student enrollment/growth due to COVID-19. - Plan should consider collecting event parking utilization data in the future. - Additions to memo to DRB: - Emphasize that goal is not to see more parking, but rather to implement strategies to further reduce demand, increase utilization of alternative modes. - Encourage cooperation between institutions and city to manage street parking in neighborhoods. Copy memo to DPW Commission, invite DPW to discuss at a PC meeting. - Emphasize annual updates should not only report on new demand from changes to planned projects, but also from changes in travel behavior, number of people on campus.		

VI. Commissioner Items

Action: N/A		
Motion: NA	Second: NA	Vote: NA
- Next meeting is Tuesday, December 1 at 6:45p		

VII. Minutes & Communications

Action: Approved the minutes and accepted communications		
Motion by: E Lee	Second: J Wallace Brodeur	Vote: Approved Unanimously
Minutes Approved: November 10, 2020		
Communications approved enclosed in the agenda packet.		

VIII. Adjourn

Adjournment		Time: 7:50 pm
Motion: H Roen	Second: Y Bradley	Vote: Approved Unanimously



Signed: December 14, 2020

Andy Montroll, Chair

Respectfully submitted by:

A handwritten signature in black ink, appearing to read "Meagan", with a stylized flourish extending to the right.

Meagan Tuttle, Comprehensive Planner