



CITY OF BURLINGTON

DOWNTOWN PARKING AND TRANSPORTATION MANAGEMENT PLAN

BURLINGTON, VT

DECEMBER 2015

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DOWNTOWN BURLINGTON PARKING AND TRANSPORTATION INITIATIVE

EXECUTIVE SUMMARY

The City of Burlington has historically been governed by the idea that parking is a necessary utility to support downtown commerce and development, and as such needs to be provided at no or low cost in as much abundance as possible. Since it has not been viewed as a comprehensive system, parking management tasks have been split up among various City departments. While some efficiencies were achieved under this model, it also led to a parking system where core functions were fractured and subject to conflicting missions. Managing parking as a utility means that little thought is given to the bigger picture, including the availability and role of non-motorized modes of transportation and the impact of parking on quality of life; and even less thought is given to the financial sustainability of the fractured system.

Burlington has reached a point its evolution as a City where it is prepared to move away from the core philosophy of parking as a base utility, including the 'more is better' perspective and its attendant policies. Following the cues of comparable communities across the country, Burlington is prepared to shift perspective and start treating transportation access to downtown as a mechanism for economic and community development, **adopting a 'smart use' philosophy** toward the development, management, and financial stability of parking assets and complementary transportation access options. This new school of thought is also a conscious step away from the traditional 'car is king' approach to transportation and towards a stance that integrates driving and parking as one in a broad array of transportation choices.

SYSTEM GOALS, OBJECTIVES AND PRINCIPLES

Goals:

The downtown parking and transportation system will be designed and operated to:

- Deliver a consistently positive customer experience
- Ensure the continued vitality of downtown Burlington
- Create a parking system which is fiscally sound and operationally efficient

Objectives:

- Provide a high quality parking service which serves customers arriving by all vehicles
- Set prices and manage availability to support the needs of users and the community
- Actively promote and support the use of a wide range of transportation modes
- Provide robust and effective information and online services and tools
- Support new development in downtown Burlington
- Collect data on system usage and use that data to inform policy
- Respond to constituents' changing needs and concerns
- Improve the fiscal operations of the system
- Fund related downtown infrastructure, education, and marketing activities

- Operate facilities, services and programs that are environmentally responsible
- Implement strategies that preserve the quality of life in neighborhoods adjacent to downtown

Principles:

To achieve these goals and objectives, the following principles must be followed:

- There must be a governing body overseeing the downtown parking system that has representation from both the public and private sectors.
- There must be more structured coordination between the public and private parking systems.
- The downtown private parking assets must be more accessible for public use.
- The parking system must become a parking and transportation service, which supports multiple modes.

BIG PICTURE

1. BURLINGTON PARKING INITIATIVE OFF TO A GOOD START

- Burlington's Traffic Fund outperformed its FY 2015 budget
- Occupancy and turnover rates in the Downtown Core are improved
- Downtown Parking Team gathered feedback from 100s of community members and leaders
- Garage repair and improvement work is underway
- Public and area stakeholders support improvement to the parking system
- Data collection is ongoing, with results informing this 4-year plan

2. Top-line Recommendations from DESMAN, Inc.

- Offer a range of parking options and price points that reflect demand
- Employ new technology like pay-by-phone to improve customer experience
- Complete parking garage capital improvements in phases – 2015-2018, with a focus on cleanliness and safety
- Partner with owners of private lots and garages to open their parking for public use through a variety of strategies
- Preserve 2-hour free parking in Lakeview and College St garages, remove it from the Marketplace Garage and offer a downtown-wide merchant validation program for discounted parking
- Promote active transportation modes - such as walking, bicycling, and public transit - via infrastructure improvements, commuter incentives, and targeted education and outreach
- Offer more online services including paying for parking, leases, and violations
- Add secure bicycle parking as a system-wide service and prioritize it in downtown transportation strategy
- Offer a coordinated suite of transportation solutions for employers and their employees
- No changes are recommended to current Snow Ban parking policy - garages will still serve as snow ban parking

PARKING POLICY AND OPERATIONS RECOMMENDATIONS

Phase 1: 2016

Finalize pilot projects, continue capital work and engage the community on parking recommendations and changes.

On-street

- Finalize Smart Meter Pilot
- Evaluate and report out on meter types, rates, and enforcement hours system-wide
- Gather feedback from stakeholders on system changes
- Implement a pay-by-phone application for parking

Garages

- Establish regular cycle to do annual cleaning, maintenance, and seasonal work in garages
- Begin operating Marketplace Garage on 24/6 schedule and adjust garage attendant schedules and seasonal work in garages to harness the benefit of automated lanes
- Complete 2015 capital work, including major renovation of Marketplace Garage elevator
- Add daytime security services to Marketplace Garage
- Install wayfinding signage

Private Parking

- Continue discussions with Burlington's four large garage owners about parking management agreements using recommended strategies in the plan, particularly for downtown residents
- Work on reform of related zoning issues to allow for more parking uses

Marketing and Outreach

- Launch next phase of a parking and transportation website, parkburlington.com
- Include a broad range of parking and transportation resources and links, including those for public transit, bike parking and routes, and specific parking like handicap accessible, electric cars, and others
- Work on adding pay-on-line services for parking and citation services
- Engage a broad range of stakeholders for feedback on parking system recommendations

Phase 2: 2016 to 2017

Begin approval process and implementation of parking recommendations while continuing capital improvements. Launch discussions on the creation of a Downtown Improvement District and use the feedback to write a plan.

On-Street

- Adjust enforcement hours and/or rates based on desired 85% occupancy, including the introduction of Sunday enforcement starting at noon
- Implement 4-tiered system for parking meters as outlined below with some seasonal adjustment within tiers (see Table I)
- Evaluate and report out on charging for parking 7 days a week
- Relocate Main St. parking kiosks to surface lots, replace with smart meters
- Implement monthly data gathering and analysis to inform short and long term parking policy

Table 1 - Proposed On-Street Parking System

Designation:	Tier 1	Tier 2	Tier 3	Tier 4
Application:	All 15 and 30 minute meters and time limited spaces	High-demand downtown core	Selected time limited and 3-hour metered spaces	Selected unlimited, time limited, 3- and 10-hour metered spaces
Technology and Policy:	Yellow 30-minute meters @ \$2.00/hour (\$0.50/15 minutes)	Grey "Smart" meters @ \$1.50/hour with no time limits	Blue "Smart" meters @ \$1.00/hour w 3-hour maximum	Brown long-term meters @ \$0.50/hour
Hours of Enforcement:	8 AM - 10 PM, Monday through Sunday	8 AM - 10 PM, Monday through Saturday (Noon – 10 PM, Sunday)	8 AM - 6 PM, Monday through Saturday	8 AM - 6 PM, Monday through Saturday

Garages

- Launch interim validation program for City garages, whereby downtown businesses receive coupons for customers. The technology for this program would be updated when the garage system is overhauled in Phase 3.
- Develop nights and weekends lease option for downtown residents.
- Develop and implement Standards of Care
- Develop and implement an Operations Manual
- Adjust rates in City garages based on short and long term use patterns
- Develop and implement the following additional pricing policies at Lakeview and College:
 - Flat-fee "night rate" from 4pm-3am
 - Downtown employee discounted parking program
- Remove 2-hour free at Marketplace Garage once validation program established

Private Parking

- Ensure success management agreements in place with at least 2 large downtown garages
- Report out on lot owners on solutions to identify success and opportunities

Bicycle Parking

- Work with nonprofit partners and bike users to identify priority locations for additional bike parking
- Install substantial additional bike parking and upgrade current racks located within the public right of way across downtown
- Work with private property owners to create more publicly accessible bike parking on private property, both indoor and outdoor, including secure bike parking options
- Add substantial quantities of secure bike parking to all public garages and ensure that it is sited, installed, and managed in ways that promote easy access and use
- Ensure all bike parking meets current national bike parking best practices

Marketing and Outreach

- Launch Interactive Parking Map

- Continue improving website, adding key functions which improve customer service
- Survey market to identify key concerns areas for improvement
- Continue outreach and education campaign

Phase 3: 2017 to 2018

Complete work and lay the groundwork for full implementation of a Parking and Transportation Management District for Burlington.

- Restructure configuration of on-street meters based on data and occupancy
- Continue to adjust enforcement hours and rates based on desired 85% occupancy
- Complete implementation of new Garage Standards of Operation and Maintenance
- Implement major overhaul of technology and payment systems in garages
- Continue automation investments and implement 24/7 operation of all garages
- Complete majority of \$9M of deferred capital work
- Continue implementing highest priority bike parking upgrades downtown
- Enhance website functionality to enable purchase of leases and payment of tickets through the Go! Burlington website
- Review and report out on performance of the parking system during the pilot periods
- Evaluate the management structure of public (and participating private) garages

5-YEAR FINANCIALS

Parking and Transportation Management Plan Pro Forma – 2016 to 2020

	FY2016	FY2017	FY2018	FY2019	FY2020
Expenses	5,112,791	5,052,894	5,190,006	5,474,990	5,552,637
Revenue	5,662,107	6,109,449	6,631,823	7,154,447	7,703,637
Net Operating Income	549,316	1,056,555	1,441,818	1,679,457	2,151,001
Debt Service	(663,170)	(1,046,317)	(1,230,513)	(1,230,513)	(1,230,513)
Net Cash Flow	(113,854)	10,239	211,305	448,945	920,888

Please note:

- The projected expenses and revenues above are based on the policy and operations recommendations in the previous section with implementation beginning in September of 2015.
- Figures include Burlington Airport parking expenses and revenue, expenses of Burlington school crossing guards and signals, and an annual payment to the Police Department for parking enforcement operations.
- All revenue generated from parking (excluding citations) remains in the city transportation/parking fund for maintenance and improvement of the system.
- FY'16 expenses and revenues are both modestly higher than the City's approved FY'16 budget as the consultant is projecting higher revenues and recommending additional capital work to be completed in the fiscal year.

PARKING & TRANSPORTATION MANAGEMENT DISTRICT

A private-public collaborative charged with meeting the goals and objectives of the PMD and creating a parking and transportation system that supports the community and our downtown.

Pilot Period - Spring 2016 to Winter 2017

- Create a pilot entity (Go! Burlington) through Council resolution charged with the following:
 - Oversee the implementation of the Downtown Parking Management District Plan (PMD)
 - Advise DPW on rates, policies, and prioritization of reinvestments in the parking system.
 - Set and monitor annual goals for the parking system based on the PMD plan
 - Work closely with DPW and the BBA to further the objectives of the PMD
 - Ensure that transportation access to downtown is managed and developed in a way that is consistent with the smart use philosophy outlined in the introduction to this plan
- On behalf of the private sector, Burlington Business Association (BBA) will utilize funding support from the DID (currently underwriting the cost of the 2-hour free parking program) to:
 - Implement recommendations from the Downtown Parking Study.
 - Lead the effort to work with Private parking owners to achieve the goal of efficiently utilizing all of Burlington's parking assets.
 - Manage marketing, communications, and outreach of parking and transportation services
 - Create a Parking and Transportation website which:
 - Provides information and access to parking and transportation services
 - Includes an interactive parking map which includes bike parking
 - Coordinate the provision of downtown TDM services
 - Work closely with DPW and Go!Burlington to further the objectives of the PMD
- On behalf of the City, DPW will:
 - Support maintenance and attendant/ambassador positions to deliver a great customer experience
 - Prioritize capital reinvestment and automation in the public garage system
 - Complete a majority of the garage capital projects outlined in the Hoyle Tanner Associates (2014 HTA) Facilities assessment and present a plan for the timely completion of the remaining work
 - Manage both off-street and on-street public systems (including bike parking) in a manner that follows the PMD and includes input from Go!Burlington and the BBA
 - Focus the DPW Assistant Director job description on parking and transportation, with a national search and input from Go! Burlington, BBA and the PAC
 - Create and implement standards of care for the parking system
 - Create and implement standards of operations for the parking system
- In Collaboration the team of Go! Burlington, BBA and DPW will:
 - Implement the parking and transportation recommendations outlined in the PMD
 - Craft a plan for creation of a Downtown Improvement District
 - Prioritize bike parking needs downtown and develop implementation plan
 - Work towards a 5-year goal of repairing and improving the parking system on the following three fronts so that the system generates net income that would then be re-invested in the care, improvement, and marketing and promotion of downtown Burlington.
 - Well-maintained capital infrastructure

- Excellent customer service
- Efficient operations

Downtown Improvement District (DID) Implementation

Following completion of the pilot phase

- Formally incorporate the DID as a separate organization.
- Formalize DID funding permanently to support transportation-related work of the DID
- Request City Council grant certain authorities to the DID
- Formalize collaboration with Church Street Marketplace

TRANSPORTATION AND DEMAND MANAGEMENT POLICY RECOMMENDATIONS

- Create a Transportation Demand Management (TDM) service model for downtown employees
- Work with CATMA as service delivery agent
- Develop an online portal for transportation services
- Create secure, covered bicycle parking and a mechanism to pay for its ongoing maintenance and expansion over time as warranted by demand

ACHIEVEMENTS AND REALIZATION OF PURPOSE

We set forth the following achievements to realize within the first five years of operation as benchmarks for determining the success of this initiative:

- The Burlington parking system is operating within budget while ensuring that the capital and maintenance needs of the garages as outlined in the HTA report are met.
- Work is complete on all needed capital improvement and annual recommended maintenance is completed.
- Parking and Transportation customers when polled report that they are receiving a better service when compared to 2014.
- The Go!Burlington can list improvements to the system that create a better customer experience.
- Data supports the efficacy of changes to the parking system.
- Private parking facilities have executed agreements for joining the Parking Management District and are providing currently underutilized parking spaces to a myriad of uses.
- Rates of bicycling, walking, and transit use are systematically and regularly measured, and all show sustained and substantial growth over time relative to driving and parking as modes of access to downtown

READ MORE

[Downtown Parking and Transportation Management Study by Desman Associates, Dec. 11, 2015](#)

[Implementation Timeline](#)

[Park Burlington website](#)

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Table of Contents

1. Introduction	1
1.1. History	1
1.2. Prior Studies.....	2
1.3. A New Charge.....	3
1.4. Governing Philosophy	3
1.5. Goals, Objectives, and Principles	4
2. Existing Conditions Analysis	6
2.1. Study Area.....	6
2.2. Parking Supply.....	7
2.2.1. On-Street	7
2.2.2. Public Off-Street	10
2.2.3. Private Off-Street.....	13
2.2.4. Rates	15
2.3. Parking Utilization	17
2.3.1. Weekdays	18
2.3.2. Weekends	22
2.4. Length of Stay and Turnover Observations	33
2.4.1. Weekday	34
2.4.2. Weekend.....	35
2.4.3. Post Smart-Meter Installation	35
2.5. Conclusions	37
3. Future Demand	38
3.1. Future Development	38
3.2. Future Parking Adequacy/Transition Zone Strategy	43
3.3. Zoning	45
3.4. Phasing.....	45
4. Parking Management Best Practices	47
4.1. Benchmarking Exercise	47
4.1.1. Methodology	47
4.1.2. Comparable Communities	47
4.2. Key Components	48
4.2.1. Governance.....	49
4.2.2. Infrastructure/Development Entity	50
4.2.3. Management/Operations Entity.....	51
4.2.4. Communications/Public Relations Entity.....	51
4.2.5. Transportation Demand Management Entity.....	52
4.2.6. Goals and Objectives	52
4.3. Local Influences and Considerations	53

4.3.1. Climate.....	55
4.3.2. Current Configuration.....	55
4.3.3. Community Values.....	56
5. Parking and Transportation Management District	57
5.1. Downtown Parking System Goals	57
5.2. Objectives	57
5.3. Approach.....	58
5.4. Recommended Structure and Governance	58
5.4.1. Assignment of Duties and Responsibilities	61
5.4.2. Programs and Initiatives	64
5.5. Expand Transportation Options and System Efficiency	97
5.5.1.1. Bicycle Parking Recommendations	101
5.5.2. Downtown Improvement District	102
5.5.3. Implementation Plan	104
6. Financial Analysis and Projects of Program Recommendations.....	105
6.1. General Methodology	105
6.2. MARKETPLACE GARAGE MODEL	106
6.2.1. Transient Parking Revenue Projections	106
6.2.2. Merchant Validation Program Financial Impact	110
6.2.3. Monthly Lease Program Financial Impact.....	112
6.2.4. Garage Operations - Financial Impact	113
6.2.5. Capital Improvement Project Financial Impact.....	116
6.3. LAKEVIEW/ COLLEGE STREET GARAGE MODEL.....	117
6.3.1. Transient Parking Revenue Projections	117
6.3.2. Hotel Guest Parking in City Garages - Financial Impact	123
6.3.3. Garage Lease Agreements - Financial Impact.....	125
6.3.4. Capital Improvements Financial Impact	129
6.4. RIGHT OF WAY MODEL.....	130
6.4.1. On-Street Meters	131
6.4.2. Surface Lots	136
6.5. Traffic Fund Pro Forma	140
7. Conclusions.....	145

1. INTRODUCTION

1.1. History

In November of 2013, the Burlington Business Association (BBA) together with the City of Burlington launched an initiative to review and identify necessary improvements to Burlington's downtown parking system. Both the City and BBA supported moving forward with this initiative in response to the following:

- Business, tourist and resident complaints
 - Poor customer service experiences
 - Little information on how to use the system including where to find parking
 - Unsafe and unclean garage conditions
 - Cash is the only way to pay for parking
- Concern that the City's Traffic Fund which manages parking was not fiscally stable
- Concern about the physical state of garages following a decade of deferred maintenance
- Support in PlanBTV for the creation of a Parking Management District.¹
- An overall interest in making improvements to the downtown
 - Specific interest in the efficacy of Burlington's Downtown Improvement District

Our first step was to hear from community stakeholders. Did community members, interest groups, and community leaders share a concern about the health and future of the parking system? Would they support an initiative to review and perhaps overhaul the system? Would the community support putting significant resources into improving the system? As a first step, BBA and the Burlington Community & Economic Development Office (CEDO) team members held more than 50 meetings with community stakeholders and asked these questions. We suspected that parking was an emotional topic. We expected to hear some harsh feedback and serious concerns. Here's a sample of what we heard:

- We need to clean-up the garages
- We get frequent complaints from customers about their parking experience
- We should be able to accept credit cards like other cities
- What about kiosks like Montreal? They work great and make the sidewalk cleaner
- Our older patrons don't like parking in Burlington; the experience keeps them away
- Churches value free parking on Sunday before noon when parishioners come for services
 - Many stay downtown and enjoy Burlington
- Our parking needs are specific, how can you help us meet them
- The garages are in terrible shape; they seem dirty, and they are not safe
- Two-hour free parking brings business downtown; we need parking for our customers
- It is HARD to find parking in Burlington
- I had no idea that garage was there and available for public parking
- Why can't we use all of those spaces that sit empty nights and weekends?
- We need better parking and transportation solutions for our employees

¹ [PlanBTV Downtown & Waterfront](#), Burlington, VT

- Our employees take breaks every two hours to cycle through garages and use two-hour free parking
- Free parking is important to downtown vitality
- Burlington needs a transportation solution - cars aren't the only way people get to downtown
- We need secure, covered bike parking
- Parking requirements for new development make it difficult to impossible to build downtown
- Downtown parking is spilling over into nearby neighborhoods

People had a lot to say. They *were* emotional about parking. Their feedback was not only valuable, but we couldn't dispute their complaints and concerns. In part, because they were accurate and in part because we had little data about how the parking system worked. Based on this feedback, it seemed the right time for Burlington to review and craft a plan for improving the Downtown parking system. Transportation services should be a part of the solution. A significant undertaking. Our Downtown Parking Team of BBA, CEDO and the Department of Public Works has been meeting every week for two hours since July of 2013 to work to understand the problem and craft solutions. But we couldn't do it alone. The Chittenden County Regional Planning Commission stepped in with critical support, and many other partners came to the table. Over the past two years, many hours and effort have been invested.

The City engaged DESMAN's services in the spring of 2014 to complete a downtown parking study and offer recommendations for changes to the parking system.

1.2. Prior Studies

DESMAN's engagement is predated by many substantial and expansive studies of downtown parking and transportation needs and many of these informed our work to date and subsequent recommendations. These consulted works include the following:

- McDonough & Scully *Downtown Employee Parking Study: Burlington, Vermont*, 1990
- Resource Systems Group *Burlington Transportation Center Parking, Pedestrian and Circulation Study*, March 2000
- Wilbur Smith Associates *Downtown Burlington Parking Study*, March 2003
- Burlington Business Association & Campus Area Transportation Management Association *Downtown Burlington Employee Transportation Survey Report*, June 2008
- Resource Systems Group *PlanBTV Transportation Study*, October 2011
- Town Planning & Urban Design Collaborative LLC *PlanBTV – Downtown & Waterfront Plan*, June 2013

Burlington's PlanBTV process informed our analysis. Much of the fieldwork and analysis performed on existing conditions supported the PlanBTV findings that a significant portion of the total downtown and waterfront parking supply (35%) was underutilized, especially those facilities owned privately and accessible only to a select group. Additionally, many of our preliminary recommendations mirror those made in the PlanBTV study including the following:

- Improve the user experience through better communication of available parking AND transportation options in downtown, improved facility operations, and wayfinding systems, and innovative programs that allow for easier location of, and payment for, parking services;
- Create a mechanism to broker shared parking agreements between prospective developers and existing facility owners to facilitate sustainable and cost-effective projects;
- Create a mechanism or agency to broker shared use agreements that allow the public to access underutilized private facilities;
- Create an agency that would centralize municipal parking operations; advocate for alternate transportation modes (i.e. transit, bicycles, park-and-rides, etc.); collect data on system utilization to inform future policy decisions; and function as the central resource for information on parking and transportation programs in downtown Burlington.

1.3. A New Charge

DESMAN's charge has been to refine these recommendations and frame them into an action plan that will result in the creation of an entity, which will carry out each of the preceding initiatives. This action plan is to include milestones, which are politically responsive to Burlington's constituents, fiscally sustainable, environmentally responsible and integrate the City's unique culture and values.

The City of Burlington has historically been governed by the idea that parking is a necessary utility to support downtown commerce and development, and as such needs to be provided at no or low cost. Since it has not been viewed as a comprehensive system, parking management tasks have been split up among various City departments. Parking planning was assigned to Planning & Zoning, managing and maintaining the assets to the Department of Public Works, and enforcement and adjudication to the Police Department. While some efficiencies were achieved under this model, it also leads to a parking system where core functions were fractured and subject to conflicting missions.

Burlington has reached a point its evolution where it is prepared to move away from the core philosophy of parking as a base utility, including the 'more is better' perspective and its attendant policies. Following the cues of comparable communities like Boulder (CO), Ann Arbor (MI), and Boise (ID), Burlington is prepared to shift its perspective. Burlington needs to treating parking as a mechanism for economic and community development, **adopting a 'smart use' philosophy** toward the development and management of public parking assets. This new school of thought is also a conscious step away from the traditional 'car is king' policies and movement towards a mission where driving and parking is one in an array of transportation choices.

1.4. Governing Philosophy

Under a traditional, 'parking is a utility' mindset, the core mission of the City is to provide abundant parking in the downtown at no or low cost to support the community. Parking is heavily subsidized; as the revenues generated will rarely cover the cost of operations, let alone debt service for capital repairs. Zoning ordinances are structured to assure that new development provides adequate on-site parking to support the development under any contingency. Parking policy is developed with specific facilities in mind, rather than looking at the parking system as a whole. Revenue generated from parking



enforcement is typically used to offset the cost of enforcement, with any overage pledged to the General Fund or a special fund supporting Police operations. The focus in this type of system is providing the community with needed capacity at the lowest possible initial and recurring costs. Little thought is given to the bigger picture, including alternative modes of transportation and quality of life issues in the downtown; and even less thought is given to the financial sustainability of this fractured system.

A 'smart use' philosophy, on the other hand, acknowledges that parking is a critical asset to the health and vitality of a downtown but is more entrepreneurial in its approach. Parking is part of a total accessibility strategy that also incorporates alternative modes of transportation for bringing citizens and visitors to and from the downtown. 'Smart use' promotes active management of existing assets; with the development of new parking facilities only occurring once all existing assets are utilized to their maximum potential. Under a 'smart use' approach, the true cost to provide parking is incorporated parking prices, to make sure the system is fiscally sustainable. In many cases, parking is not only expected to 'pay for itself' but also subsidize other community benefits programs. Zoning ordinances are structured to be flexible to respond to changing market conditions and allow developers to provide the most appropriate number of parking spaces to support their project without adversely impacting the surrounding community while utilizing existing capacity.

Parking policy under 'smart use' provides incentives for preferred behaviors and seeks to discourage unwanted behaviors, but allows users to make choices according to their needs, values, and objectives. Parking enforcement is still used maintain adherence to policies, but parking tickets are issued more as corrective than punitive actions and the officers issuing them are encouraged to act as ambassadors, rather than scolds. Also, revenues from citations beyond base operating costs are typically pledged back to the system to make improvements or fund community programs. Under this approach, the design of both assets and operations is focused on providing a high level of service to the end user. Functionality in design is still prized, but a greater emphasis is placed on how traffic (vehicular and pedestrian) flows in out of the facility, what the user experience is like and how the facility integrates into the surrounding community aesthetically. Operationally, the primary foci of a 'smart use' system are efficiency and service; municipalities who have adopted this philosophy are constantly looking for new technology that will boost patronage, reduce cost or provide the end user with additional benefits. Fiscally, a 'smart use' system embraces value pricing to reflect the true cost of the provided service to two ends:

- 1) To create a system that is self-sustaining: fees generated by the end users who benefit directly from service provided, and
- 2) To place the opportunity cost of driving alone and parking on a comparable plane with other, more environmentally sustainable modes of transportation.

1.5. Goals, Objectives, and Principles

The city's parking work is directed by three over-arching goals as outlined below:

Downtown Parking System Goals:

1. **A Vibrant Downtown** -- The downtown parking and transportation system resources must be maximized to ensure the continued vitality of downtown Burlington.



2. **Great Customer Service** -- The parking system is often the first and last impression for people driving downtown. These experiences should consistently be positive and dependable.
3. **A Sustainable System** -- The parking system must minimally generate sufficient revenues to meet its operational and maintenance needs while aiming also to support downtown infrastructure and marketing.

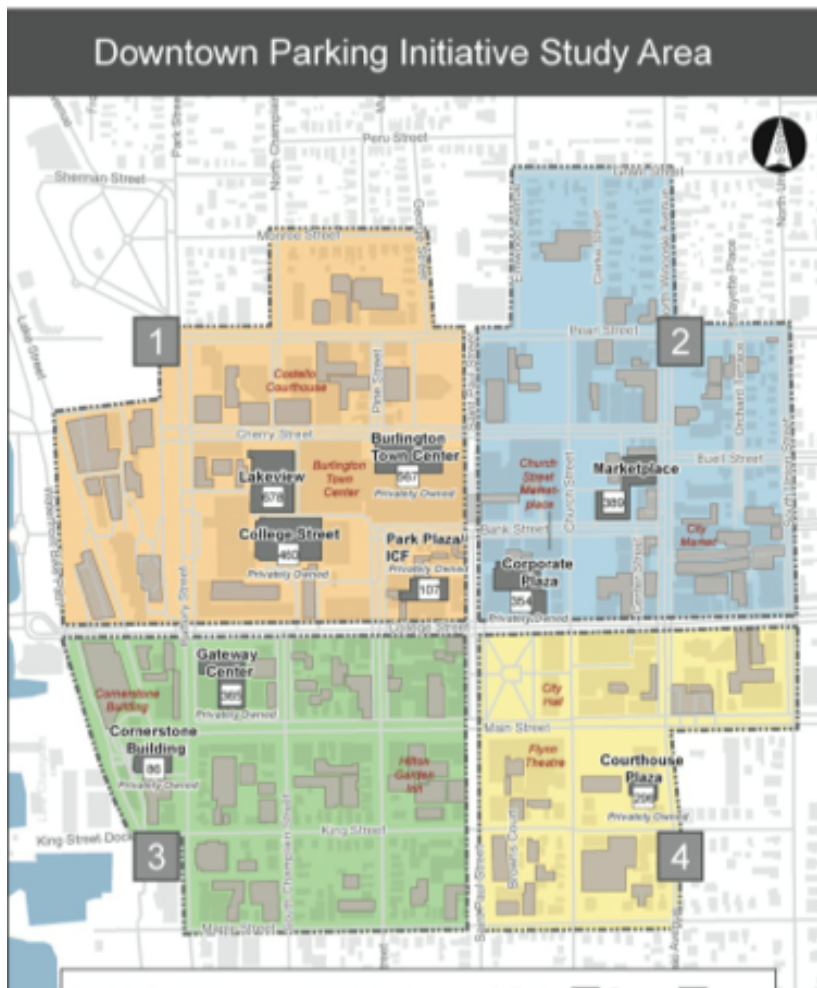
2. EXISTING CONDITIONS ANALYSIS

2.1. Study Area

The defined study area for this project encompasses the core of downtown Burlington within which a majority of the commercial activity takes place. This boundary limits the amount of residential area bordering the downtown that is included in the analysis; a separate analysis of residential parking was conducted concurrently with this study. In general, the study area is bounded by Pearl Street on the north, South Union Street on the east, Maple Street on the south, and Lake Street on the west. While these streets form the basic boundaries of the study area, there are deviations from this boundary, which allow specific blocks to be included or excluded from this study.

Figure 1 shows the boundaries of the study area, as well as the locations of existing off-street parking facilities and the space capacities of the parking garages. This figure also shows how the study area was divided into four smaller zones for ease of analyzing the vast amount of data gathered during the study. The study area encompasses 40 total blocks and includes office buildings, retail stores, restaurants, hotels, courthouses, City Hall, and residences.

Figure 2-1 Downtown Parking Initiative Study Area



Source: DESMAN

2.2. Parking Supply

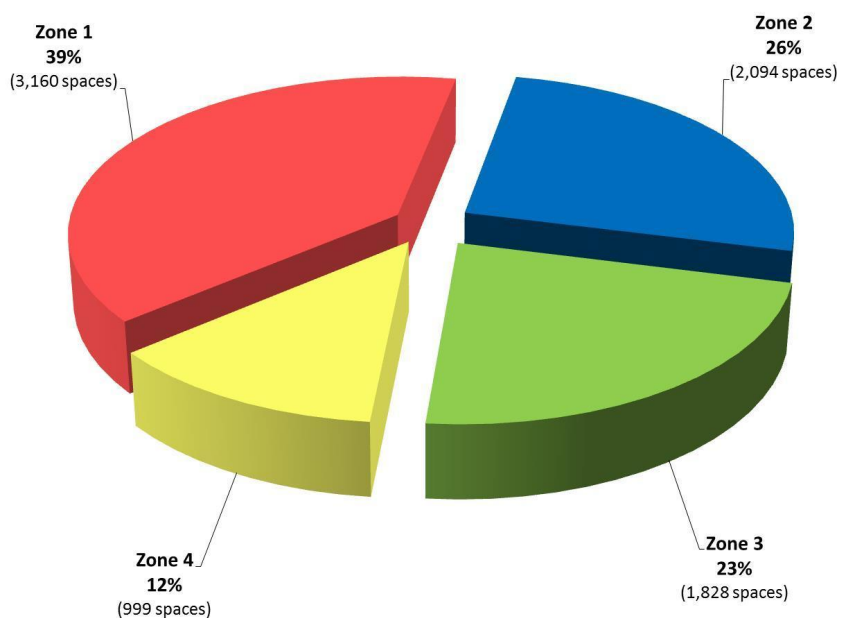
Parking supply in downtown Burlington is comprised of three types of parking resources: on-street (curbside) spaces, public off-street spaces and private off-street spaces. On-street spaces are a combination of metered, time-restricted, residential permit, handicapped, special purpose, and unrestricted spaces. Public off-street spaces were identified as such if they were clearly accessible for use by the general public; these spaces are located in a combination of public surface parking lots and City-owned and privately owned parking garages. Private spaces are dedicated for use by certain groups only, such as customers of a certain business or employees working in a particular building.

In total, the existing supply of parking within the study area is 8,081 spaces, broken down as:

- 1,199 on-street spaces
- 2,825 spaces in 13 public facilities
- 4,057 spaces in 119 private facilities

Figure 2 presents the breakdown of total existing parking supply by zone.

Figure 2-2 Existing Parking Supply by Zone



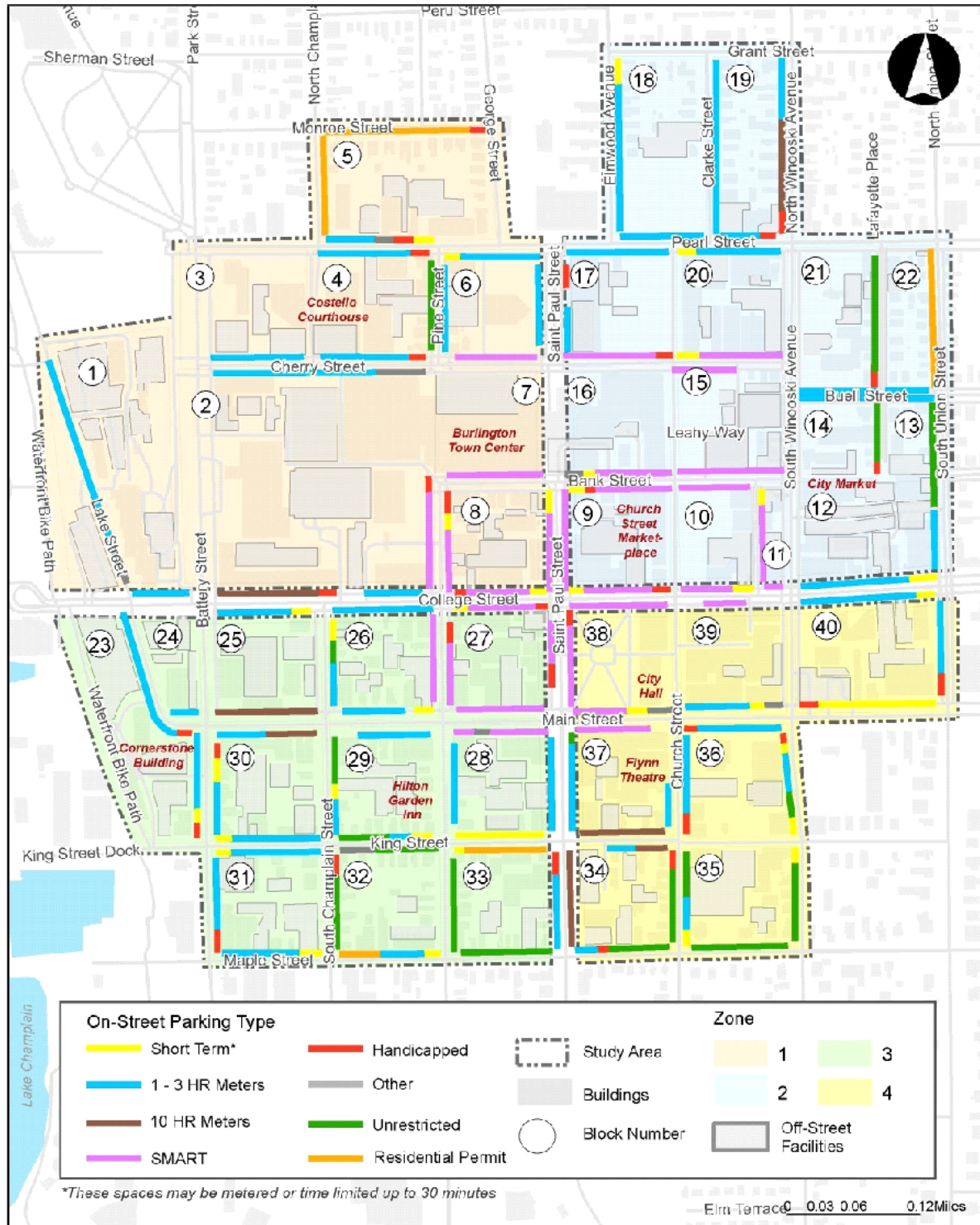
Source: DESMAN

2.2.1. On-Street

In downtown Burlington, on-street spaces are a combination of metered, time-restricted, residential

permit, handicapped, special purpose, and unrestricted spaces. **Figure 3** shows the locations of on-street parking supply in the downtown.

Figure 2-3 On-Street Parking Supply



Source: DESMAN

As shown in the figure, the metered parking spaces are a combination of short-term (15- and 30-minute meters), 1-hour, 3-hour, and 10-hour meters and Smart Meters with no time limit. Aside from the Smart meters which accept credit cards, all other parking meters accept coins only. **Table 2-1** shows the breakdown of on-street spaces by type.

Table 2-1 - On-Street Parking Supply

	NAME/DESCRIPTION	ACTUAL CAPACITY
ON-STREET	15-minute (time limit)	14
	30-minute (time limit)	6
	1-hour time (limit)	1
	2-hour (time limit)	3
	Motorcycle	10
	Special Purpose	9
	Residential Permit	75
	Unrestricted	156
	15-minute meters	32
	30-minute meters	24
	1-hour meters	1
	3-hour meters	767
	10-hour meters	63
	Handicapped	38
	Sub-Total On-Street	1,199

Source: DESMAN

It should be noted that, at the time of the initial surveys, the Smart meters had a 3-hour time limit, so they are included in the 767 meters in Table 2-1. **Figures 4** and **5**, respectively, show the breakdown of on-street spaces by type and the percentage of the total on-street spaces located in each zone. Figure 4 also differentiates Smart meters from 3-hour meters.

Figure 2-4 On-Street Spaces by Type, source: Desman

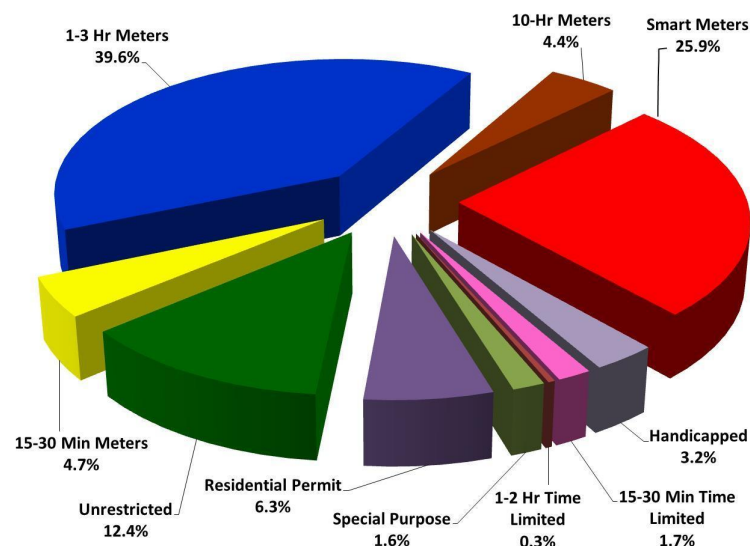
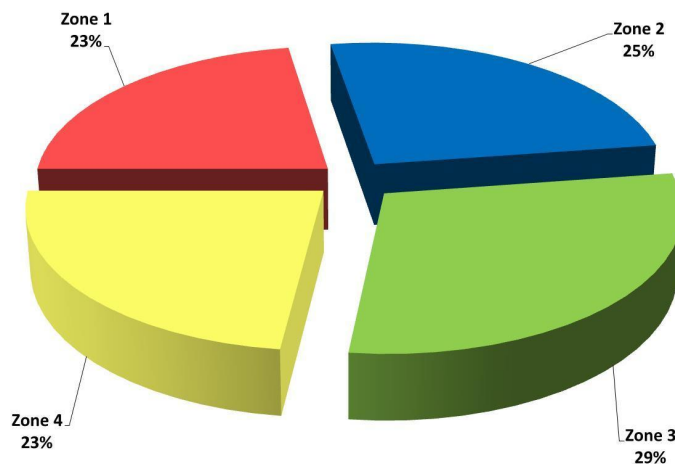


Figure 2-5 Percentage of On-Street Spaces by Zone, source: Desman



It should be noted that 310 on-street spaces (25.9% of the total on-street spaces) were originally intended to be converted to Smart meters. However, the actual number of Smart meters installed was 284, while the other 26 meters remained 3-hour, mechanical meters. The on-street utilization survey data presented later in Section 3.3 was recorded prior to the installation of the Smart meters, when the spaces were still 3-hour spaces. Additional survey data will be presented in Section 3.4 to show utilization of the on-street spaces after the Smart meters were installed.

Of the total 1,199 on-street spaces in downtown Burlington, 894 spaces (about 75% of on-street spaces) are controlled by some type of parking meter. As seen in **Figure 5**, there is a fairly even distribution of on-street spaces among the four zones.

2.2.2. Public Off-Street

Public off-street parking spaces are located in a combination of surface parking lots and garages and are either owned by the City or a private entity. As stated previously, for a space to be considered public parking, it had to be clearly marked as available for use by the general public and not designated for use by a particular group. In total, there are 2,825 off-street spaces available for public parking.

Figure 6 shows the locations of the off-street parking supply in downtown Burlington, both public and private.

Figure 2-6 - Off-Street Parking, source: Desman

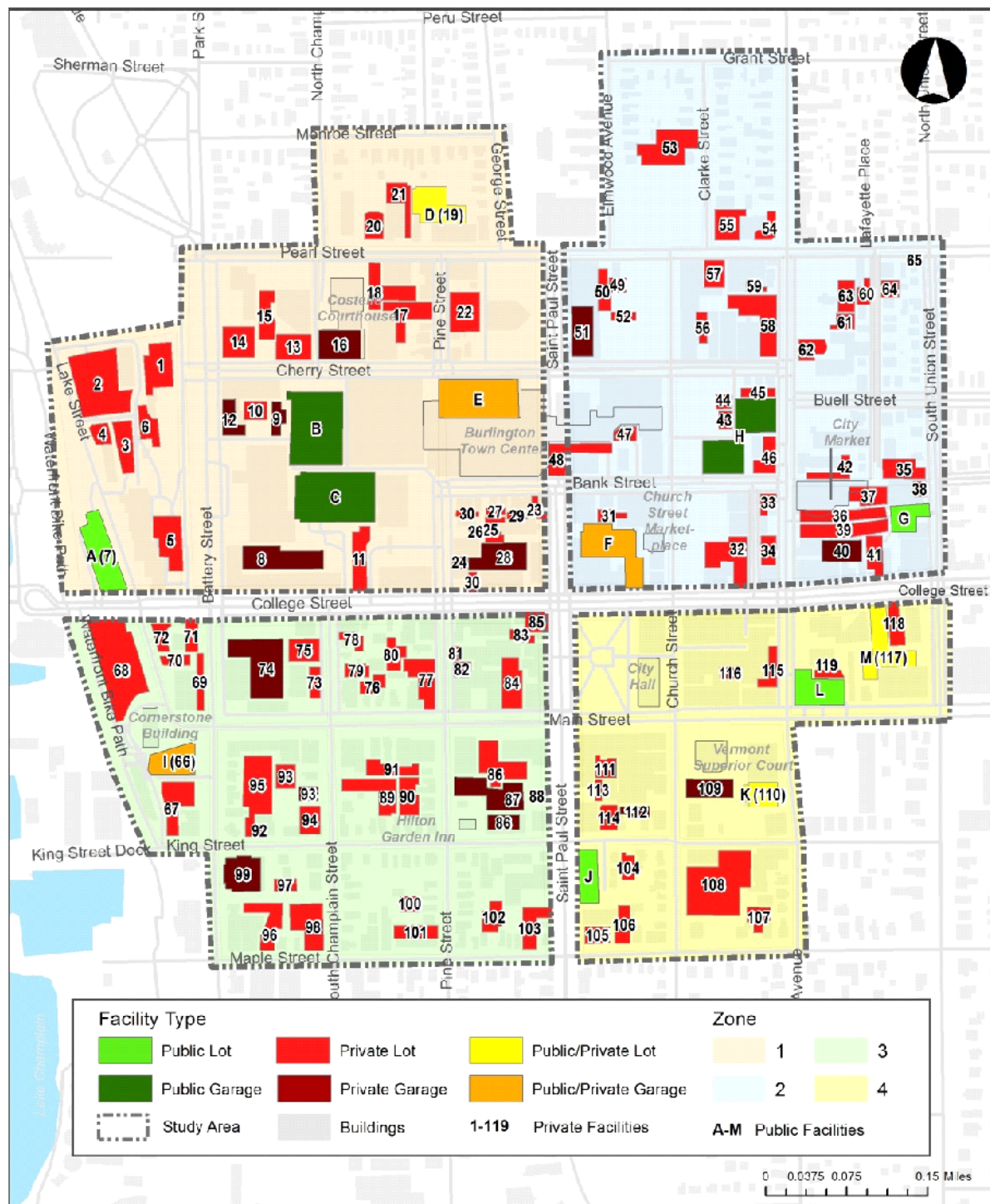


Table 2 shows the breakdown of public parking spaces by facility type. The Zone, Block Number and facility IDs presented in Table 2 correspond to the map in **Figure 6**.

Table 2-2 - Public Off-Street Parking Supply

ZONE	BLOCK #	ID	NAME/DESCRIPTION	TYPE	GENERAL	H/C	TOTAL
1	1	A	Pease/Waterfront Lot	Public Lot	66	3	69
1	2	B	College Street Garage	Public Garage	456	4	460
1	2	C	Lakeview Garage	Public Garage	667	11	678
1	5	D	86 Pearl Street (VT Credit Union)	Public Lot	30	1	31
1	7	E	Town Center Garage	Public Garage	555	12	567
2	9	F	Corporate Plaza	Public Garage	350	4	354
2	12	G	City Market Back Lot	Public Lot	21	1	22
2	15	H	Marketplace Garage	Public Garage	378	11	389
3	23	I	Cornerstone Bldg Garage (ground)	Public Garage	40	2	42
4	34	J	Browns Court (Metered) Lot	Public Lot	40	2	42
4	36	K	Courthouse Plaza Garage	Public Garage	86	0	86
4	40	L	Burlington DPW Lot	Public Lot	42	0	42
4	40	M	Fletcher Free Library Lot	Public Lot	43	0	43
TOTAL					2,774	51	2,825
					Public Lot		249
					Public (Municipal) Garage		1,527
					Public (Private) Garage		1,049

Source: DESMAN

As shown in **Figure 7**, approximately 54% of the public off-street spaces are located in City-owned garages, 37% are in privately owned garages and 9% are in City-owned surface lots; about 63% of the total public parking supply is provided by the City.

Figure 2-7 Public Spaces by Type

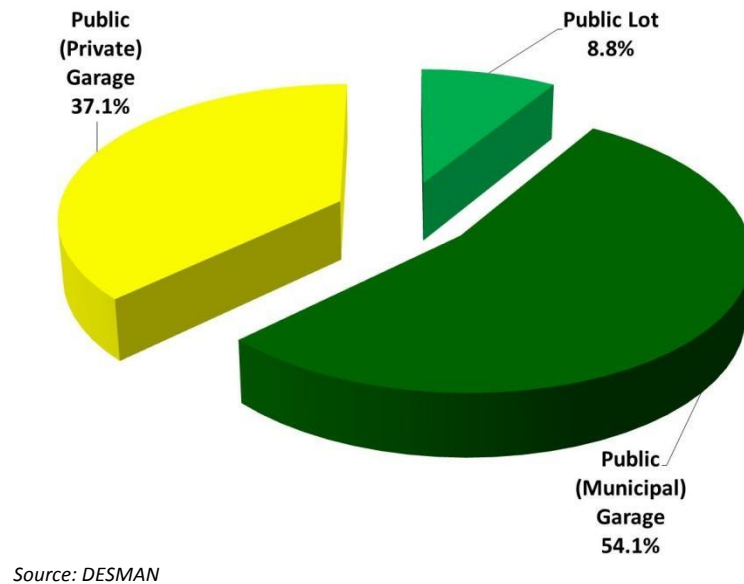
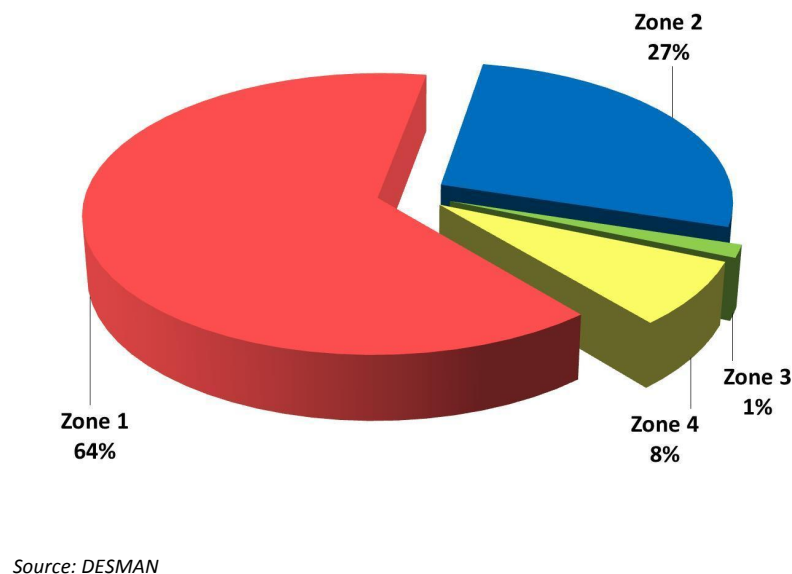


Figure 8 shows the distribution of public parking spaces among the four zones. Zone 1 contains approximately 64% of the total public parking supply, while Zones 2, 3 and 4 contain 27%, 1% and 8% of the public parking supply, respectively.

Figure 2-8 Percentage of Public Parking Supply by Zone



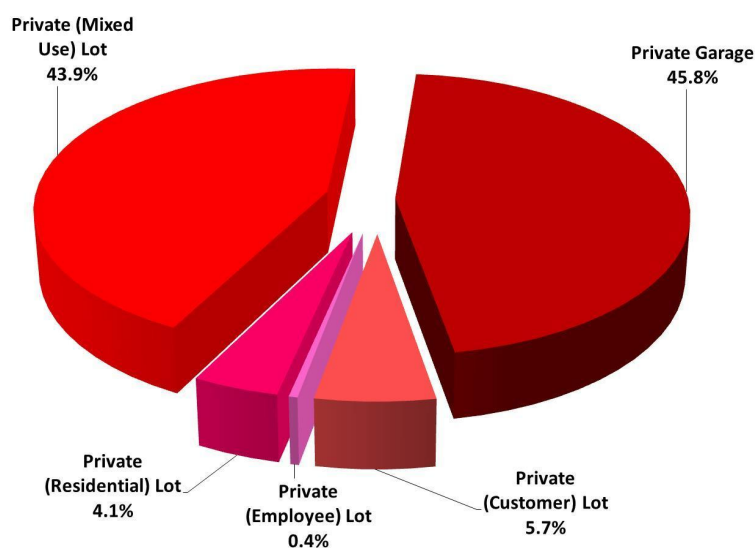
2.2.3. Private Off-Street

Private off-street parking spaces are located in a combination of surface parking lots and garages and are designated for use by residents, employees, customers, building tenants, or a mix of users, depending on the facility. In total, there are 4,057 private parking spaces in downtown Burlington located in 119 private parking facilities.

Given the fact that there are 119 private parking facilities in Burlington, the full list is not presented in the text of this report, but can be found in [Appendix 2-1](#).

Figure 9 presents a breakdown of private parking spaces in the city. Approximately 46% of the private off-street spaces are located in garages, 44% are in mixed-use lots, 6% are in customer lots, 4% are in residential lots, and <1% are in employee-only lots.

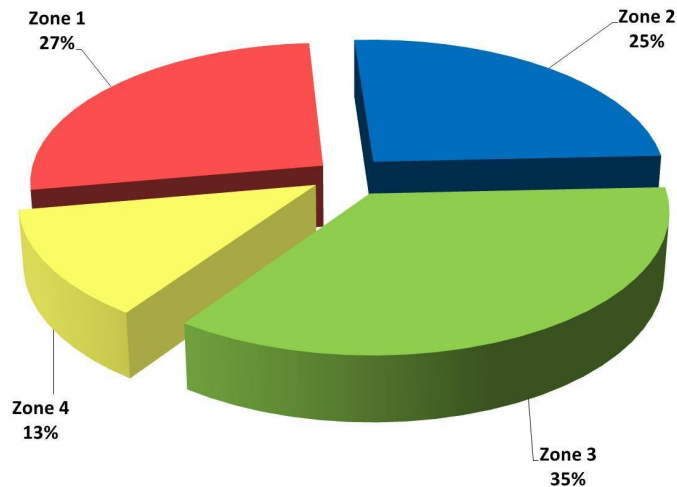
Figure 2-9 - Private Spaces by Type



Source: DESMAN

Figure 10 shows the distribution of private parking spaces among the four zones. Zones 1, 2, 3, and 4 contain approximately 27%, 25%, 35%, and 13% of the total private parking supply respectively.

Figure 2-10 Percentage of Private Spaces by Zone



Source: DESMAN

2.2.4. Rates

Fees are collected for parking on public streets only at spaces with meters.

Meters

There are four types of meters currently in use in the downtown:

- 284 “Smart meters” in the downtown core, priced at \$1.50 per hour and with no time limit. The parking kiosks that accept credit cards on a portion of Main Street and in the parking lot at the corner of South Winooski Avenue and Main Street operate under the same rules. These meters and kiosks are enforced from 8 AM until 10 PM, Monday through Saturday.
- 56 short-term or “yellow” meters, priced at \$1.00 per hour with time limits of 15 to 30 minutes. These meters are enforced from 8 AM until 6 PM, Monday through Saturday, with the exception of those meters located in the downtown core.
- 475 mid-term or “blue” meters, priced at \$1.00 per hour with time limits of 1 to 3 hours. These meters are enforced from 8 AM until 6 PM, Monday through Saturday.
- 53 long-term or “brown” meters, priced at \$0.40 per hour with time limits of 10 hours. These meters are enforced from 8 AM until 6 PM, Monday through Saturday.

Public Off-Street - Municipal Parking Garages

The City owns and operates three parking garages, known as the Lakeview Garage, the College Street Garage, and Marketplace Garage. The rates for these structures can be found in **Figure 11**.

Figure 2-11 Parking Rates for Municipal Garages

	
DAILY PARKING RATES	
MARKETPLACE PARKING GARAGE	
HOURS	RATE
0 - 2	FREE
2 - 2.5	\$3.00
2.5 - 3	\$4.00
3 - 3.5	\$5.00
3.5 - 4	\$6.00
4 - 5	\$7.00
5 - 6	\$8.00
6 - 7	\$9.00
> 7	\$10.00
LOST TICKET	\$10.00
www.parkburlington.com Questions or Concerns: 802-863-9094	

	
DAILY PARKING RATES	
COLLEGE & LAKEVIEW PARKING GARAGE	
HOURS	RATE
0 - 2	FREE
2 - 2.5	\$2.00
2.5 - 3	\$3.00
3 - 3.5	\$4.00
3.5 - 4	\$5.00
4 - 5	\$6.00
5 - 6	\$7.00
6 - 7	\$8.00
> 7	\$8.00
LOST TICKET	\$8.00
www.parkburlington.com Questions or Concerns: 802-863-9094	

Source: www.parkburlington.com

The City also has five surface parking lots – all originally equipped with single-space, coin-operated meters – available to the general public. (The lot at the corner of Winooski Avenue and Main Street now has a pay kiosk.) Rates are equivalent to those shown in the table above for the various types of meters (i.e. brown or blue). The City's Department of Parks and Recreation also has a lot near the waterfront that is administered by a pay-and-display kiosk. The Main Street Landing lot operates as permit only for building tenants on weekdays, but opens on weekends and evenings to the general public at a flat rate of \$5.00-\$10.00 per vehicle, with an attendant collecting the fee on entry.

Monthly parking permits, where available, run from as little as \$80.00/month up to \$110.00/month. There are additional facilities in the downtown, which offer paid monthly parking permits, but these are restricted to building tenants for the most part and not available to the general public.

Rates surveyed during field work (2014) are shown in **Table 3**.

Table 2.3 Office Street Parking Fees

ID:	A	B	C	D	E	F	G	H	I	J	K	L	M
NAME:	Passer/ Waterfront Lot ¹	College St. (City) Garage	Lakeside (City) Garage	80 Pearl Street (City) Lot	Town Center Garage ²	Corporate Plaza Garage ³	City Market (City) Back Lot	Marketplace (City) Garage	Cornerstone Building Garage ⁴	Browns Court (City) Lot	Courthouse Plaza Garage	Gateway (City) Lot ⁵	Fletcher Library (City) Lot
CAPACITY:	66	400	678	21	567	254	22	389	42	42	95	42	43
TRANSIENT RATES													
0.0-1.0 hours	\$ 5.00	\$ -	\$ -		\$ 2.00	\$ 1.50		\$ -	\$ 0.50		\$ 5.00		
1.0-2.0 hours	\$ 5.00	\$ -	\$ -		\$ 4.00	\$ 3.00		\$ -	\$ 0.50		\$ 5.00		
2.0-2.5 hours	\$ 7.00	\$ 3.00	\$ 3.00		\$ 6.00	\$ 3.75		\$ 2.00	\$ 1.00		\$ 1.00		
2.5-3.0 hours	\$ 7.00	\$ 4.00	\$ 4.00		\$ 6.00	\$ 4.25		\$ 3.00	\$ 1.00		\$ 1.00		
3.0-3.5 hours	\$ 9.00	\$ 5.00	\$ 5.00		\$ 8.00	\$ 5.00		\$ 4.00	\$ 2.00		\$ 2.00		
3.5-4.0 hours	\$ 9.00	\$ 6.00	\$ 6.00		\$ 8.00	\$ 5.75		\$ 5.00	\$ 2.00		\$ 2.00		
4.0-5.0 hours	-	\$ 7.00	\$ 7.00		\$ 10.00	\$ 7.25		\$ 6.00	\$ 3.00		\$ 3.00		
5.0-6.0 hours	-	\$ 8.00	\$ 8.00		\$ 10.00	\$ 8.75		\$ 7.00	\$ 4.00		\$ 4.00		
6.0-7.0 hours	-	\$ 9.00	\$ 9.00		\$ 12.00	\$ 10.00		\$ 8.00	\$ 5.00		\$ 5.00		
7.0-8.0 hours	-	\$ 10.00	\$ 10.00		\$ 12.00	\$ 10.00		\$ 8.00	\$ 6.00		\$ 6.00		
8.0-10.0 hours	-	\$ 10.00	\$ 10.00		\$ 14.00	\$ 10.00		\$ 8.00	\$ 8.00		\$ 7.00		
10.0-12.00 hours	-	\$ 10.00	\$ 10.00		\$ 16.00	\$ 10.00		\$ 8.00	\$ 12.00		\$ 8.00		
12.00-24.00 hours	-	\$ 10.00	\$ 10.00		\$ 22.00	\$ 10.00		\$ 8.00	\$ 24.00		\$ 8.00		
MONTHLY PERMITS													
5-day (M-F)/Tenant	n/a	\$ 80.00	\$ 80.00	n/a	n/a	\$ 35.00	n/a	\$ 80.00	\$ 85.00	n/a	\$ 110.00	n/a	n/a
6-day (M-Sat)/Public	n/a	\$ 95.00	\$ 95.00	n/a	\$ 90.00	\$ 100.00	n/a	\$ 95.00	n/a	n/a	n/a	n/a	n/a

Notes:
1. Posted rate is \$5.00 for the 1st hour, \$2.00 each additional hour with a maximum allowable stay of 4 hours.
2. Garage operator recently started advertising a \$7.00/day "Daily Bird" special for commuters.
3. Facility also offers a flat rate (\$3.75/vehicle) for nights and weekends. Garage also contains parking for Merchant's Bank section @ \$300.00/month.
4. Facility has a multi-space meter which collects \$0.50/hour with no limit on length of stay.
5. Monthly permits are available in the Browns lot for \$55.00/month.

Private Off-Street (Publicly Available)

Rates for publicly available, privately owned parking resources vary. There are a wide range of surface lots and parking garages that are available for public use in the downtown, and each parking resource has its own fee structure and enforcement rules and regulations. The Courthouse Plaza and Cornerstone Building Garages are open to the general public, although they see substantially lower patronage than the other public garages in the area. Rates vary widely between these facilities, with the Burlington Town Center having the most aggressively priced structure in the area for transient use. The Park Plaza/ICF Garage (107 spaces) is a private facility during the day, but opens to the general public on nights and weekends for a rate of \$3.00/vehicle. In these instances, an attendant collects payment on entry. Similarly, the 359-space Gateway Center Garage, located near the waterfront, also advertises public parking for a fee on nights and weekends, but the signage indicating such is of such poor quality and placement, the facility is only marginally used during off-peak periods. Additionally, the current revenue control equipment serving this facility is in poor repair and appeared to be malfunctioning on several site visits,

2.3. Parking Utilization

Parking utilization or occupancy is a common measure for determining the adequacy of a city's parking supply. By documenting the utilization of spaces during various periods of time and on various days of the week, it is possible to determine the peak demand period and how different types of parking spaces are used throughout a day. Analysis of existing parking demand can be used to evaluate the current adequacy of the parking supply, as well as the anticipated adequacy of the parking supply in the future, based on projected growth and development downtown.

In order to get a complete picture of parking demand downtown, occupancy surveys of all of the spaces in the study area – on-street, public and private spaces – were conducted on seven days in July and September of 2014. The July surveys were conducted on Saturday the 12th, Sunday the 13th, Friday the 18th, and Saturday the 19th. The September surveys were conducted on Thursday the 25th, Saturday the 27th and Sunday the 28th. Multiple weekend surveys were conducted in order to observe parking demand conditions on a typical weekend when a special event would not skew demand, as well as during a special event to determine the ability of the parking supply to handle event-driven surges in demand.

2.3.1. Weekdays

The pattern of parking utilization on a weekday in most downtowns consists of increasing utilization in the morning toward a peak, typically between 11AM and 1PM, with a steady decline in utilization as the daytime moves to evening. In some cases, there is also a slight bump in parking utilization on weekdays, particularly at on-street spaces, around the dinner hour.

Occupancy at the off-street parking facilities and for the parking supply as a whole in the downtown was observed to follow this typical pattern. Additionally, as one would expect in a downtown containing the dining and nightlife options enjoyed by downtown Burlington, the utilization of on-street parking followed the same pattern as the off-street until around 4PM, at which time the utilization of spaces increased steadily toward the dinner hour.

The following sections present a detailed look at the pattern of utilization observed in downtown Burlington during the weekday survey.

2.3.1.1. *July*

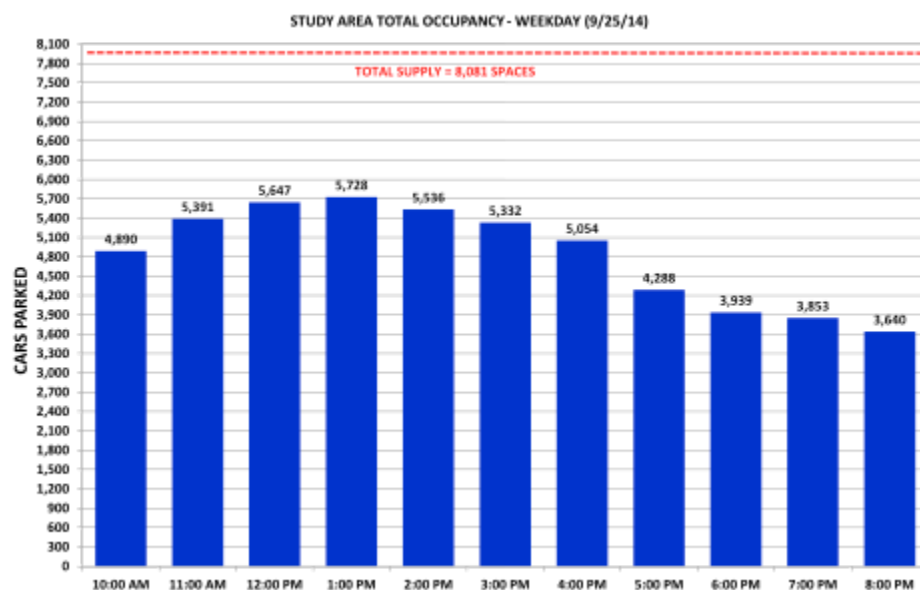
A survey of weekday parking activity was not conducted as part of the July surveys. Parking utilization in a downtown commonly decreases in the summer months as downtown workers take vacation. In addition, given the proximity of downtown to the University of Vermont, the large student population that contributes to downtown parking demand is not present in July. Because of these factors, it was determined that a weekday survey conducted in July would not markedly contribute to the analysis of typical parking activity in downtown Burlington. There is an inventory for Friday July 18th in Appendix 2.7.

2.3.1.2. *September*

On Thursday, September 25, 2014, occupancy surveys of all parking spaces within the study area were conducted between the hours of 10AM and 8PM. This data is summarized and presented in **Figures 12-15**, below. Observed weekday utilization by zone can be found in the [Appendix. 2-2](#)

On the day of the survey, observed parking utilization peaked at 1 PM when 5,728 vehicles were parked in downtown Burlington, occupying approximately 71% of the total supply of parking and leaving 2,353 spaces available. Over the course of the survey period, occupancy averaged about 60% throughout the study area.

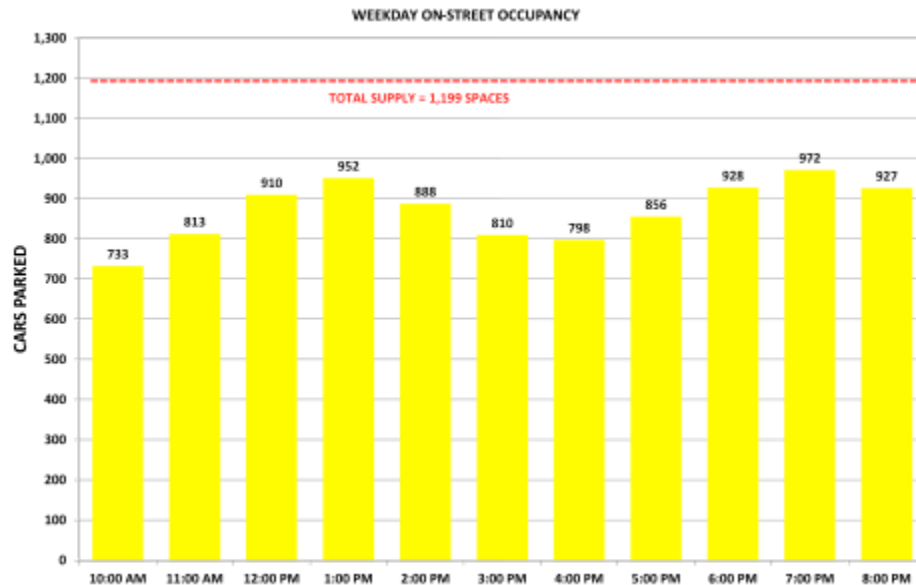
Figure 2-12 Overall Downtown Parking Utilization, Thursday, September 25th, 2014



Source: DESMAN

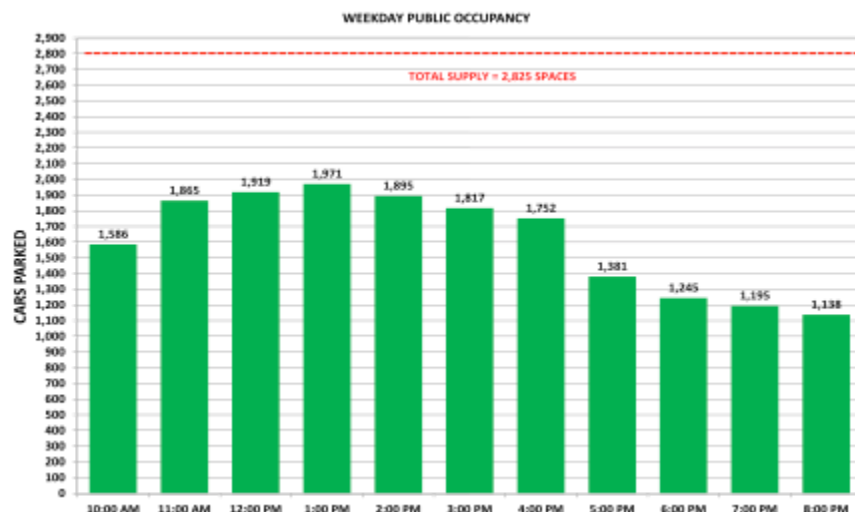
The supply of on-street parking in downtown experienced higher peak and average utilization than the overall supply. As shown in **Figure 13**, on the survey day, on-street utilization peaked at 7 PM when approximately 81% of the spaces (972 out of 1,199) were occupied; during the 1 PM city-wide peak demand hour, 79% of the on-street spaces were occupied. Over the course of the survey day, on-street space utilization averaged 73%, with average occupancy of 66% at Metered Spaces, 68% at Time-Limited Spaces, 47% at Residential Permit Spaces, and 92% at Unrestricted Spaces.

Figure 2-13 On-Street Parking Utilization, Thursday, September 25th, 2014



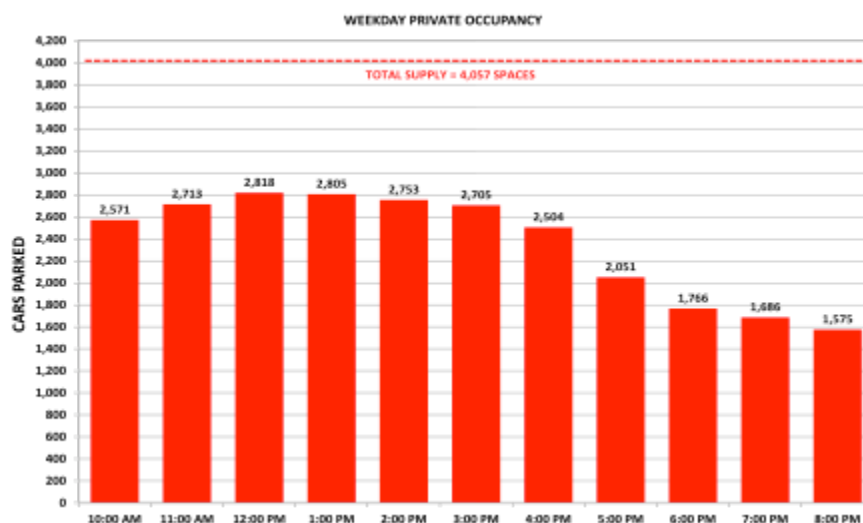
Source: DESMAN

In most downtowns, one would expect occupancy to peak at mid-day, when office workers are present, and decline in the evening. In Burlington, there is a mid-day peak, but demand rises substantially after 4 PM, actually peaking at 7 PM. This is common in areas with concentrations of residential, retail or entertainment, but is rarely seen across the whole of a central business district. It is DESMAN's contention that occupancy rises in the afternoon in anticipation of the conclusion of enforcement activities at 6 PM and is driven primarily by users seeking to avoid paying for parking as opposed to an overall increase in activity across the entire area.



Public (Off-Street) Parking Utilization, Thursday, September 25th , 2014

Figure 2-14 Source: DESMAN



Private (Off-Street) Parking Utilization, Thursday, September 25th, 2014

Figure 2-15 Source: DESMAN

As seen in Figure 12, on the day of the survey, observed parking utilization peaked at 1PM when 5,728 vehicles were parked in downtown Burlington, occupying approximately 71% of the total supply of parking. Over the course of the survey period, occupancy averaged about 60% throughout the study area.

The supply of on-street parking downtown experienced higher peak and average utilization than the overall supply. As shown in Figure 13, on the survey day, on-street utilization peaked at 7PM when approximately 81% of the spaces (972 out of 1,199) were occupied; during the 1PM city-wide peak demand hour, 79% of the on-street spaces were occupied. Over the course of the survey day, on-street space utilization averaged 73%, with average occupancy of 66% at metered spaces, 68% at time-limited spaces, 47% at residential permit spaces, and 92% at unrestricted spaces.

Utilization of the public and private off-street facilities closely mirrored the utilization of the total supply of parking in the study area. As shown in Figures 14 and 15, the utilization of the public parking supply peaked at 1PM, with 70% of the public supply (1,971 out of 2,825 spaces) occupied, while private parking utilization peaked at 12PM, when 69% of the private supply (2,818 out of 4,057 spaces) was occupied. Additionally, occupancy of the public parking supply averaged 57% over the course of the survey day, while occupancy of the private parking supply averaged 58%.

The results of the parking utilization survey of downtown indicate that, on a typical weekday in the fall, at the 1PM peak hour, 2,923 spaces of the 4,024-space public parking supply were occupied (73%). This means that there are over 1,000 vacant public parking spaces on a typical weekday during peak demand period. In addition, there are another 1,200+/- private spaces unused at the busiest hour of the day.

2.3.1.3. Special Event

Parking utilization downtown was observed during a special event (the Vermont Brewers Festival) on Friday, July 18th and Saturday, July 19th, 2014. Despite the fact that Friday is a weekday, it does not experience the same pattern of activity as other weekdays. Daytime utilization of parking spaces by downtown employees tends to be lower on Fridays than on other weekdays. Additionally, nighttime activity typically picks up on Friday night, unlike other weekdays, making it difficult to determine the impacts of the special event on parking demand versus the demand associated with normal Friday-night activity. For these reasons, the Friday parking utilization survey results will be presented later in the report, alongside the weekend survey results.

2.3.2. Weekends

The pattern of parking utilization on a typical Saturday in most comparably sized downtowns consists of increasing utilization in the morning toward a peak in the early afternoon, followed by a dip in demand in the mid-afternoon and a second peak around dinner time. While the timing of the peaks in utilization on a Saturday commonly follow this pattern, the evening peak can also occur after the dinner hour, depending on the mix of restaurant, bar and entertainment offerings downtown. Based on the survey data, on a non-event Saturday, it appears that the parking activity in Burlington tends to peak later in the evening than less active downtowns.

In addition to the observations of non-event weekend days, as mentioned previously, surveys were also conducted on a weekend during the summer when there was an event downtown. This was done to determine the adequacy of the downtown parking supply during a period of unusually high demand.

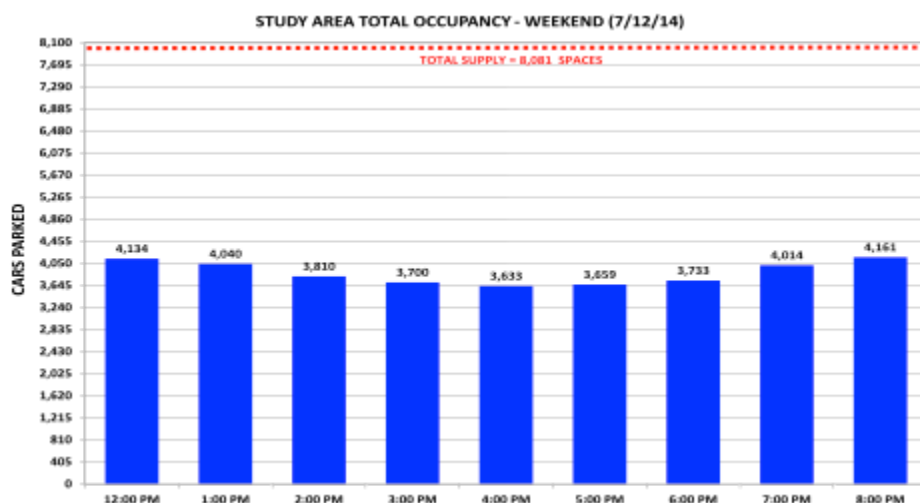
The following sections present a detailed look at the pattern of utilization observed in downtown Burlington during the weekend surveys.

2.3.2.1. July

On Saturday, July 12th and Sunday, July 13th, 2014, occupancy surveys of all parking spaces within the study area were conducted; the Saturday surveys were conducted between the hours of 12PM and 8PM, while the Sunday surveys were conducted between the hours of 11AM and 4PM. These survey periods were chosen based on the typical patterns of utilization, which occur on Saturdays and Sundays, in order to capture the peak demand periods. With input from the City, it was decided that extending the surveys beyond these hours would not yield any additional benefit.

The survey data of utilization by parking type gathered on Saturday, July 12th is summarized and presented in **Figures 16-19**, below, while the Sunday, July 13th data can be found in the [Appendix 2-3](#). Additionally, zone-by-zone utilization data can be found in the [Appendix 2](#).

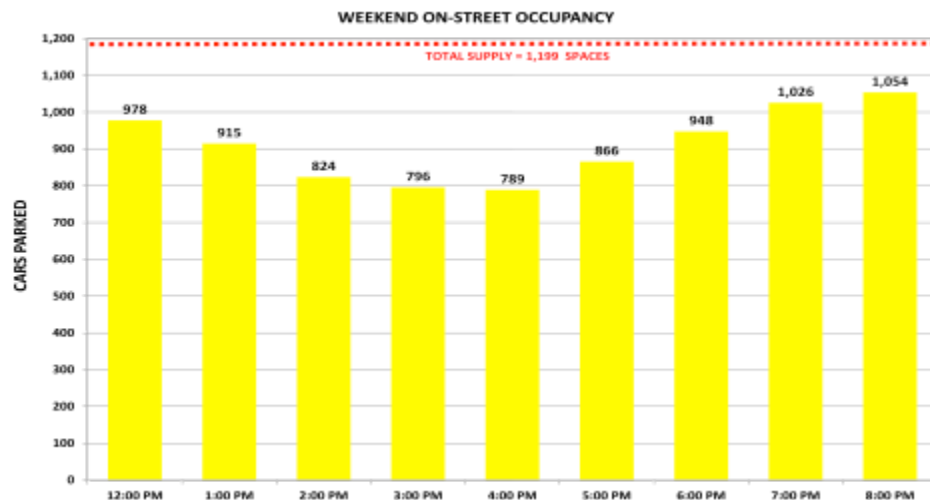
Figure 16, on the day of the survey, observed parking utilization peaked at 8 PM when 4,161 vehicles were parked in downtown Burlington, occupying approximately 51% of the total supply of parking.



Overall Downtown Parking Utilization, Saturday, July 12th, 2014

Figure 2-16 Source: DESMAN

The supply of on-street parking in downtown experienced higher peak and average utilization than the overall supply. As shown in **Figure 17**, on the survey day, on-street utilization also peaked at 8 PM when approximately 88% of the spaces (1,054 out of 1,199) were occupied.



On-Street Parking Utilization, Saturday, July 12th, 2014

Figure 2-17 Source: DESMAN

As shown in Figures 17 and 18, the utilization of the public parking supply peaked at 8 PM, with 52% of the public supply (1,475 out of 2,825 spaces) occupied, while private parking utilization peaked at 12 PM, when 42% of the private supply (1,699 out of 4,057 spaces) was occupied.

Public (Off-Street) Parking Utilization, Saturday, July 12th, 2014

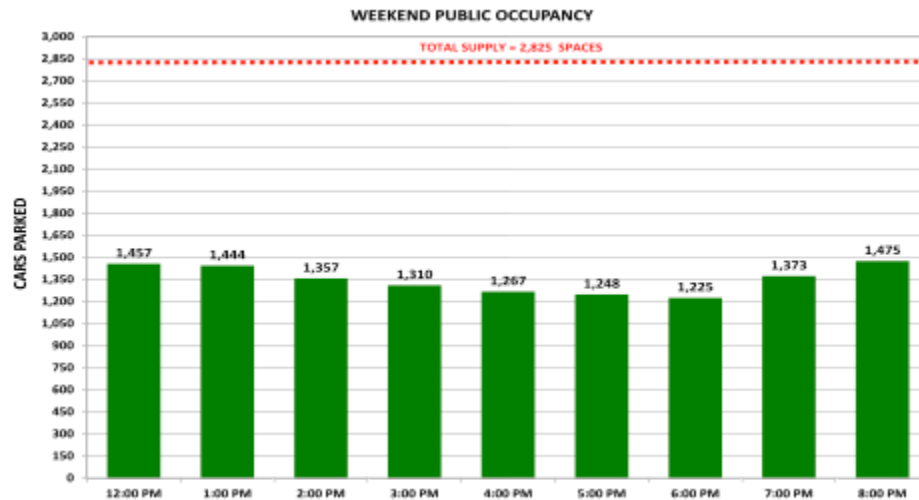


Figure 2-18 Source: DESMAN

Private (Off-Street) Parking Utilization, Saturday, July 12th, 2014

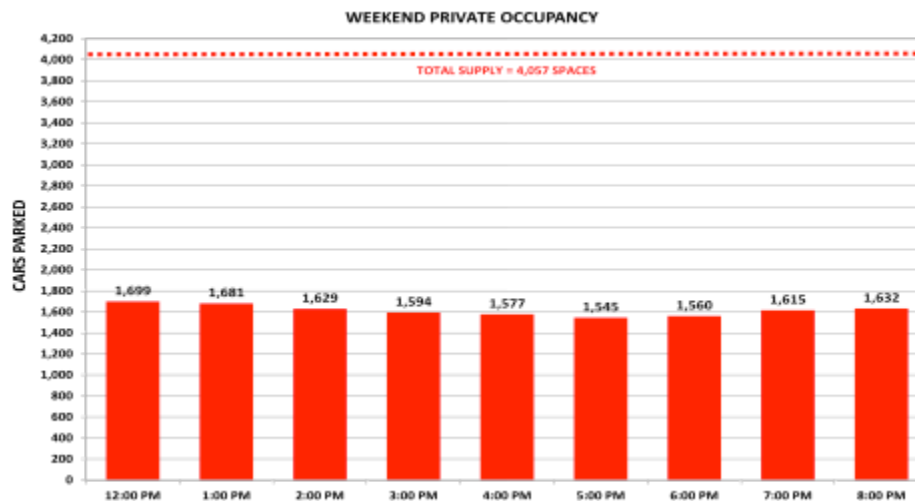


Figure 2-19 Source: DESMAN

As seen in Figure 16, on the day of the survey, parking utilization peaked at 8PM when 4,161 vehicles were parked downtown, occupying approximately 51% of the total supply of parking. Over the course of the survey period, occupancy averaged about 48% throughout the study area. On-street parking spaces had an average occupancy rate of 76% across the survey day. Occupancy of the public parking supply averaged 48% over the course of the survey day, while occupancy of the private parking supply averaged 40%. Overall, DESMAN observed significant availability across each segment of the supply and within all four zones of the study area. There were individual facilities, such as the Marketplace and Town Center Garages, that were highly utilized at times, contributing to the perception a parking shortage, but DESMAN did not observe any actual shortfall of parking anywhere in the area.

The results of the parking utilization survey of downtown Burlington indicate that, on a typical non-event Saturday in the summer, at the 8 PM peak hour, only about half the total supply is being used. In public facility, 2,529 spaces of the 4,024-space public parking supply were occupied (63%). This means that there are nearly 1,500 vacant public parking spaces on a typical Saturday during the peak demand period. In private facilities, only 1,632 of 4,057 spaces were occupied (40%), with over 2,400 spaces available. The supply of on-street parking in downtown experienced higher peak and average utilization than the overall supply. As shown in Figure 17, on the survey day, on-street utilization also peaked at 8PM when approximately 88% of the spaces (1,054 out of 1,199) were occupied. Over the course of the survey day, on-street space utilization averaged 76%, with average occupancy of 80% at metered spaces, 63% at time-limited Spaces, 33% at residential permit spaces, and 91% at unrestricted spaces.

Compared to the utilization of the public and private off-street facilities during the weekday survey period, utilization of these spaces was, not surprisingly, much lower on Saturday. This lower weekend utilization is expected, as far fewer downtown employees drive to and park at their place of employment on the weekend. Short-term weekend parkers tend to park in available on-street spaces before parking off-street, contributing to the lower utilization of public off-street spaces on weekends.

As shown in Figures 18 and 19, the utilization of the public parking supply peaked at 8PM, with 52% of the public supply (1,475 out of 2,825 spaces) occupied, while private parking utilization peaked at 12PM, when 42% of the private supply (1,699 out of 4,057 spaces) was occupied. Additionally, occupancy of the public parking supply averaged 48% over the course of the survey day, while occupancy of the private parking supply averaged 40%.

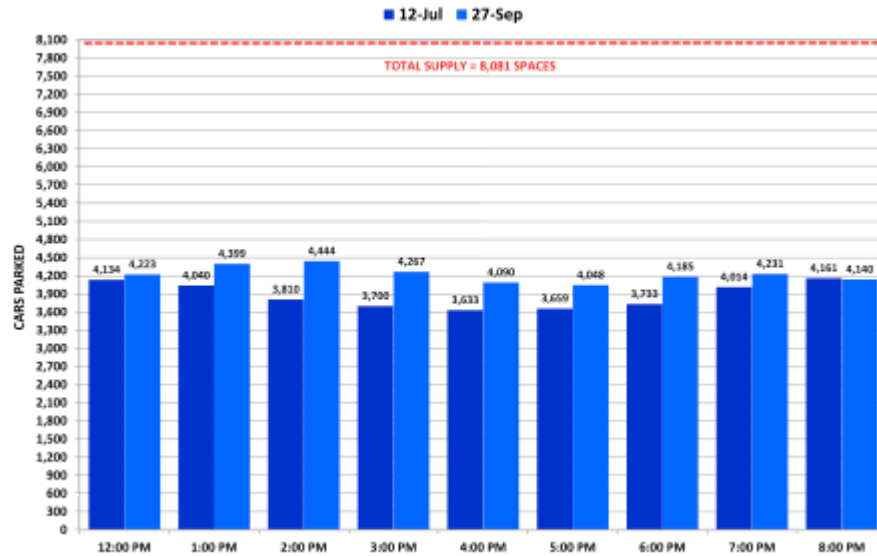
The results of the parking utilization survey of downtown indicate that, on a typical non-event Saturday in the summer, at the 8PM peak hour, 2,529 spaces of the 4,024-space public parking supply were occupied (63%). This means that there are nearly 1,500 vacant public parking spaces on a typical Saturday during peak demand.

2.3.2.2. September

To get a sense of weekend parking activity downtown when the University of Vermont is in session, additional utilization surveys were conducted on Saturday, September 27th and Sunday, September 28th, 2014 to evaluate any seasonal fluctuations in observed occupancy and utilization rates on weekends. As with the July surveys, occupancy counts of all parking spaces within the study area were conducted on Saturday between the hours of 12PM and 8PM, while the Sunday surveys were conducted from 10AM to 4PM.

The survey data of utilization by parking type gathered on Saturday, September 27th is summarized and

presented in **Figures 20-23**, while the Sunday, September 28th data can be found in the [Appendix 2-5](#). Additionally, Friday and Saturday zone-by-zone utilization data can be found in the [Appendix 2](#).



Overall Downtown Parking Utilization, Saturday, September 27th, 2014

Figure 2-20 Source: DESMAN

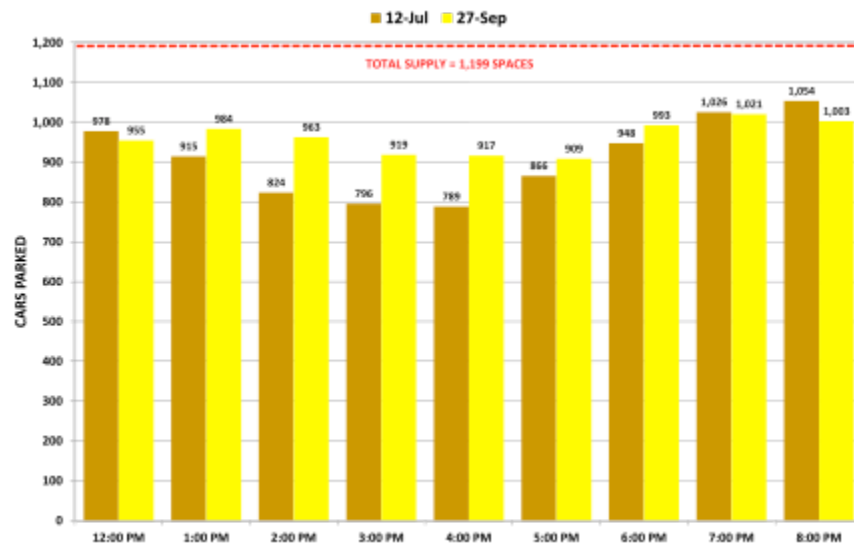


Figure 21 – On-Street Parking Utilization, Saturday, September 27th, 2014

Figure 2-21 Source: DESMAN

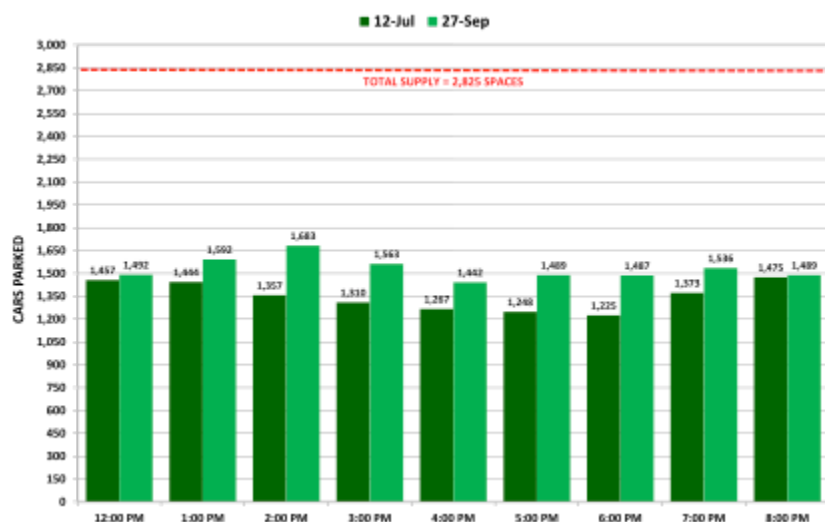


Figure 22 – Public (Off-Street) Parking Utilization, Saturday, September 27th, 2014

Figure 2-22 Source: DESMAN

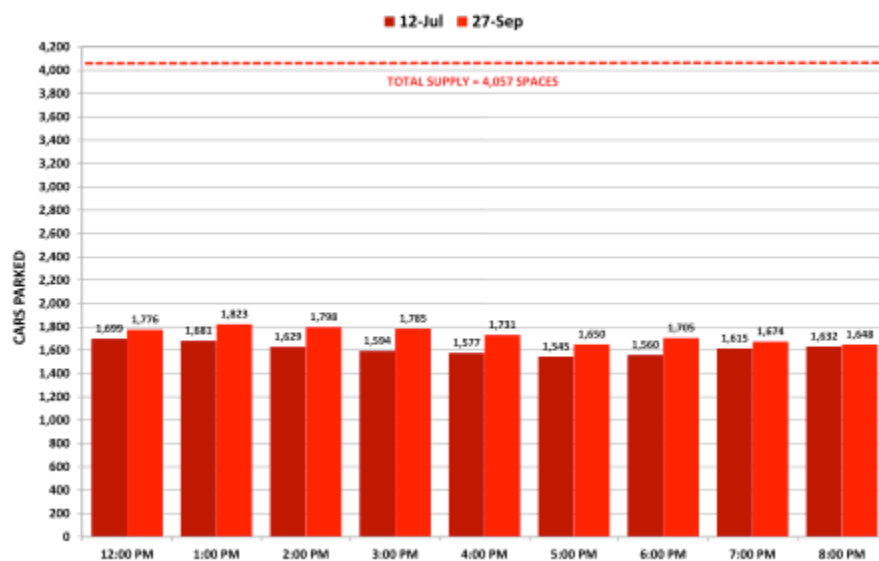


Figure 23 – Private (Off-Street) Parking Utilization, Saturday, September 27th, 2014

Figure 2-23 Source: DESMAN

As seen in Figure 20, parking utilization peaked at 2PM when 4,444 vehicles were parked downtown, occupying approximately 55% of the total supply of parking and leaving 3,637 spaces available. As the figure shows, activity in across the area was higher in September than July. Additionally, DESMAN noted that the peak hour for a weekend day in September occurred mid-afternoon instead of late evening, as observed in July. DESMAN hypothesized that, with the local universities in session, there was a higher presence of study area residents and more daytime activity than observed during the summer months, when both tourists and local flock to downtown in search of entertainment. Over the course of the survey period, occupancy averaged about 52% throughout the study area.

On-street utilization patterns, shown in **Figure 20**, reflect the same overall trends, with peak demand occurring earlier in the day in September at 7 PM versus 8 PM in July. At the peak hour, 85% of the on-street supply was utilized. Again, on this survey day, the supply of on-street parking in downtown experienced significantly higher peak and average utilization than the overall supply. As shown in Figure 21, on-street utilization peaked at 7PM when approximately 85% of the spaces (1,021 out of 1,199) were occupied. Over the course of the survey day, on-street space utilization averaged 80%, with average occupancy of 83% at metered spaces, 74% at time-limited spaces, 58% at residential permit spaces, and 94% at unrestricted spaces.

As illustrated in **Figure 21**, utilization of public parking facilities was also much higher in September than July, and also reflected a shift in the peak hour from evening to mid-day. Utilization averaged 54% on the day and there were roughly 1,300 available spaces in public facilities at any given hour. As shown in Figures 22 and 23, the utilization of the public parking supply peaked at 2PM, with 60% of the public supply (1,683 out of 2,825 spaces) occupied, while private parking utilization peaked at 1PM, when 45% of the private supply (1,823 out of 4,057 spaces) was occupied. Additionally, occupancy of the public parking supply averaged 54% over the course of the survey day, while occupancy of the private parking supply averaged 43%.

Finally, utilization of private facilities was also greater in September, as compared to July, but similarly stable throughout the day. Utilization averaged 43% on the day and there were roughly 2,300 available spaces in private facilities at any given hour. When comparing the July and September utilization data, there is a noticeable shift in the overall peak demand hour from 8PM in July to 2PM in September. Additionally, peak parking utilization increased from 51% in July to 55% in September. This shift in the peak demand hour and the higher peak utilization are likely attributable to the large student and University employee populations present in Burlington during the September survey that were not present in July. Patronage of restaurant and retail establishments by these population groups during the day on Saturday is likely the cause of the shift in the peak demand hour.

Despite the fact that the September survey revealed overall weekend peak parking utilization that was higher than that recorded in July, there was still an abundance of public parking available on the

fall survey day. At the 2PM peak hour, 2,646 spaces of the 4,024-space public parking supply were occupied (66%), leaving almost 1,400 public on- and off-street parking spaces vacant during the period of highest demand.

2.3.2.3. Special Event

The Vermont Brewers Festival on Friday, July 18th and Saturday, July 19th, 2014 brought nearly 50 brewers to Waterfront Park for 3 separate tasting sessions – one Friday night and two Saturday – with each session hosting approximately 2,800 people. To gauge the ability of the existing public parking supply to satisfy increased demand due to this event, parking utilization surveys were conducted. On Friday the 18th, occupancy counts of all on-street and public parking spaces were conducted from 10AM to 8PM to capture daytime demand associated with weekday business activity, and event demand in the evening. As with the other Saturday surveys, the July 19th surveys were conducted from 12PM to 8PM.

DESMAN did not perform formal field surveys on another Friday during the course of this engagement, so conditions observed on Friday, July 18 were compared to those recorded on Thursday, September 24. During normal business hours (i.e. 8 AM to 4 PM), average utilization across the study area was only 1% greater on the opening day of the Brewer's Festival than it was on a typical fall weekday. However, in the evening (eg. 5 PM to 8 PM), the average utilization rate across the entire study area was 24% higher than the same time on the fall weekday and represented roughly 3,700 more parked vehicles during this time span than recorded during the same period on September 24th. Detailed observations recorded on Friday, July 18th can be examined as [Appendix 2-7](#) Utilization surveys of the private parking supply were also conducted on these two days, but the analysis which follows only deals with the on-street and public parking supply; the complete private parking data for these two days can be found in the [Appendix 2](#).

Figures 24-27 on the following pages illustrate the comparison of conditions observed on Saturday, July 19th – the second day of the Vermont Brewer's Festival – to those observed on Saturday, July 12th and Saturday, September 27th. Details regarding field observations conducted on July 19th can also be reviewed in [Appendix 2-9](#). **Figures 24** and **25** show the utilization of the on-street parking supply and public parking supply, respectively, on Friday, July 18th. **Figures 26** and **27** show the utilization of the on-street parking supply and public parking supply, respectively, on Saturday, July 19th.

As shown in Figure 23, peak hour across the study area occurred at 1 PM on Saturday the 18th, with 5,004 cars parked, occupying 62% of total capacity, leaving just 3,077 spaces open. DESMAN counted 6,776 more cars during the course of the day than inventoried on the prior Saturday (7/12/15) during the same time period. When compared to the same time period for Saturday, September 27th, DESMAN counted 3,633 more cars on July 19th.

Utilization of on-street spaces peaked at 92% with 1,104 cars parked at 7 PM against 1,199 spaces, as shown in Figure 24. On average there were roughly 100 more vehicles parked in on-street spaces each hour than were observed on the prior Saturday and 55 more than observed each hour in the fall.

Roughly 3,300 more vehicles parked in public off-street facilities than the prior Saturday. Peak demand occurred at 2 PM, as shown in Figure 25, with 1,943 vehicles parked in 2,825 spaces, occupying 69% of the total public supply, but still leaving 882 spaces available. The greatest amount of additional occupancy appeared to be focused in the Lakeview and College Street Garages.

Roughly 2,450 more vehicles parked in private off-street facilities than the prior Saturday. Peak demand occurred at 1 PM, as shown in Figure 26, with 2,201 vehicles parked in 4,057 spaces, occupying 50% of the total public supply, but still leaving 2,036 spaces available. This increase in demand was largely due to several private lots and garages near the waterfront opening to the general public for the event and collecting cash on entry for allowing vehicles to park in the facilities.

Total Parking Utilization, Saturday, July 19th, 2014

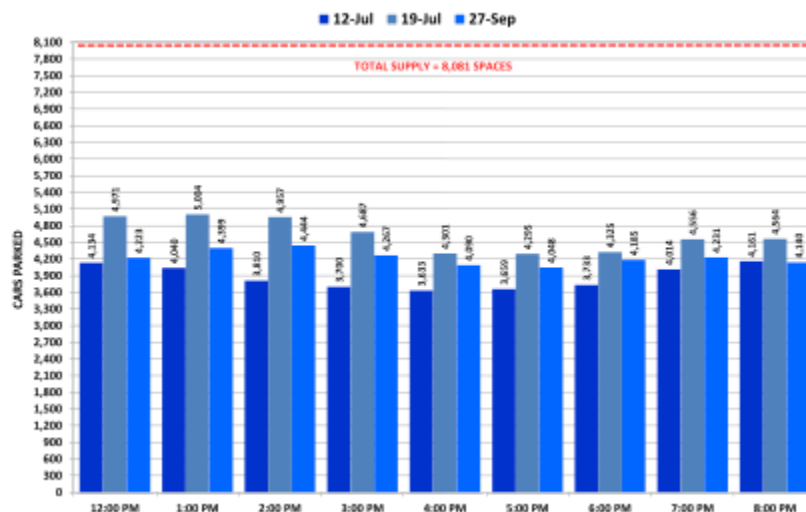


Figure 2-24 Source: DESMAN

On-Street Parking Utilization, Saturday, July 19th, 2014

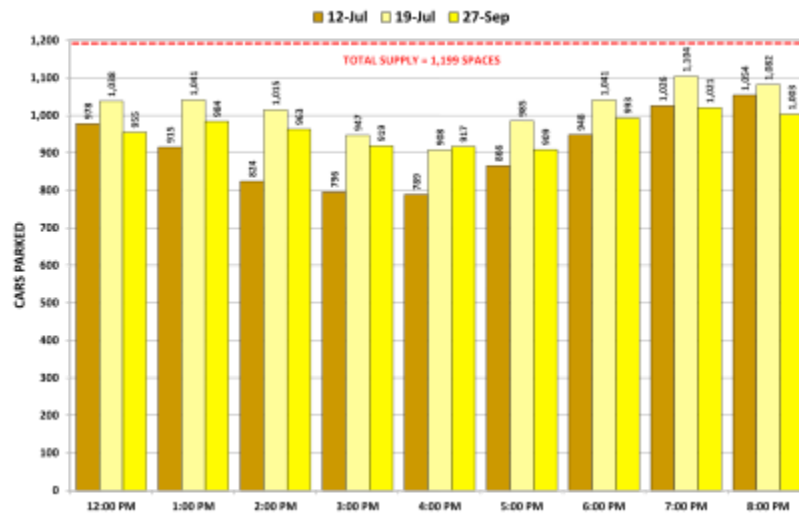


Figure 2-25 Source: Desman

Public (Off-Street) Parking Utilization, Saturday, July 19th, 2014

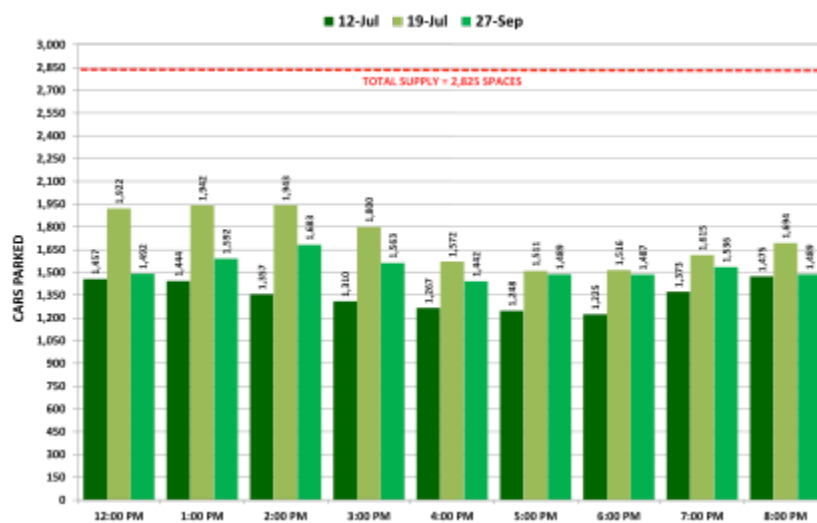


Figure 2-26, Source: DESMAN

Private (Off-Street) Parking Utilization, Saturday, July 19th, 2014

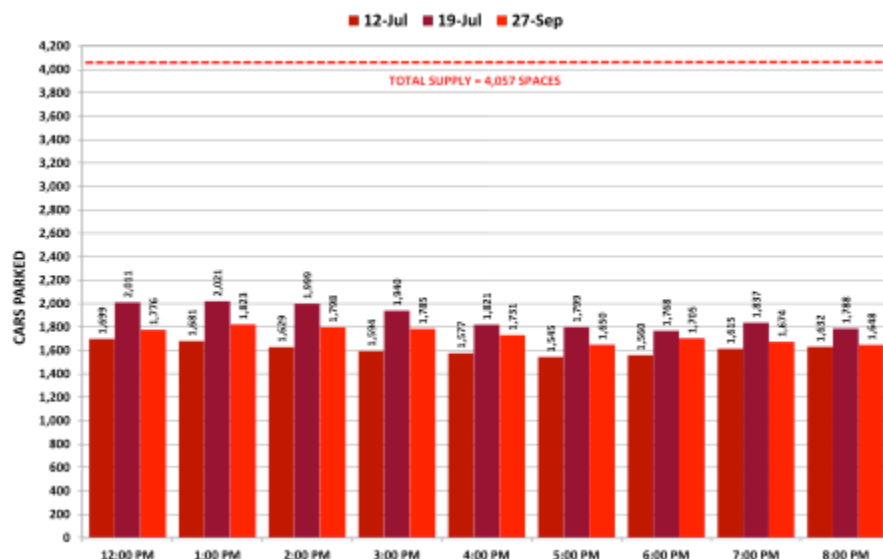


Figure 27, Source: DESMAN

As shown in Figure 24, on-street parking utilization peaked at 1,167 vehicles at 7PM on Friday (97% occupancy). Figure 25 shows that public off-street parking peaked at 2,090 vehicles at 2PM (74% occupancy). Figure 26 shows that on Saturday, July 19th, on-street parking utilization peaked at 1,104 vehicles at 7PM (92% occupancy), while Figure 27 shows that public off-street parking peaked at 1,943 vehicles at 2PM (69% occupancy).

The overall peak utilization of on-street and public off-street spaces on Friday, July 18th occurred at 2PM when 3,081 of the 4,024 spaces were occupied. On Saturday, peak utilization occurred at 1PM when 2,983 spaces were occupied. This data indicates that, while on-street space utilization reached 97% and 92% on Friday and Saturday, respectively, the overall peak utilization of the on-street and public off-street parking supply was only 77% and 74%, respectively.

Despite the fact that there was a major event in downtown Burlington on this Friday and Saturday, there were still approximately 950 and 1,050 unoccupied on-street and public off-street parking spaces available during the Friday and Saturday peak demand periods, respectively.

2.4. Length of Stay and Turnover Observations

Utilization, the measure of the number of cars parked at a given time against the capacity of a facility or area, is one measure of activity within a parking system and provides insight into which facilities may be over- or underused. However, counting cars hour-by-hour provides no insight into the volume of vehicles coming in and out of a facility or area. Without special observation it is impossible to

know if the utilization levels recorded during field work reflect hundreds of cars coming in and out of a facility, or the same hundred cars parked for the length of a typical day.

Length of stay is of particular concern in downtowns where it applies to curbside parking. This parking is most coveted by first-time or infrequent visitors to an area as it allows them to locate a destination first, then park within sight of the establishment or institution which drew them downtown. Municipal best practices advocate for setting policies which maintain a 15% vacancy rate on a given block face, so that these discretionary users can easily find a parking space near their destination, be accommodated, and conduct commerce within the central business district. In addition to ensuring a reasonable vacancy rates, policies are also set to encourage turnover in curbside parking spaces.

In order to measure length of stay and turnover, DESMAN conducted license plate inventories along select streets in downtown Burlington as part of field observations performed Thursday, September 25th between 10 AM and 8 PM and Saturday, September 27th between 12 PM and 8 PM. In each instance, DESMAN assigned personnel to walk the length of each street between identified cross streets, recording whether a vehicle was parked in each parking space each hour and recording the license plate number of the vehicle parked in the space. DESMAN then analyzed this data to determine how many cars parked in each space observed during the survey day and how long each vehicle was parked in the space.

The 284 spaces that DESMAN surveyed were largely covered with ‘blue’ (3-hour) meters at the time. These meters were replaced with ‘Smart Meters’ shortly after DESMAN conducted their surveys.

2.4.1. Weekday

On the surveyed weekday, DESMAN observed a total of 715 vehicles parked in 284 parking spaces during the course of the survey day (10 AM – 8 PM). Average turnover ranged from as high as 3.49 vehicles per space (per day) along Bank Street to as low as 1.53 vehicles per space (per day) along Cherry Street. The average length of stay varied as well, from 3.81 hours down to 2.48 hours. Across the surveyed area, DESMAN calculated an average length of stay of 2.45 hours and an average turnover rate of 2.52 vehicles per space, per day, as shown in **Table 4**.

Table 2-4 Weekday (9/25/14) Length of Stay and Turnover Observations

Street	Starting X-Street	Ending X-Street	Space Inventory	Total Cars/Day	1	2	3	4	5	6	7
Bank Street	Pine	S. Winooksi	45	157	45	41	33	18	11	6	3
Center Street	College	Bank	13	27	7	5	8	5	1	1	0
Cherry Street	Pine	S. Winooksi	38	58	11	22	15	5	3	0	1
College Street	Pine	S. Winooksi	44	92	19	26	21	19	3	1	2
Main Street	Pine	S. Winooksi	55	190	54	72	36	20	5	1	1
Pine Street	Bank	Main	37	91	23	25	21	14	5	1	0
St. Paul Street	Bank	Main	52	100	21	42	25	7	1	0	3
TOTALS			284	715	180	233	159	88	29	10	1

Source: DESMAN

Roughly 80% of the vehicles observed during the course of the survey day were parked for 3 hours or less, while almost 20% were parked for more than 3 hours. As previously noted, the majority of the parking spaces across this area were subject to a 3-hour maximum time limit, indicating that the majority of parkers were in compliance with posted policy.

2.4.2. Weekend

Weekend turnover rates were significantly lower than those observed on weekdays and length of stay was more than a half-hour longer, as shown in **Table 5**.

Street	Starting X-Street	Ending X-Street	Space Inventory	Total Cars/Day	1	2	3	4	5	6	7	Average (Hrs/Pkd)	Average Turnover
Bank Street	Pine	S. Winooksi	45	82	12	18	13	17	9	8	5	3.45	1.82
Center Street	College	Bank	13	17	4	5	4	1	2	0	1	2.76	1.31
Cherry Street	Pine	S. Winooksi	38	45	3	5	18	15	1	3	0	3.33	1.18
College Street	Pine	S. Winooksi	44	70	9	16	23	14	5	2	1	3.00	1.59
Main Street	Pine	S. Winooksi	55	103	16	24	35	19	3	4	2	2.89	1.87
Pine Street	Bank	Main	37	54	7	15	18	11	1	2	0	2.81	1.46
St. Paul Street	Bank	Main	52	59	7	12	17	17	3	1	2	3.14	1.13
TOTALS			284	430	58	95	128	94	24	20	11	3.08	1.51

Table 2-5 Weekend (9/27/14) Length of Stay and Turnover Observations

Source: DESMAN

On the surveyed weekday, DESMAN observed a total of 430 vehicles parked in 284 parking spaces during the course of the survey day (12 9M – 8 PM). Average turnover was significantly lower than observed on the weekday, with each space in the surveyed area only accommodating roughly 1.5 cars during the course of the day. The average length of stay varied from 3.45 hours down to 2.81 hours, but the calculated an average length of stay was 3.08 hours. Only 65% of the vehicles observed during the course of this survey day were parked for 3 hours or less, while 35% were parked for more than 3 hours. This variance, relative to weekday observations, suggests a lower rate of compliance with posted policies.

2.4.3. Post Smart-Meter Installation

In November 2014, the City replaced the meters across DESMAN's survey area with 'Smart Meters', which would accept credit or debit cards as payment in addition to cash. The City also elected to change policy to eliminate time limits on these meters, but raised the rate to park at the meters by \$0.50/hour to encourage reasonable turnover and maintain target occupancy rates.

DESMAN did not perform license plate inventories subsequent to the installation of 'Smart Meters' across the survey area, but was provided access to the reporting functions on each of the meters. These functions recorded every transaction occurring at every Smart Meter according to time of day that payment was made and length of stay, which was purchased. It is DESMAN's contention that, with no time limits prescribed for these meters, the length of time each consumer buys is a reasonable proxy for actual length of stay. To this end, DESMAN analyzed all the transactions occurring on a busy weekday during the holiday shopping season (12/18/14) and a typical weekday, post-holidays (1/10/15).

As with the license plate inventories, DESMAN observed a broad range of purchased length of stay, from less than hour to in excess of 8 hours. However, on average the maximum length of stay purchased was just over 3 hours and the minimum was just under 30 minutes. The average purchase on both days was roughly 1.5 hours, with purchases made during the holidays being slightly longer as shown in **Table 6**.

Table 2-6 – Purchased Lengths of Stay in Smart Meters

THURSDAY, 12/18/2014					SATURDAY, 1/10/2015				
Street Name	# of Meters	Avg. Min	Avg. Max	Avg. Total	Street Name	# of Meters	Avg. Min	Avg. Max	Avg. Total
Bank St.	45	00:27:21	03:14:40	01:26:47	Bank St.	45	00:25:11	03:12:41	01:26:26
Center St.	13	00:29:32	03:33:03	01:41:51	Center St.	13	00:24:30	02:58:13	01:22:13
Cherry St.	38	00:22:19	02:36:59	01:14:21	Cherry St.	38	00:21:20	02:53:51	01:19:13
College St.	44	00:19:35	03:17:01	01:21:35	College St.	44	00:23:08	03:17:23	01:30:17
Main St.	55	00:20:04	03:27:45	01:27:48	Main St.	55	00:28:00	03:12:54	01:26:43
Pine St.	37	00:28:50	03:28:45	01:40:29	Pine St.	37	00:41:10	02:36:55	01:30:04
St. Paul St.	52	00:29:58	03:36:27	01:45:24	St. Paul St.	52	00:21:30	03:06:24	01:25:32
Total Avg		00:25:23	03:19:14	01:31:11	Total Avg		00:26:24	03:02:37	01:25:47

Source: DESMAN

The system could not provide data on turnover, but field counts performed by the Burlington Business Association in March 2015 suggest that the new meters are meeting the City's targets for space availability on weekdays and weekends as shown in Table 7.

Table 2-7 Smart Meter Occupancy Observations (March 2015)

Street	Starting	Ending	Pole	Meter	Weekday Occupancy (3/12/15)			Weekend Occupancy (3/15/15)		
	X-Street	X-Street	Numbers	Inventory	11:00 AM	6:00 PM	8:00 PM	11:00 AM	6:00 PM	8:00 PM
Bank Street	Pine	S. Winooski	Q001-Q045	45	32	33	23	36	33	28
<i>Utilization Rate:</i>					71%	73%	51%	80%	73%	62%
Center Street	College	Bank	H001-H013	13	11	11	10	13	13	9
<i>Utilization Rate:</i>					85%	85%	77%	100%	100%	69%
Cherry Street	Pine	S. Winooski	O001-O87A	38	36	35	26	38	33	29
<i>Utilization Rate:</i>					95%	92%	68%	100%	87%	76%
College Street	Pine	S. Winooski	R043-R126	44	41	29	31	41	40	37
<i>Utilization Rate:</i>					93%	66%	70%	93%	91%	84%
Main Street	Pine	S. Winooski	S047-S167	55	39	38	30	41	43	31
<i>Utilization Rate:</i>					71%	69%	55%	75%	78%	56%
Pine Street	Bank	Main	K013-K059	37	31	29	29	33	33	27
<i>Utilization Rate:</i>					84%	78%	78%	89%	89%	73%
St. Paul Street	Bank	Main	J008-J109	52	52	43	33	43	47	41
<i>Utilization Rate:</i>					100%	83%	63%	83%	90%	79%
TOTAL				284	242	218	182	245	242	202
<i>Utilization Rate:</i>					85%	77%	64%	86%	85%	71%

Source: Burlington Business Association

In summary, DESMAN believes the new meters are meeting policy targets set for the City and promoting lengths of stay and space turnover conducive to maintaining a positive, welcoming downtown for residents and visitors.

2.5. Conclusions

- Based on the public and private parking utilization counts completed on a mix of weekday, weekend, and special event days for the downtown, we can draw a set of conclusions:
- On-street parking is the most well-utilized asset, with occupancy on certain street segments regularly exceeding 90%
- On all seven of the days surveyed, even during peak demand, more than 950 on-street and public (off-street) parking spaces remained unoccupied
- Occupancy of the private parking supply never exceeded 69%; this means that during all of the days surveyed, the excess private parking capacity downtown never fell below 1,200 spaces
- In general, there seems to be a more-than-adequate supply of both public and private parking in downtown
- There are localized instances of parking shortfalls. However, given the excess available capacity at peak, these shortfalls are a function of poor wayfinding to public off-street assets with available space or improper pricing of the on-street spaces
- There may be opportunities for public use of private parking during off-peak (evening and weekend) periods; this would be especially useful in Zones 3 and 4 which have ample private parking, but very limited public off-street parking. Such arrangements could help take the pressure off of on-street parking in these two zones.

3. FUTURE DEMAND

The following section discusses in detail likely development scenarios in Burlington's downtown. Each proposed development has a few key recommendations, and there are also recommendations for new capacity, zoning, and phasing. Some of those include:

- Ensuring all new parking capacity is shared in nature, and right-sized to the proposed development.
- Continue to encourage "parking lite" uses in our downtown - housing for demographics that traditionally use less parking for example.
- Severely reducing or eliminating surface parking lots and street-facing at-grade parking, and replacing with higher or better uses - more dense development, green space, amenities for alternative modes of transportation.
- Encourage master planning at a multi-block level to best utilize shared parking opportunities rather than requiring inefficient and suburban style on-site parking for every new development.
- Encourage more development downtown in order to make a more walkable, vibrant community.
- Change zoning to encourage denser downtown development and more efficient use of existing parking capacity.
- Utilize recommended tools from this report, the Residential Parking Plan, and the Transportation Demand Management Plan to ensure all downtown users and their neighbors' needs are met, while encouraging growth in other modes of transportation.
- Phase the recommended changes strategically so as not to endanger the economic vitality of the downtown.

3.1. Future Development

As we have seen in the previous section, parking supply across Burlington and availability is not evenly distributed. The northwest quadrant of downtown, for instance is currently over-supplied by hundreds of spaces. The southeast corner, in contrast, is near saturated with parking demand for its relatively limited spaces. When considering future development, however, the relationship between supply and future demand is less clear.

By looking at planBTV and consulting with the Community & Economic Development Office (CEDO), future demand for existing and new parking resources can be estimated, in part. Some development seems more likely to occur than others – but this estimation is an inexact science based on the changing nature of development. Will the projected developments really occur? What will the program be, or what uses will be in each development? How will they be phased? Will there be shared parking opportunities or will all of the uses have very specific parking needs that preclude them from more advantageous sharing arrangements? How much current parking capacity can be utilized to support these projected developments? On top of these questions, smart policy makers have to wrestle with whether Burlingtonians and visitors will have the same transportation needs or preferences decades into the future, since any new or rehabilitated parking infrastructure will be paid for over time, and will be a permanent fixture in our downtown. What if the transit system becomes more robust, reliable, and markedly cheaper than automobile commuting? What if driverless cars really are in the future? Or

what if “disruptive” technologies like Uber and Lyft continue to fundamentally change the ways we get around? If any or all of those occur, policy makers may regret some of the parking assets created only years before with scarce public dollars.

There are many development opportunities in our downtown, but each has significant questions around their eventual “program,” (type and magnitude of use,) and their parking needs. The following is a short list of potential opportunities:

- **Burlington Town Center Mall** – As currently planned, the redevelopment of the mall into a mixed use development would entail the addition of up to 75,000 square feet of additional retail, between 100,000 and 180,000 square feet of new office space, and up to 300 units of housing. The City is working with the owner/developer to refine these numbers and the program parameters.
 - The mall is in the zone that currently has the most significant excess of parking, and also has three significant garages (Lakeview, College, and the BTC garage.) Planning should incorporate this existing capacity.
 - The mall, as well as the three existing garages, are all within the Waterfront TIF district, a significant funding mechanism for the creation of parking infrastructure.
 - During planning and negotiations with the mall developer, the City should do everything it can to:
 - Create shared parking arrangements between future and existing tenants of the mall and surrounding properties and uses.
 - Maximize the efficiency of the existing parking spaces to “right-size” the eventual parking spaces created to serve the development.
 - Investigate the cost/benefit of building additional parking capacity within the existing two city garages’ footprints, under the mall and/or “in” the mall, and at the site of the current mall parking garage.
 - The developer should consider (in consultation with the City) whether certain programming might meet the developer’s financial objectives while meeting the City objectives defined in the recent public process in ways that minimize parking requirements. Examples include the creation of student housing with no or little on-site parking; the creation of senior housing; explicit lease arrangements with commercial tenants that better utilize transit and other modes; etc.
 - The City may want to consider whether the current parking options (garages and nearby surface lots) are best fits to continue as parking, or whether they would better be utilized as development opportunities – or some combination of both. This will require a cost/benefit analysis and some likely coordination with adjacent landowners.
- **Gateway Block** – There have been several proposals over the years for the Gateway Block, which is bounded by Main Street, North Winooski Avenue, College Street and North Union Street. It is identified in planBTV as a key development opportunity, which includes a municipal owned parking lot, Memorial Auditorium, the Mid-Town Motel, fire station, and Library and parking lot, among other things. In addition, the other blocks surrounding the

- Main/S. Winooski intersection constitute opportunities for more dense development.
- Unlike the mall redevelopment opportunity, this development is in the zone identified as having the least surplus parking, with perhaps the only surplus at all diagonally across the street within the Courthouse Plaza garage.
 - This location has long been identified as a potential “intercept” parking opportunity for visitors entering town from Williston Road, with faster access to Interstate 89 without going through the downtown street grid and associated traffic.
 - Due to the scale of nearby buildings, the grade change, and the fact that it serves as one of the primary gateways to Burlington, this could serve as a place for significant density and height.
 - Additional parking capacity will almost certainly be necessary in this location if significant redevelopment is to be supported. The City and partners could take proactive steps to:
 - Identify goals for the program uses of any redevelopment, which would help quantify parking need.
 - Create development parameters that require shared use parking, prohibit at-grade street-facing parking, and insist that adjacent latent capacity is utilized first.
 - Determine the most cost-effective way to add parking capacity on any of the four blocks surrounding the S. Winooski and Main intersection, which may include redevelopment or additions to the existing Courthouse Plaza Garage.
 - **Train Station** – Current plans look to activate the Main Street Landing train station as a commuter station once more, linking to Addison County, Rutland, Albany and New York.
 - The Main Street Landing garage at the foot of Main Street, directly adjacent to the planned train station facility, has excess capacity.
 - The station is also adjacent to a large parking lot at the foot of College Street that currently represents low quality use of land directly adjacent to our waterfront.
 - Upon determining the parking needs of the train station, project partners should seek to maximize the existing parking availability in creative shared ways so as to minimize the burden of building more structured parking.
 - Large surface lots should be reexamined as development opportunities for either more density and/or more creative parking options, particularly against the hillside and away from street faces and waterfront.
 - **Waterfront** - The 2013 Public Investment Action Plan (PIAP) authorized the City to utilize Tax Increment Financing to invest in various projects along Burlington’s waterfront, including the redevelopment of the Moran Plant, a northern harbor marina, a new facility that will house the Sailing Center’s community programs, improvements to ECHO, an improved bike path and Waterfront Park, a new skate park facility, and new parking resources. Additional projects could include redevelopment of a parcel currently owned by Main Street Landing (north of the building that houses 7th Generation) and the creation of a southern harbor marina.

- Parking resources to support these varied projects should be shared - in almost no case should parking spaces be single-purpose, especially year-round.
- Parking resources being created by the Waterfront Access North project should be shared with future development projects.
- The seasonal nature of the waterfront should be considered when contemplating the cost of parking - whether for leasing purposes or for on-street metered spaces.
- Multi-modal transportation should be prioritized on the waterfront, and significant investments should be made to encourage a continued rise in mode-share for these projects. (The bike path is a natural start to this investment).
- Waterfront events should be better integrated into a downtown parking management system through both wayfinding and online tools, encouraging more event-goers to utilize downtown parking capacity, particularly on evenings and weekends, and then walking to the waterfront.
- **St. Paul's Cathedral** – PLAN BTV identifies this site as a place for more dense development, presumably more affordable housing similar to the adjacent development.
 - Any potential development is directly across the street from the Lakeview and College Street garages, and a little over a block away from the planned redevelopment of the mall.
 - Any potential development should consider what parking needs current users of the site have, and what the actual parking demand for existing adjacent units have been in an effort to “right size” the number of spaces associated with development proposals.
 - Any potential development should consider the efficiencies of partnering with adjacent parking capacity and operators to minimize cost while maximizing shared parking resources.
- **Hood Plant parking lot** – The lot behind the Burlington Telecom building has long been a development opportunity with its grade change and frontage on lower Church Street.
 - If future development proposals occur, development partners should seek to maximize the shared resources within the development and utilize the grade change to their advantage. They could also explore potential partnerships with adjacent parking capacity, such as the Courthouse Plaza garage.
 - By utilizing the grade changes of the site and multiple points of potential vehicular access, development should avoid building at-grade street-facing parking and instead seek to “bury” any new parking capacity within the site.
- **Marketplace and Courthouse Plaza Garage** – One is a municipally owned facility with the highest rate of occupancy in the system, and the other is a privately owned facility with significant vacancies at opposite ends of the downtown.
 - Both garages should be assessed as future development opportunities – either through reconfiguration, additional capacity, or utilizing space in the garages as part of the solution for adjacent development.
 - At Courthouse Plaza, a full structural assessment will be necessary.
 - At Courthouse Plaza, adjacent underdeveloped properties (Champlain Housing Trust-owned building, the VFW, the Hood Plant lot, and other spaces) should be

considered for development with a shared parking plan. A masterplan for the adjacent blocks that incorporates smart parking principles would be a good planning activity to prioritize.

- At the Marketplace Garage, the street-facing at-grade level should be considered as a development opportunity to enliven the streetscape and screen the garage, and adjacent parcels (Rite Aid, Handy's service station, etc.) should be considered when any redevelopment is occurring at the garage.
- **Housing in General** – There is a strong demand, as revealed in the Burlington Housing Action Plan, for additional housing units downtown. This will lead to higher levels of street vibrancy, additional customers for downtown businesses, and relief for the under-supplied and increasingly unaffordable housing stock. (An example of converting a current surface parking lot to an increase in housing supply is the proposed Champlain College Housing project at King Street and St. Paul Street.)
 - The type of housing units should be carefully considered in different locations so as to be strategic with shared parking capacity.
 - In locations with latent capacity and few other development pressures, housing units should seek to strategically share parking spaces with businesses and/or customers.
 - In locations with less possibilities of shared parking resources, housing units should be strategically planned to have less parking demand. Examples include university managed student housing or senior housing.
 - In locations where new capacity will be added, policy should insist that the parking be shared in nature.
 - Zoning changes would allow housing units to utilize shared parking strategies more efficiently, reducing overall cost and maximizing the revenue for a sustainable parking system; while reducing the proportion of our downtown devoted solely to parking. A separate report details more fully recommendations for zoning changes related to parking, but highlights for housing include:
 - "Unbundle" all housing units from parking spaces. Tenants should have a choice about whether or not to rent parking spaces separately, and if they choose not to, an existing parking space should be available to other users.
 - Consider eliminating or severely reducing parking requirements for downtown housing units (see future report for more specifics).
 - Reinvest a portion of the costs otherwise used for required downtown residential parking in sustaining the public parking system and other modes of transportation.
 - Reinvest a portion of parking revenues in safe, complete streets to optimize the pedestrian experience and encourage people, especially downtown residents, to utilize alternative modes of transportation.
- Other Potential - There may be other places to explore more dense, strategic and streetscape-friendly parking, including space north of the redeveloped mall on Pine Street or within the "City Market" block, utilizing grade changes and existing parking

structures already found there. The remaining City owned parking lots should also be examined as places for potential new urban infill and smart parking strategies.

3.2. Future Parking Adequacy/Transition Zone Strategy

Fundamentally, any new parking assets added to the system downtown should:

- Be shared among multiple users and properties through a Parking Management District's involvement.
- Account for the likelihood of adjacent development.
- Be built in such a way that additional capacity can be added at reasonable cost and minimal disruption if market changes dictate.
- Never impair our walkability and streetscape.
 - No first floor parking adjacent to sidewalks
 - Good design that retains our urban character
 - Properly branded for customer convenience
 - Coordinated with large-scale traffic planning
 - A balance between efficiency, urban design, and streetscape compatibility
 - User comfort should be paramount
- Maintain a certain standard of care

A good resource for well-designed parking facilities is www.parkandgo.org.

The following map illustrates where thoughtful additional parking capacity could support likely development.

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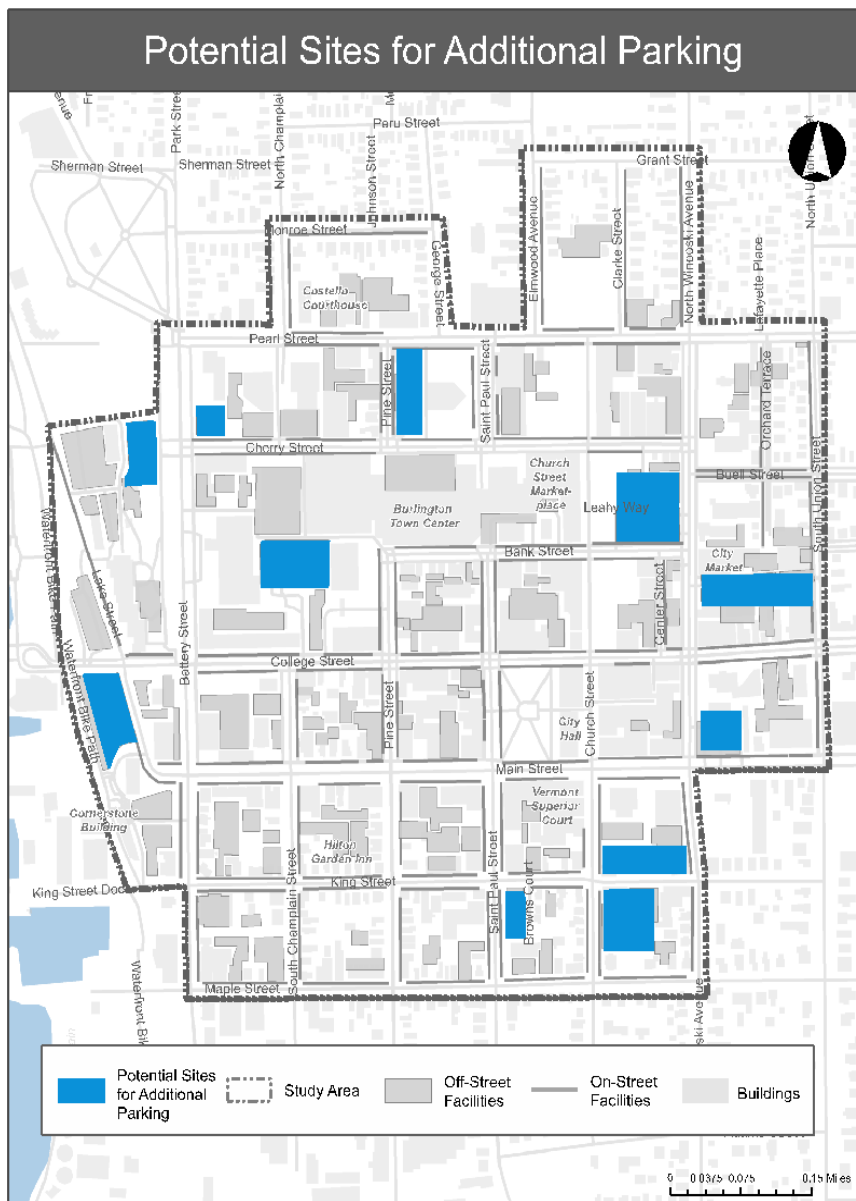


Figure 3-1

It is also important to note that as the downtown grows in vibrancy and uses, there will continually be pressure for parkers to migrate to spaces they presume to be available and cheap. Our current parking utilization shows parkers already do this.

The transition zones around our downtown already experience significant parking pressures. For instance, the largely unregulated streets south of Main Street (lower Church, Maple, parts of St. Paul) currently act as all-day free parking for downtown workers. In the evening, they transition to parking for folks experiencing the nightlife of downtown. Many of these blocks have adequate off-street parking for residents or have tenants that have less need for the on-street parking spaces. In other transition areas, however, there is already strain between these uses and residents' needs. East

of Union Street is one zone where myriad strategies have already been employed to attempt to address this competition for spaces (examples include meters, permit zones, some residents parking in downtown garages, etc.).

The tools referenced in the Residential Parking Plan MUST be utilized and continuously updated based on parking patterns and demand in these transition areas. The situation should be considered fluid, and several tools tried until the right mix for each block is determined (there will be no one right answer). These tools include: time limited parking, residential parking program designation, metered parking, defined/stripped parking areas, and many others. As the next section illustrates, zoning changes are critical for the downtown to grow in density and vibrancy, and without them, our city will not experience the transportation mode change progressive cities around the country are investing in. Strategic tools, however, must be utilized and continuously refined to ensure all downtown stakeholders, including residents in the transition zone, join in the growing vibrancy.

3.3. Zoning

A separate report will illustrate key zoning change recommendations to enable future development to best utilize existing parking and “right size” its parking needs. Some of the highlights of that report will include:

- Changing the zoning code to enable existing parking assets to be used for purposes other than those they were built for. Currently, there are hundreds of vacant parking spaces that, by code, are not eligible to be used more efficiently for both existing uses and new development projects. The unintended consequence of this code is the creation of parking spaces in our downtown sometimes across the street from existing capacity - raising the amount of acreage devoted to parking, and the cost of the development and ultimate rent/lease costs.
- Changing the zoning code to severely reduce or eliminate parking requirements within the downtown. By utilizing the recommendations of the Residential Parking Study, investing in the other recommendations within this report, and adding shared parking capacity in strategic locations, zoning change is highly recommended. This will reduce the amount of space devoted to parking in our downtown, encourage other modes of transportation, and reduce the escalation in the cost of space over time. The specifics of this recommendation will need to undergo a defined public process through the Planning Commission and City Council, with a robust amount of research, understanding of national best practices, and opportunity for public comment.

3.4. Phasing

Advanced parking planning for future development will be critical to minimize disruption to downtown businesses and employers. Though altering, rebuilding or eliminating existing parking assets may be necessary to support future development, it will have a considerable short-term impact on existing economic concerns. Careful phasing across the entire system will be necessary. This is especially true for customers and visitors. Leased spaces to support businesses can theoretically be moved on a short-term basis to support changes to the parking system; this is much harder to do with customers, especially given the current limited signage, coordination, and online tools for the parking

system. A phasing plan should assess parking needs downtown and make sure there is adequate parking capacity to meet those needs during transition or construction periods.

Of key concern is launching the branding, wayfinding and online presence as soon as possible. This will give the Parking Management District (or whoever is managing parking) multiple tools to engage parkers when changes are made. For instance, if the Burlington Town Center garage will be temporarily offline for 18 months, customers and visitors have to be made aware, and be given other options to park downtown – particularly in places where there is existing but unused capacity.

Temporary strategies like valet, stacking cars in existing facilities, and remote parking with shuttle service or temporary bus routes may be far cheaper than overbuilding capacity or building/demolishing in a choreographed sequence (example – rather than rebuilding the College Street garage first, for instance, before starting construction on new garage capacity for the mall, it may be more cost effective to utilize shuttle, valet, and more efficient parking for existing tenants, etc., while new capacity comes online).

The staging of alterations or additional assets should also be carefully managed across the entire system. Depending on the eventual development “sequencing,” a potential phasing plan could look like this:

1. Complete master plans for Gateway Block, Mall redevelopment; investigate the cost/benefit of rebuilding the College Street Garage, Mall garage, and the Courthouse Plaza garage versus new construction at the Gateway Block or Mall site.
2. Invest in wayfinding, online tools, and a parking management system for the downtown to provide short-term alternatives prior to and during any construction.
3. Once the above work is up and running, proceed with the first demolition, if appropriate - likely the Burlington Town Center garage.
4. During construction of new on-site Mall parking capacity, utilize capacity at Lakeview and College garages and better management of downtown spaces through a parking management system.
5. Build new capacity at the Gateway Block concurrently or after mall work is underway.
6. After new capacity is created at the Mall and/or Gateway Block, consider demolition and rebuild of the College Street Garage if cost/benefit analysis warrants.
7. Build new parking capacity and/or new development along the waterfront BEFORE the train station is up and running, so as to utilize the existing capacity within Main Street Landing during construction.
8. Utilize extra capacity within the Courthouse Plaza garage during any construction at the Hood Plant parking lot.

Burlington will continue to grow and change for decades to come. As it develops, utilizing the existing parking capacity and “right-sizing” planned new spaces become critical drivers of that growth. Ensuring that all parking spaces use smart growth principles of design, sharing, and efficient management will lead to a healthier, more affordable city.

4. *PARKING MANAGEMENT BEST PRACTICES*

As part of the contracted scope of services, DESMAN was charged with reviewing how the City of Burlington currently provides parking and transportation services, comparing and contrasting the current structure with similar municipalities, and making recommendations for changes which reflect this evaluation, as well as parking industry best practices.

4.1. Benchmarking Exercise

DESMAN reviewed dozens of other municipalities in order to identify those with comparable demographics to the City of Burlington. The objective of this ‘benchmarking exercise’ was to compare and contrast how the City of Burlington provided services relative to other comparable municipalities.

4.1.1. Methodology

DESMAN limited the scope of research to those municipalities with one or more major colleges or universities located within or in reasonable proximity of the downtown core. Through work on the ground in Burlington and in multiple stakeholder meetings, DESMAN has come to understand the impact that the University of Vermont and Champlain College have on downtown.

DESMAN also limited the scope of research to municipalities which served as the central employment or business center in the region. This often translated into a small to mid-sized urban center surrounded by scattered suburban and/or rural communities. Urban centers were generally limited to twenty-five square blocks or less.

Finally, each community considered had a clear, expressed commitment to sustainability and ‘green’ transportation practices, but transit service that was limited to buses or trackless trolley systems.

4.1.2. Comparable Communities

Initially, DESMAN reviewed the parking and transportation systems for the following municipalities: Boulder, CO; Ann Arbor, MI; Charlottesville, VA; Nashville, TN; Louisville, KY; San Luis Obispo, CA; Madison, WI; Ithaca, NY; Durham, NC; Raleigh, NC; Bloomington, IN; Austin, TX; Lexington, KY; Boise, ID; and Asheville, NC.

As many of these communities shared identical governance and operating structures, demographics, and applied practices, DESMAN refined the focus of evaluation to six core communities:

Boulder, CO which employs a city-owned, centralized service agency focused on parking and transportation as part of an overall development strategy.

Ann Arbor, MI which uses a third-party public agency to develop parking and transportation infrastructure and coordinate delivery of other parking and transportation-related services from public and private institutions.

Charlottesville, VA which has deeded parking management responsibilities to a third-party for-profit agency, which collaborates with other agencies and institutions to provide transportation services.

Durham, NC which has adopted a 'classic' structure where the City provides parking infrastructure and a public agency provides oversight into parking operations, but all other services are assigned to other parties.

Lexington, KY which employs a unique independent city-county agency to deliver all public parking services and works for or with other agencies to deliver transportation services.

Boise, ID which has assigned various parking and transportation functions and duties to different institutions and agencies that have agreed to work collaboratively to support downtown development and commerce.

4.2. Key Components

There is no 'one-size-fits-all' program for delivering parking and transportation services to a community. Policies and programs are developed by each community which reflect the constituents' unique values, goals, objectives and sensitivities. However, in our review of the comparable communities, as well as other cities and towns considered to employ best practices in parking, DESMAN did note some consistent components, including:

A body, board, commission or agency made up of public officials and private individuals charged with policy and operational oversight for the parking and/or transportation system.

An agency or institution charged with developing funding for parking and/or transportation improvements and responsible for the design and development of the same.

A department or agency responsible for executing parking and/or transportation policy and providing services on a daily basis. These services include regular maintenance of system assets.

An institution or agency tasked with providing and updating comprehensive information on all of the parking and/or transportation options available to downtown workers, visitors and residents.

A body or department responsible for collaborating with other transportation providers or advocates to promote transportation decisions which support sustainability objectives.

A clearly stated mission, objective and/or set of goals which frames both the structure of the organization as well as the policies executed.

Programming which supports a variety of transportation choices equally, as well as the stated mission and goals of the system.

The following sections provide descriptions of how the municipalities examined address each of these areas.

4.2.1. Governance

Currently there is no universal governance for parking and transportation policy or operations in the City of Burlington. City Council ratifies large scale policies which are subject to recommendation from a number of boards or commissions. The Public Works Commission is tasked with oversight of parking operations and policies as they relate to operations, including the setting of fees or prices for on- and off-street parking. The Planning Commission, along with the Design Advisory Board, address issues regarding the provision of parking to support new development. And the Transportation, Energy and Utilities Committee addresses topics associated with transportation.

The City of Boulder, which operates under a Council-Manager structure, also defers final execution of policy to the elected City Council with input from seven different boards and commissions focused on parking, transportation, transportation demand management, design, planning and services management. However, much of the policy driving the parking and transportation system in Boulder is driven by the City's Access Management and Parking Strategy (AMPS) plan. This plan, developed collaboratively between multiple public agencies and private entities, provides both an overarching strategy for addressing parking and transportation issues, as well as clear actions steps, assignments, and milestones. The plan is so integral to governance over the system is has a project manager tasked exclusively with its execution and a website dedicated to detailing the plan's current status, initiatives and triumphs.

In Ann Arbor, on-street parking policy and policy pertaining to the provision of parking associated with private development is ultimately set by City Council. However, Ann Arbor has a Downtown Development Authority (DDA) which is subject to oversight by a board of twelve citizens appointed by the Mayor and City Council. This board sets policy and provides oversight for the DDA, which is in turn tasked with developing new off-street parking facilities and operating them, as well as collaborating with local and regional transit agencies to provide alternative services.

In Charlottesville, on-street parking policy and policy related to parking enforcement and requirements for new development all rest with the City Council, but off-street parking policy and oversight of public parking garages and other off-street facilities is actually set by the Charlottesville Parking Center, a private for-profit organization tasked with collaborating with the City, the local Downtown Business Association, the local Chamber of Commerce, and the regional Convention and Visitors Bureau to provide services.

Durham (NC) has a Director of Transportation who reports directly to the City Manager and City Council. The Director is tasked with oversight of all parking-related matters in the City and collaboration with the local transit authority (DATA) and the area metropolitan planning organization (DCHC MPO). Parking and transportation policies are developed collaboratively between the City's Transportation Department, DATA and the DCHC MPO; those specific to the City's assets are reviewed and ratified by City Council.

In Lexington, the Lexington & Fayette County Parking Authority (LF CPA) is an authority constituted by the Lexington Fayette Urban County Government and reports to a six-member commission and works with a five-member advisory board. Any resident of Fayette County can apply to become a commission or board member, but they must 1) submit a formal application to the Mayor's office demonstrating reasonable education, skills and/or experience to participate; 2) submit to a background check; and 3) attach a copy of their resume. Applications are received and vetted by the Mayor's office, which makes the appointment. Successful applicants must undergo a formal training curriculum prior to taking their seat which includes sections on financial controls, open meeting laws, best practices and record keeping.

In Boise, the Boise Capital City Development Corporation (CCDC), which has responsibility for developing and oversight of off-street public parking facilities, reports to an eight-member Board of Commissioners. Commissioners are selected by the Mayor and confirmed by the City Council for five-year terms. Commissioners are not compensated for their service. The Downtown Boise Association, which is tasked with providing communications for the parking system and collaborating with the CCDC, has a Board of Directors which numbers over 20 individuals and includes representatives from the CCDC, the Police Department, City Council, the Mayor's office, the local retail/service sector, the local restaurant/lodging/entertainment sector, the professional services sector, the property owner/development sector, the Chamber of Commerce, Boise State University and St. Luke's Health System.

4.2.2. Infrastructure/Development Entity

In the past, the City of Burlington has used tax increment financing (TIF) to build new parking facilities downtown. The City's Department of Public Works was tasked with oversight of the actual construction process and capital improvements thereafter. Currently, there is no agency charged with collecting funds to acquire land or build new parking facilities downtown.

Boulder, Ann Arbor and Boise have all used TIF to fund the development of new parking and/or transportation infrastructure, as well as state and federal grants. In Boulder, infrastructure development initiatives fall under the Department of Facilities and Asset Management. In Ann Arbor, the DDA was tasked with establishing a TIF district and developing infrastructure with the proceeds. In Boise, the CCDC is the agency tasked with building new parking downtown.

Lexington's LF CPA has the ability to issue their own revenue bonds to support the development of new financing, while the City of Durham finances new system infrastructure through General Obligation bonds. Officials at the Charlottesville Parking Center declined to indicate the



mechanisms they would employ to develop new infrastructure, but did indicate that they would seek to partner with the City of Charlottesville on any development initiative.

4.2.3. Management/Operations Entity

Burlington currently provides management and operations service for parking through the Department of Public Works, and for public transportation through the Chittenden County Transportation Authority. The Burlington Police Department provides parking enforcement and citation adjudications.

The City of Boulder provides parking management and operations and parking enforcement functions through Parking Services, collaborates with the Regional Transit District to provide transit services, and works closely with and partially funds GO Boulder, a separate city initiative to promote the use of alternate transportation modes.

The Ann Arbor DDA contracts with Republic Parking to provide day-to-day management, operations and maintenance services in public off-street facilities. The City of Ann Arbor administers on-street parking assets and manages the Residential Parking Permit program. Parking enforcement is managed by the Police Department. The DDA actively promotes biking, walking and other alternative transportation modes, but local transit service is provided the Ann Arbor Transportation Authority.

The Charlottesville Parking Center (CPC) manages off-street assets directly, while the City manages on-street parking, the residential parking program and enforcement. Both the City and the CPC actively work to promote Virginia RideShare, but have no affiliation with any other transportation agency.

The Durham Transportation Department (DDOT) has contracted Lanier Parking to provide day-to-day management, operations and maintenance services in public off-street facilities. The DDOT manages on-street parking, enforcement, the residential parking program and design development review. The Durham Area Transit Authority (DATA) is a subdivision of DDOT.

The LFCPA provides all parking-related services for Lexington directly through its own personnel, but does not provide any transportation services. Transportation services for downtown are provided through Lextran, Lexington's Transit Authority

The CCDC subcontracts management and operation of all its off-street assets to a private parking operator (Ampco). City of Boise Parking Services, a subdivision of the Finance & Administration Department, handles on-street parking, enforcement and residential parking permits. Transit services are provided by separate public agencies.

4.2.4. Communications/Public Relations Entity

Currently, the City of Burlington is collaborating with the Burlington Business Association (BBA) to provide information on parking and transportation options through the ParkBurlington website. Both the City's Department of Public Works and the BBA provide some information on parking options and have mounted information campaigns in the past.

The City of Boulder's Parking Services division has designed their website, program and initiatives to make the agency the central source for information on parking and transportation. Where Parking Services does not directly provide services or programs, it provides literature, web links and other

parking and transportation resources . The Ann Arbor DDA and the Durham DDOT also do this, ensuring users can reliably access one resource for comprehensive transportation information.

The Charlottesville Parking Center provides links to some affiliated agencies, but no information on on-street parking, parking in other facilities in the downtown area or transit choices. The LFCPA also does not provide information on transportation alternatives or resources in the area.

The Boise CCDC provides information only on its assets, but the Downtown Boise Association provides a comprehensive review of parking and transportation options through their website and links to the appropriate agencies or providers.

4.2.5. Transportation Demand Management Entity

There is a local transportation management agency in Burlington (the Chittenden Area Transportation Management Association, or CATMA) working with various agencies, the University of Vermont, the University of Vermont Medical Center and Champlain College, but not currently servicing downtown businesses and institutions.

GO Boulder is a city-run and funded initiative to actively promote alternative modes of transportation. The initiative has its own page on the City's website, and Parking Services includes links to the page from their homepage. GO Boulder provides information on transit options, biking, walking, ridesharing, and car share services. The initiative has separate webpages devoted to the promotion of bicycle parking and free transit passes (EcoPass).

The Ann Arbor DDA is the agency developing bike parking in downtown and provides substantial information of transportation alternatives. The DDA is a partner in the GetDowntown program with the Ann Arbor Transportation Authority and the Ann Arbor Downtown Development Authority, which provides a transit pass (Go!Pass) similar to Boulder's EcoPass program. The DDA also provides infrastructure investments to improve both walking and biking options, promotes regional transit and car sharing services, and offers preferential parking for carpools.

The Durham DOT is also strong in transportation demand management, working closely with DATA and the DCHC MPO to promote alternative modes of transportation. The DDOT is aligned with the Durham Bike Co-op, a private nonprofit, and works closely with Duke University to promote its Bull City Connector service. The DOT also works closely with Downtown Durham to promote both parking and transportation services.

Neither the Charlottesville Parking Center nor the LFCPA promote transportation demand management or provide links or information to other commuting options in the area.

The CCDC does not sponsor or promote alternative transportation, but the Boise Downtown Association provides information on options and works closely with ACHD Commuteride and the Valley Ride Bus to make citizens aware of other transportation options.

4.2.6. Goals and Objectives

Historically, the City of Burlington has approached parking from the same perspective as the majority of American cities. While much has been made of ground-breaking initiatives in municipal parking planning and management in cities like Boston, New York, Washington DC, Chicago, San Francisco, San



Diego, Portland (OR) and Seattle, the vast majority of municipalities in America still see parking as a necessary utility to support downtown commerce and development; something that needs to be provided at no or low cost to facilitate higher, better activities.

As is common in many municipalities, management of various parking tasks in Burlington has been assigned to different agencies within the municipal government according to the perceived similarity of tasks within those departments. Parking planning and the development of new parking assets has been placed under the Department of Planning & Zoning, as this task is seen as an extension of that department's natural mission and powers. The Department of Public Works, the agency tasked with managing the majority of public assets and services (i.e. streets, sidewalks, water, sewer, waste management, etc.), has traditionally been assigned the management and maintenance of public parking assets, as this was perceived as another utility. The Police Department was tasked with parking enforcement and adjudication as an extension of their mission to the community. This distribution of tasks created some efficiency in execution, but also created a parking system where core functions were fractured and subject to conflicting missions.

Burlington is prepared to move away from the philosophy of parking as a base utility, including the 'more is better' perspective and its attendant policies. Following the cues of comparable communities like Boulder (CO), Ann Arbor (MI), and Boise (ID), Burlington is prepared to shift perspective and start treating parking as a mechanism for economic and community development, adopting a 'smart use' philosophy, which is a step away from the traditional 'car is king' mentality and a movement towards a mission where driving and parking is one in an array of transportation choices. To that end, Burlington has established the goals of improving the customer experience; creating a sustainable parking system; and fostering a vibrant downtown.

The City of Boulder provides the clearest definition of goals and objectives for the parking and transportation system through the Access Management and Parking Strategy (AMPS) plan. The plan includes regular updates on initiatives in process and completed and upcoming public hearings. The Ann Arbor DDA also has a clear mission statement and provides an annual "State of Downtown Report" which outlines the agency's objectives and activities for the prior and coming years. In both cases, the goals and objectives outlined by each agency are defined and measurable.

The Charlottesville Parking Center stated goals are broad, with no defined initiatives associated with them or measurable objectives. Similarly, the DDOT does not state a clear mission or set of objectives, although there are a number of studies provided on their website which allude to both.

The LFCPA does provide a clear Mission and Vision Statement, as well as a listing of guiding principles applied in the development and execution of programs and services provided by the Authority, but no measurable objectives. Similarly, the CCDC provides a clear Mission Statement and well-defined goals, as well as an annual report of the agency's activities.

4.3. Local Influences and Considerations

Of the peer cities identified, DESMAN believes that Boulder (CO), Ann Arbor (MI) and Boise (ID) best exemplify the kind of success in parking management that Burlington aspires to achieve. Of the



three, only Boulder retains parking management services within City government. Ann Arbor has ceded the majority of parking management over to its Downtown Development Authority, a public agency created by State law. Boise practices a hybrid approach, wherein a public/private consortium (Capital City Development Corporation) provides off-street parking infrastructure, private companies provide day-to-day management of off-street assets under contract, the City provides on-street parking services including enforcement and residential permit programs, and the Downtown Association is the organizing agency that acts as a liaison between the other parties, the private sector and the general public. The common theme in all three instances is that the founding philosophy for each system is based upon and oriented toward community development².

Of the three, we believe that the Ann Arbor DDA model may be the most advantageous to Burlington, although the Boise model may be the most politically achievable. Under the Ann Arbor model, the City would create an independent Authority to assume responsibility for the development, operations and management of all public parking assets (on- and off-street), as well as serve as the central resource for all parking and transportation information and initiatives for downtown Burlington, and the liaison between the private sector, local transit agencies and transportation advocates, and the Police Department which would retain enforcement and collections duties³. Under the Ann Arbor model, the Authority would fund itself largely from the creation of a BID and/or TIF district initially.

We believe the Ann Arbor model would be more appealing to the private sector as it will create an “arm’s length” relationship between the City and the agency managing parking and transportation services in downtown, but less appealing to the municipal government. Transfer of ownership of public parking assets will be both financially and politically difficult; the assets are distressed (~ \$9M) and depending on the legal structure, the City could lose input regarding pricing, hours of operation and standard of care for the duration of the agreement with the Authority.

The Boise model is very similar to Ann Arbor in a number of ways, including that it uses TIF to fund new facilities and parking revenue to fund operations; its independent public parking agency was created by state legislation; it subcontracts day-to-day operations to a commercial parking operator; it advocates for alternative modes; it defers on-street parking programs to City agencies and promotes privately owned parking assets; and its parking agency is governed by a board appointed by the Mayor and confirmed by City Council.

One piece of the Ann Arbor model that could be improved upon in Burlington is the coordination of information-sharing regarding the parking and transportation network. There are four different business/neighborhood associations within the DDA which appear to have only a loose affiliation with the DDA. The basic needs of a visitor or commuter are met by these organizations, but there is limited cross promotion and no easily discernable central resource to go to for information on all aspects of the existing parking and transportation system. This is a marked contrast to Boulder Parking Services, which has created a centralized resource to link various agencies and services in a central location. The

² Boulder Parking Services is a subdivision of the City’s Downtown & University Hill Management Division, the Ann Arbor Downtown Development Authority was created by the Michigan State legislature to promote redevelopment of Michigan downtowns afflicted by suburban flight in the 1970’s and the Boise Center City Development Corporation “focuses on the revitalization of Boise’s downtown and its neighborhoods through urban design and development initiatives.”

³ Permitting would also be retained under City Zoning & Planning.

network is also segmented in Ann Arbor, with on- and off-street services being managed by different entities.

Parking and transportation services are also segmented in Boise, but the Downtown Boise Association, a 501c6 non-profit funded by BID assessments, acts as the information clearinghouse for the system. This information clearinghouse is lacking in Ann Arbor and would be an important component for Burlington to consider. The DBA is also the primary conduit for collaboration between the business community, private parking facility owners and operators, and the CCDC by inviting representatives for all these organizations to sit on their Board of Directors. The DBA provides a comprehensive listing of both public and private assets, transportation alternatives, special programs and aggressive promotion of Municipal Parking Services, the CCDC, private parking operators, and local transit and alternative transportation providers. To the end user, this provides the perception of a seamless system and a balanced presentation of transportation mode choices.

We do not believe the Boulder model is achievable; it is our understanding that the City lacks the finances to bring multiple functions (i.e. operations, management, enforcement, public relations, etc.) under one newly created agency. We would worry about budget impacts under this scenario, as well as where this agency would be housed under the City's current structure.

4.3.1. Climate

Burlington has certain challenges related to the physical climate that will make various parking and transportation considerations unique to the locale. For example, due to long periods of cold during the year when snowfall and ice can be significant, it is unlikely that all residents would adopt biking as a year-round form of transportation. While biking and all other modes should be encouraged and infrastructure for these modes should be developed, Burlington should be realistic about probable mode splits and plan accordingly in terms of demand estimates and infrastructure development. Burlington should encourage the use of programs like "Free Ride Home," which can assist commuters whose travel plans may be interrupted by inclement weather.

Burlington also needs to be sensitive to climate considerations when choosing payment technologies, which should function well in cold climates and be easily accessible to customers and enforcement officers. The new smart meters in the downtown core have proven to work very effectively in the winter, and the flashing red and green lights that indicate whether a meter has been paid have made enforcement much easier in snowy conditions.

Lastly, Burlington should continue to make accommodations for parkers during snow bans, which it has been doing effectively for many years.

4.3.2. Current Configuration

In the course of examining peer cities, some comparison and contrast has already been made with Burlington's system and how it is managed and operated. Here is a summary of how Burlington's parking system is currently configured:



The City's Department of Public Works owns, operates, and maintains 3 public garages, several surface lots, and all on-street meters. It also administers the residential parking permit program.

The Burlington Police Department provides enforcement, collections, and adjudication.

The Burlington Business Association provides an avenue for public engagement and private partnership.

Private parking asset owners do not coordinate with the city, and operate independently in relation to rates, hours, and enforcement procedures.

Transit services are provided through the Chittenden County Transportation Authority and other private nonprofits.

Various groups advocate for bicycle and pedestrian amenities and collaborate on certain projects with the City, but these services are not coordinated or centralized.

Area universities and colleges have their own parking and transportation departments, with some collaboration through the Chittenden Area Transportation Management Association.

4.3.3. Community Values

Burlington is known for having an environmentally minded and engaged citizenry that cares about local ownership and local politics. This translates into a couple of key points for Burlington's parking and transportation system:

There is an active community in Burlington that advocates for biking, walking, and alternative modes of transportation. These modes should be recognized and encouraged through programs and information-sharing, and improved infrastructure for bike parking should be considered.

Due to a focus on community and public involvement in local government, DESMAN does not believe that Burlingtonians would accept a full transfer of parking ownership and management responsibilities to a private entity. We propose that a hybrid model for service delivery involving public-private partnership would be most politically feasible and most palatable to the citizenry.

5. **PARKING AND TRANSPORTATION MANAGEMENT DISTRICT**

Members of the Downtown Parking Team (BBA, DPW, CEDO) with the support of Desman Associates and under the guidance of the Parking Advisory Committee spent two years planning, studying, and gathering public input towards the creation of a plan for a Parking and Transportation Management District (PMD) for Burlington. PlanBTV Downtown & Waterfront calls for the creation of a PMD. Based on industry best practices and the needs of Burlington,

As detailed in the Introduction and Executive Summary, this project is moving forward under clearly set goals, objectives and approach. These are reviewed here.

5.1. **Downtown Parking System Goals**

1. **A Vibrant Downtown** -- The downtown parking and transportation system resources must be maximized to ensure the continued vitality of downtown Burlington.
2. **Great Customer Service** -- The parking system is often the first and last impression for people driving downtown. These experiences should consistently be positive and dependable.
3. **A Sustainable System** -- The parking system must minimally generate sufficient revenues to meet its operational and maintenance needs while aiming to also support downtown infrastructure and marketing.

5.2. **Objectives**

- **Provide high quality parking services at a fair market price.** A user who can find available parking in a reasonably proximate, clean, well-lit and safe facility with relative ease will typically be willing to pay a fee equal to the value of that service. These fees may support other initiatives or programs with value to the community, but the first priority needs to be satisfying the end user's definition of value and quality.
- **Promote the use of other transportation modes.** An effective downtown transportation system must successfully accommodate multiple modes. The more people walk, bike, take transit, carpool and use carshare for travel into and around downtown, the fewer parking spaces are needed and the more space is available for other uses.
- **Support new development in downtown Burlington.** Parking is often identified as a barrier to patronizing businesses and creating new infrastructure in a downtown. A strong parking and transportation system should provide a variety of options and programs which reduce or eliminate those barriers and support the economic health of the community.
- **Collect data on system usage and use that data to inform policy decisions.** Gathering data, analyzing it and presenting it as the foundation and justification for policy changes should be at the core of any organization managing downtown parking and/or transportation.
- **Respond to constituents' changing needs and concerns.** Creating mechanisms for regular dialogue between the agency managing parking and the constituents it serves is critical to ensuring the system is oriented toward meeting the community's goals and objectives.
- **Maintain a strong balance sheet and fiscal self-sufficiency.** A system that does not rely on subsidies and outside funding and is thus self-supporting can maintain its facilities, programs, services and mission without interruption.
- **Sponsor non-core programs and events.** Under a 'smart use' philosophy, excess income from the parking system goes back to the community in the form of contributions to programs which directly benefit the constituents from which the original fees were collected.
- **Operate facilities, services and programs, which are environmentally responsible.** The system should support Burlington's commitment to preserving the region's natural

beauty and environmental health by implementing programs and services, which minimize impact on the environment.

- **Improve management of downtown parking assets while implementing strategies to preserve the quality of life in transition zone areas.** The parking management agency should understand the residential parking program and the impact that changes in downtown parking have on transition zones and implement policies that preserve reasonable parking options for these residents.

5.3. Approach

To accomplish these goals and objectives, several guiding actions will direct the City's parking work at a high level:

- **Employing technology to improve the system.** Whether it's implementing payment options that make paying for parking more convenient, or collecting system usage data to inform policy decisions, utilizing the latest technology is a critical piece of the City's parking strategy.
- **Creating an entity to manage parking.** This single entity, representing both private and public interests, would be responsible for facilitating and coordinating parking and transportation services and providing up-to-date information to visitors and residents alike.
- **Working with providers of alternative transportation modes.** The integration of other modes of transportation into the parking system is critical as the City moves toward a 'smart use' philosophy. Parking efforts should be coordinated with CATMA, CCTA, and bike/pedestrian advocacy groups to ensure a holistic approach to transportation.
- **Improving wayfinding and signage.** To maximize the potential of each parking facility in the downtown, users must know and understand their parking options, including location of facilities, hours they are available, and cost.
- **Collaborating with private parking owners.** There are many under-utilized private parking facilities in the downtown. The 'smart use' philosophy emphasizes the importance of utilizing these existing parking assets before building new facilities. Public/private partnerships can help unlock these private assets.
- **Remaining flexible.** An effective and efficient parking system must be adaptable to changing circumstances and community needs. Future system usage data may suggest that rates or hours of enforcement should be adjusted, and the parking system should be nimble enough to make these changes in the service of improving the system and the customer experience.

5.4. Recommended Structure and Governance

The objective of this plan to meet the goals outlined above through a series of gradual, phased changes to how the parking system is currently managed in downtown Burlington. Currently, parking and transportation management services are spread across two different public agencies, a local non-profit and a private organization. The ultimate objective of this plan is to create an entity which will be singularly focused on the provision of parking and transportation services. This entity will realize this vision in part by working collaboratively with the following partners to deliver services and provide essential resources. In the following section, we will outline each agency's current role and how that will change and evolve over the life of the proposed three year pilot.

Department of Public Works

The Department of Public Works (DPW) is currently the agency tasked with building, managing and maintaining all of the city's on- and off-street parking assets. The DPW currently prepares and submits information on parking options for residents, workers, patrons and visitors and is also responsible for all signage and branding of the public parking system. The Public Works Commission (PWC) is the current governing agency for the DPW and has the power to set rates and policies for the parking system. (Note: some policy questions go to City Council, but the PWC is the primary agency.)

Through the length of the pilot, the DPW will continue to maintain and operate the on- and off-street parking facilities and the PWC will continue to retain policy making power. However, duties associated with promoting the parking system will be transferred to another entity. In addition, the quality of care and operations in the public facilities will fall under review by a consortium of public and private individuals. This consortium will also advise the PWC on policy matters.

Revenues from off- and on-street parking operations will continue to go to the City's Traffic Fund, with the exception of the current Downtown Improvement District assessment. This revenue stream will be pledged to the entity accepting the promotion duties formerly carried by the DPW, as well as development of an expanded downtown parking and transportation management program. This transfer will be phased to correspond with rate adjustments in order to keep the Traffic Fund whole.

Burlington Police Department

The Burlington Police Department will continue to provide parking enforcement, collections and adjudication duties through the life of the pilot. In the future, the team should examine how best to utilize citation revenue, and DESMAN recommends that revenues, particularly new revenues, should be reinvested in the parking system. A surcharge may be applied to these citations in later stages of the pilot in order to support the cost of rehabilitating the existing parking assets or introducing new services and features to the system.

Burlington Business Association

The Burlington Business Association (BBA) currently acts an advocacy organization for downtown businesses, and as such, has helped promote the municipal parking system in the past . The BBA lead the creation of the Downtown Improvement District (DID). The DID assessment helps to underwrite the cost of the 2-hour Free program in municipal garages. During the pilot period, the BBA will assume the role of promoting the parking system and other transportation options in downtown Burlington and providing communication regarding various program initiatives and improvements. As the primary connection to employers, the BBA coordinate the effort to deliver TDM services to downtown employers in collaboration with the Chittenden Area Transportation Management Agency. The BBA will also work closely with private property owners to promote the City's program brand. The BBA will help lead the effort to implement the recommendations included in this plan and be responsible for ensuring that the goals of the PMD are achieved.

Chittenden Area Transportation Management Association

The Chittenden Area Transportation Management Association (CATMA) is the leading organization for providing Transportation Demand Management (TDM) services to the region. As such CATMA will serve as the agency to deliver TDM services called for in this plan. CATMA currently acts as a liaison between public and private transportation providers and its members, to develop and promote



programs which encourage diverse transportation choices including carpool services, acquisition and distribution of discount transit passes and Unlimited Access program, incentives for biking/walking, 'guaranteed ride home' and direct commuter assistance and planning support. In 2014, CATMA expanded its focus beyond its founding hill institutions and has opened up membership to employers and employees across the county. In addition, CATMA launched its free Employee Transportation Coordinator Network providing an opportunity for businesses to collaborate and engage in transportation solutions. CATMA will serve as the key partner for delivery of TDM services for employers and employees in downtown Burlington. BBA, Go!Burlington[ST1] and DPW will work to support CATMA in its efforts to deliver TDM services.

Go!Burlington

Go!Burlington will initially be a City Council-established public/private advisory committee working to implement the recommendations of this study. The Association will be governed by a 5-9 member committee made up of downtown business owners and stakeholders, and should be populated as much as possible by representatives with experiences related to smart parking policy. This committee will be charged with monitoring and driving execution of the pilot's various objectives including the development of operating standards and monitoring of the same in the City's public parking assets. This committee will also advise the DPW Commission and City Council on parking and transportation policy matters.

The governing body of Go!Burlington should also be supported by a representative advisory committee. The governing body is proposed to be comprised of parking professionals with experience in smart parking policy and management; but there is a role for an advisory committee made up of diverse downtown stakeholders who do not necessarily know about parking as a discipline but have a stake in downtown transportation. This advisory committee would not have decision making authority, but would have the charge to advise the governing body on policy decisions.

As Go!Burlington evolves and the pilot enters its final phases it will become a working entity which will adopt the BBA's duties assigned during the pilot phase. These duties include promoting parking and transportation options in downtown Burlington and driving the branding campaign. In addition, Desman recommends that Go!Burlington be the agency of authority for all agreements with private parking property owners. Go!Burlington will develop and administer a database of private property owners willing to enter into short-term shared parking arrangements with other parties and oversee the formation and ratification of these agreements. The Go!Burlington committee will be tasked with developing structure and bylaws for the formation of a formal Downtown Improvement District (DID) and submitting those to City Council for review and approval. Once the bylaws are approved, the committee will move to have the DID formally incorporate before the close of this pilot period, at which point Desman recommends that Go!Burlington become a program of the DID with the public/private committee formally overseeing the program. The Go!Burlington committee may eventually lobby the City to transfer certain duties traditionally held by the DPW or the Police Department, such as management of public off-street and/or on-street parking assets, to the DID and Go!Burlington (as its subsidiary organization) once the pilot is near completion.

In many ways, Go!Burlington will continue the tradition of Burlington's Parking and Transportation Council, an early and successful example of public/private partnership. The former Council's emphasis on collaboration is a value that should be prioritized in any future entity.

5.4.1. Assignment of Duties and Responsibilities

The following section outlines key duties and responsibilities for the various agencies outlined in the prior section through the duration of the initial pilot.

5.4.1.1. Policy Development

Public policy regarding parking will continue to be set by City Council and/or the DPW Commission, but the Go!Burlington committee and BBA will act an advisor to both bodies in this matter, representing the united goals and objectives of both the private and public sectors.

5.4.1.2. Off-Street Parking Operations/Management

The DPW will continue to operate and manage the City's off-street parking assets, but the department will work with the Go!Burlington committee to develop a set standards of care for the operation and maintenance of the assets. These standards will contain specific and measurable metrics for evaluating customer service and efficiency of DPW parking personnel and the cleanliness and state of repair for the assets. Once these standards are set, Go!Burlington will be charged with monitoring compliance with these standards on a monthly basis and identifying violations of the same to DPW, which will be committed to correcting them before the next evaluation period.

The DPW will also work with BBA and Go!Burlington to identify periodic maintenance or capital improvement activities which may impact the operations or availability of the public garages at least five (5) business days before they occur. BBA will be responsible for communicating these impacts to the general public within twenty-four (24) hours of being alerted. The parties will collaborate, as needed, to find alternate accommodations within either the private or public parking supply for parkers displaced by these events.

The DPW will move to acquire products or vendors which will allow for online sales of parking permits in public facilities. BBA will be responsible for promoting this service to the general public, including web portal links directing users to where permits may be purchased online. The City should explore the online sales of downtown off-street parking permits which would set a framework for the future integration of residential parking permits.

BBA will work with private parking facility owners to promote a universal signage and branding effort for parking assets which will create a more professional and unified image of parking options in downtown Burlington. As negotiated, Go!Burlington may eventually accept management responsibilities for some of these assets, retaining the services of a private parking operator to provide staffing.

5.4.1.3. On-Street Parking Operations Management

The DPW will continue to operate and manage the City's on-street parking assets, but the department will work with the Go!Burlington committee to develop a set standards of care for the operation and maintenance of the assets. These standards will contain specific and measurable metrics for evaluating customer service and efficiency of DPW parking personnel and the cleanliness and state of repair for the assets. Once these standards are set, Go!Burlington will be charged with



monitoring compliance with these standards on a monthly basis and identifying violations of the same to DPW, which will be committed to correcting them before the next evaluation period.

The DPW will also work with BBA and Go!Burlington to identify periodic maintenance or capital improvement activities which may impact the operations or availability of on-street parking spaces at least five (5) business days before they occur. BBA will be responsible for communicating these impacts to the general public within twenty-four (24) hours of being alerted. The parties will collaborate, as needed, to find alternate accommodations within either the private or public parking supply for parkers displaced by these events.

The DPW will lead efforts to expand meter installation across downtown, improve meter stock and procure pay-by-phone services. BBA under the Go!Burlington brand will be responsible for preparing and issuing communications informing the public of these initiatives as they occur. The two parties will collaborate to develop metrics measuring the success of each initiative, which DPW will track and BBA will publish periodically to the general public.

5.4.1.4. Wayfinding

The DPW will be responsible for implementing the current wayfinding initiative underway to improve trailblazing (i.e. signage directing drivers from major arterial roadways to public parking assets) and identifier (i.e. signage indicating the entrance to a public parking asset and/or its current available capacity) signage across downtown.

BBA will be responsible for creating and installing geolocation signage in each facility indicating where the facility is located relative to surrounding businesses and attractions. This signage is critical to connecting drivers to their destinations once they exit their vehicles and become pedestrians. As budget allows, BBA or Go!Burlington may expand this program in the future to include signage on public sidewalks connecting pedestrians back to their parking facility

BBA will be responsible for the development of a web site which identifies all public parking assets in downtown Burlington – both publicly and privately owned – including their rates and hours of operations. The map on this website will also include identification of participating businesses and institutions in downtown Burlington and a listing of those available parking facilities closest to each destination. As technology and budget allows, this map eventually allow users to see real-time availability information for each parking asset as well.

BBA will also work with private parking operators to promote the City's new wayfinding brand, including and up to acquiring signage in the same theme to identify and promote their facilities.

5.4.1.5. Enforcement, Collections & Adjudication

The Police Department will remain in charge of parking enforcement, citation adjudication and citation collections. The department will move to acquire products or vendors which will allow for online payment of parking citations as well as filing an appeal for adjudication. BBA will be responsible for promoting this service to the general public, including providing links to the web portal from which permits may be purchased on the ParkBurlington website.

Best practice from around the country has downtown parking-related revenue including citations dedicated to parking-related activities and any surplus revenue dedicated to



downtown infrastructure or marketing investments. Desman recommends that the City of Burlington follow this model. Burlington has long used parking citation revenue to support General Fund activities. Go!Burlington will engage the Police Department in a discussion and review of enforcement operations with goal of aligning this function with the goals of the PMD. As on-street parking services improve, the number of citations will decrease. Citations should encourage compliance with on-street parking regulation for the system to function effectively. Going forward it is recommended that the City of Burlington and Go!Burlington dedicate all new citation revenue and a portion of existing citation revenue be reinvested into downtown parking, infrastructure, or marketing activities.

DESMAN also recommends that the process for acquiring event parking permits is examined in order to streamline the process, putting it online and making it easier to use. It is also best practice to charge for event permits (which result in a meter hood for metered spaces) to prevent abuse of the program. A good models to look at for event permit reform is the City of Portland, Oregon's.

Upon instituting an online management and tracking tool for meter hood requests, it should be easier for the City to coordinate its requests for temporarily restricting parking, ensuring no one portion of Downtown ever has too big a proportion of its parking spaces temporarily taken offline.

5.4.1.6. Communications, Marketing & Promotions

BBA under the Go!Burlington brand will be responsible for all communications, marketing and promotion of downtown parking and transportation options. This work will be done in collaboration with the City, downtown stakeholders, CATMA, Go!Vermont and will include development of website with information and key links to partners to outline all options available to the general public – parking, transit, bicycling, carpooling, ride matching, etc. The website will also include a 'news crawler' function updating the general public of upcoming events which may impact the availability of parking or transportation options as well as links to the websites of other collaborating agencies and/or parking related services such citation appeal and payment or permit applications.

BBA will also be responsible for leading the effort to add pedestrian-oriented signage supporting public parking garage operations as previously outlined. BBA will also design and execute a campaign to encourage private parking facility owners to incorporate the City's new wayfinding system into their facility's signage.

5.4.1.7. Private Sector Programming

BBA under the Go!Burlington brand could offer one of five programs to private parking facility owners. More detail on each of these programs can be found later in this document:

1. **Lease Program:** Under this program, Go!Burlington leases the facility from the property owner for a fixed period and can dictate rates and hours of operation. It would also be responsible for all expenses associated with operations, maintenance, and capital improvements, but could retain all revenues for the term of the lease.
2. **Management Program:** Under this program, Go!Burlington manages the facility for the property owner for a fixed period. The Owner dictates rates, hours of operation, standard of care and accessibility to the general public and is responsible for all expenses associated with operations and capital improvements, but retains all revenues.
3. **Concession Program:** Under this program, Go!Burlington agrees to furnish a privately-owned parking facility with PARCS equipment, maintain the equipment and ensure



compliance with posted limitations of use in exchange for a portion of the net revenues and opening the facility to use by the general public during select periods.

4. **Marketing/Branding Program:** Under this program, Go!Burlington allows private parking facility owners not participating in the other programs to acquire ParkBurlington signage and promote their facilities through the website to prospective users.
5. **Promotional Program:** Under this program, Go!Burlington maintains a database of privately held parking spaces for purchase or lease by new entrants into the market, thus acting as a parking broker, matching the parking needs of employees, visitors and the community with available assets.

5.4.1.8. Data Collection & Analysis

Data collection and analysis is a key component to any 'smart growth' approach to parking and transportation policy development and assessment. Data will be needed from both public and parking assets.

DPW and Go!Burlington will each be responsible for developing a program to track utilization of all public assets under their care and control. This program should include occupancy counts, license plate inventories, and tracking of total daily transient volumes and monthly pass holder presence in each off-street facility. Specific recommendations for these program items can be found later in this document.

CATMA currently collects data on commuting and transportation use patterns for Burlington. CATMA will continue to be the prime data source for this important information.

The BBA and/or Go!Burlington will also work with private parking facility owners managing and operating their own assets to develop a similar program of data collection to be performed either by the owner or BBA/Go!Burlington.

Go!Burlington, through a collaborative DPW and BBA effort, will prepare a 'state of the city' report annually incorporating this data and publishing the analyzed impact of various policy initiatives and system improvements in terms of utilization, availability, economic impact and success in achieving stated policy objectives.

5.4.2. Programs and Initiatives

The following section includes a description of the nature and timing of different system improvements, program changes and proposed initiatives under the plan.

5.4.2.1. Parking

The following are proposed parking initiatives.

Capital Improvement Program

The Marketplace, Lakeview and College Street Garages collectively represent 19% of the total public parking supply in downtown Burlington and key components to the City's continued prosperity and growth. However, the newest of these structures is 17 years old and all three facilities are showing their age due to high usage and substandard maintenance efforts. Hoyle Tanner & Associates (HTA), a restoration engineering firm, has identified roughly \$9.2M in repair and replacement projects which must be completed on the City's three garages to achieve their full lifecycle and maintain functionality. DPW is proposing to execute the majority of this work over the term of this program pilot.

This garage maintenance plan represents a significant investment on the part of the City of Burlington. Annually, DPW will work with stakeholders to understand parking demand and cost benefit of garage investment. Depending on the future demand analysis, it is conceivable that some of these rehabilitation costs may be best redirected towards redevelopment of the asset. (See section on Future Demand.)

Marketplace Garage

The Marketplace Garage (MPG) was opened in 1976 is projected to need roughly \$3.8M in repairs to extend its life an additional 15-20 years. Repairs have been scheduled in three phases occurring in 2015, 2016-2017 and 2018.

The 2015 projects are estimated to cost roughly \$975,000 and include structural repairs, replacement of the existing elevators, clearing and replacing faulty drainage systems, and electrical upgrades.

The 2016-17 projects are estimated to cost roughly \$2.7M and include structural repairs, life safety system upgrades, resurfacing driving areas, deep cleaning the entire facility, adding exit signage and upgrading rooftop lighting.

The 2018 projects are estimated to cost roughly \$131,000 and include final structural and surface repairs.

Lakeview Garage

The Lakeview Garage (LVG) opened in 1998 and is projected to need roughly \$647,000 in repairs to extend its service life an additional 30-40 years. Repairs have been scheduled in two phases occurring in 2016-2017 and 2018.

The 2016-17 projects are estimated to cost roughly \$378,000 and include structural repairs, life safety system upgrades, resurfacing driving areas, deep cleaning the entire facility, clearing and replacing faulty drainage systems, replacing missing doors on stair towers and upgrading lighting.

The 2018 projects are estimated to cost roughly \$269,000 and include structural repairs clearing and replacing faulty drainage systems, electrical upgrades and new exit signage.

College Street Garage

The College Street Garage (CSG) opened in 1985 and is projected to need roughly \$3.9M in repairs to extend its service life an additional 20-30 years. Repairs have been scheduled in three phases occurring in 2015, 2016-2017 and 2018.

The 2015 projects are estimated to cost roughly \$398,000 and include structural repairs, electrical upgrades, elevator improvements, drainage system repairs and upgrades, façade repairs and painting.

The 2016-17 projects are estimated to cost roughly \$2.8M and include a comprehensive cleaning of the entire facility, electrical upgrade, drainage upgrades, lighting replacement, new exit signage, and structural repairs,

The 2018 projects are estimated to cost roughly \$803,000 and include replacing existing elevators, drainage improvements, façade repairs and structural repairs.

According to this proposed schedule, the three structures should be significantly rehabilitated by the end of the proposed pilot.

5.4.2.2. Off- Street Facility Automation

In the parking industry, 'automation' refers to the conversion of a task, formerly performed by hand by parking personnel, to a process which can be performed by the user in manner that is easier, less costly or more convenient than under existing conditions. As two of the stated objectives of this plan were to improve the fiscal stability of the parking system and improve service to the City's visitors, residents and businesses, the following recommendations seek to achieve one or both of these goals.

Garages

The City's garages currently operate with SkiData Parking Access and Revenue Control Systems (PARCS) equipment. The system uses proximity cards as credentials for monthly pass holders to enter and exit the system and magnetic stripe tickets as credentials for transient parkers. Transients collect a ticket when they enter the facility, drive to the exit when they are ready to depart and present the ticket to a parking attendant, who places the ticket into a reader located in their booth. The system reads the data on the magnetic stripe, which includes the parker's date and time of entry, and calculates the fee due according the rules of the rate structure in place. The fee is displayed for both the attendant and customer to read, the customer makes payment in cash, credit/debit card and/or with a validation or voucher, which the attendant enters into the system before the gate lifts, allowing the parker to leave.

If the City wishes to issue any kind of validation or credit to a particular user, they can code a magnetic stripe ticket with a specific value which the system will read as payment received when it is inserted after the customer's original ticket. Because the pre-coded ticket follows the parker's original ticket (which indicates the time and date of their entry to allow the system to calculate elapsed time and corresponding payment due), these are often referred to as 'chaser tickets'.

The current system design is reasonable and effective, if somewhat dated. Using proximity cards for pass holders is the most ubiquitous technology format in the U.S. due to its reliability and low cost. Similarly, more U.S. parking facilities use magnetic stripe transient tickets than any other format for the same reasons. And the actual equipment, while aged, has been upgraded several times in recent years and appears to be fairly functional. Finally, the use of booth attendants to collect on exit is a serviceable format, as evidenced by how many visitors the three facilities support each year.

However, this system will not support the objectives for the proposed plan. Proximity cards do not offer the same convenience and level of customer as newer technologies, which operate 'hands free'. Magnetic stripe ticket technology has less flexibility to support new programs as they are introduced into the parking system and has higher maintenance and repair costs as they system ages. And collecting fee by hand with an attendant is neither cost effective nor the best use of personnel.

The City has made initial efforts to introduce automated fee collection into the garages, adding a pay-in-lane station at the Marketplace and Lakeview Garages last year. These lanes were added to give customers a second option for paying for their fee at the exit, increasing customer service. Installation of these lanes will also allow the City, which currently raises the gates each evening when the last booth attendant goes off shift, to soon keep the gates down and keep collecting fees overnight,



enhancing revenues and improving the fiscal stability of the system. However, this current configuration has done little to reduce operating costs in the facilities and is only marginally better than the old, attended format in terms of customer service.

The City has solicited initial quotes from their current equipment vendor to expand automation in the garages, adding pay-on-foot stations and supporting software and hardware at an estimated cost of just under \$700,000. This would allow the facilities to convert to fully automated operation during the overnight and other non-peak hours, but does not expand the capabilities of the system appreciably to provide a more robust data stream for evaluating policies, nor does it allow for the flexibility that will be needed in the future to support new programs.

DESMAN recommends the City consider developing a technical specification outlining both current and future system requirements and solicit bids for a wholesale replacement of the existing system before committing to expanding or updating the existing PARCS equipment. With the development of new technologies since the existing equipment was installed, DESMAN contends the City may be able to replace all of the existing equipment in each of the garages and acquire new capabilities at a cost not substantially higher than the existing vendor's quote to introduce the new automated pay stations into the existing system.

Based on recent bid processes to acquire new PARCS equipment, DESMAN believes the City can acquire a comprehensive replacement for the existing system which could allow:

1. Each garage to operate as a fully automated facility on a 24/7 basis with only limited staffing;
2. The City to monitor and provide real-time occupancy information for each facility;
3. DPW personnel to track utilization trends in each facility over time to evaluate the impact of policy changes;
4. Merchants and others to apply electronic validations online through a web portal for their customers;
5. Visitors to reserve and pre-purchase parking from home before coming downtown;
6. A single attendant to remotely monitor activity and assist customers in multiple facilities through internet-enabled cameras and intercoms;
7. Visitors to locate where they parked their car in a facility by entering their license plate number into a pay station.

The cost of these systems vary widely by vendor; for the purposes of this analysis, DESMAN recommends budgeting \$1.1M for a total system replacement, but is confident final quotes will be substantially lower than this figure. DESMAN recommends the City initiate development of the technical specification and bid documents at the outset of FY2016, with the objective of selecting a vendor and installing new equipment to go live at the outset of FY2017.

DESMAN recommends DPW continue automation of garage operations, with either the current or proposed PARCS equipment, to achieve the following benefits:

- Reduce overall operational labor costs to allow for increased levels of capital reinvestment into the aging garage facilities.
- Free attendants from the booths to enable them to serve more of an ambassador role. DPW should determine whether the attendant job description needs to be revised to have attendants/ambassadors monitor activity throughout the garages, answer patron questions, do light janitorial work, etc.

These benefits will help achieve the study's goals of improved customer service and greater operational sustainability.

Lots

DESMAN advocates for elimination of the 98 single-head meters in the Pearl Street, City Market, and Fletcher Library Lots, to be replaced by six multi-space meters operating on a pay-by-plate format. This retrofit would allow parkers to pay with cash, credit/debit cards and, when it is introduced, cellular telephone applications. These systems would also allow the City the flexibility to adjust rates remotely in response to special events occurring in the area, maximizing revenue when demand exists that supports a higher rate and lowering it when utilization drops. Assuming meters units featuring solar-cells for supplementing internal batteries and wireless modems for processing real time transactions, DESMAN estimates the total purchase and installation costs to be \$8,000 - \$9,000 per unit and annual operating costs to be roughly \$2,000 per unit. DESMAN would recommend the City move to solicit competitive bids on this project shortly after the end of the current calendar year, with the objective of have the meters installed and operating by the close of FY2016.

5.4.2.2.1 Sunday Parking Enforcement

Currently, all parking in City-owned parking facilities (garages, lots and on-street spaces) is free on Sundays. Historically, Sunday parking in Burlington has been free. With more activities happening on Sundays, occupancy counts over the last year have shown high rates of on-street and some off-street utilization. Charging in high-demand parking areas during high-occupancy periods helps create turnover and availability. For this reason, this report recommends looking at charging on Sundays at high occupancy locations during high-occupancy times. As changes occur over time regarding enforcement of certain parking spots at certain times on Sundays, re-evaluation will be periodically necessary – especially after the next year of data collection. Sunday on-street enforcement in the downtown is supported by data indicating that by late morning, utilization of on-street spaces across the downtown approaches and sometimes exceeds the 85% target. There were few available spaces by noon on most Sundays that were studied within the downtown, a condition that persists till later in the evening. (Appendices A3 and A5.)

A recent occupancy count from November 2015 indicated 74% occupancy within the core at 10:00AM, and nearly 100% occupancy by 12:00PM, reinforcing the data from 2014. DESMAN recommends the City charge for on-street parking within the Downtown core on Sundays, consistent with rates for the other six days a week to promote on-street availability at the goal of around 15% per block face.

In order to phase in onstreet parking enforcement, DESMAN recommends starting enforcement at noon until an appropriate data set is collected given the other recommended changes. (It is possible that charging from noon onward will reduce late morning on-street occupancy.) If after a year of data collection, occupancy counts warrant an earlier start time, the City could consider that in a later phase.

Occupancy counts at the Marketplace Garage indicate a similar story of utilization on Sundays. By noon, occupancy typically hits 90%, the garage is functionally full, and security starts turning away potential customers or allowing customers in only when another customer exits. This occupancy level persists all day into the evening. In contrast, occupancy rates at the Lakeview and College Street garages

remain very low all day on Sundays under conditions and policies. DESMAN recommends the City consider charging for parking at the Marketplace garage for some portion of the day in the future if occupancy levels remain consistent after the other recommended changes are in effect for at least a full year. DESMAN recommends implementing this change (if warranted) starting in the summer of 2018.

DESMAN also recommends that the City consider coupling a free garage parking program for Burlington city residents if the City elects to charge for parking in garages on Sundays in the future. The City of Portsmouth, NH has experimented with offering free parking to City of Portsmouth residents (verified by driver's license) in a downtown garage all day on Sundays. Though the program results in less revenue, they have reported satisfaction among residents utilizing the program and have worked to implement strategies that make the program efficient for employees of the parking system. If a garage or garages in the future continue to have excess capacity, DESMAN recommends investigating implementing a similar program in those garages.

5.4.2.3. On-Street Facility Automation

In 2014, the City replaced 284 existing coin-operated electronic meters located in the downtown core with state-of-the-art meters which accepted coinage and debit/credit cards as payment. The objective of this initiative was to improve service to end users as well as implement a system which provided a more robust data stream regarding day-to-day usage to help guide policy making in the future.

Preliminary analysis, performed collaboratively by the Burlington DPW and DESMAN, indicates that these new meters are collecting roughly \$0.10 per hour more than the meters they replaced, independent of changes in rates and hours of enforcement in this area. This change is attributed to a higher rate of voluntary payment because the newer meters accept debit and credit card transactions, as well as a lifting of maximum time-limits in the areas where these meters were installed.

To that end, DESMAN is advocating for additional upgrades to the City's existing meter stock, as well as introduction of new technologies for accepting payment for curbside parking and reorganization of the current system of curbside regulation management and administration across the downtown area.

Meters

The City currently has four types of meters operating across the downtown area. These are:

- 284 "Smart Meters" installed in the downtown core, priced at \$1.50 per hour to promote turnover, but with no prescribed time limit. These meters have distinctive silver heads and are currently subject to enforcement for 8 AM until 10 PM, Monday through Saturday.
- Short-Term or "yellow" meters, currently priced at \$1.00 per hour with prescribed time limits of 15 to 30 minutes. These are commonly located adjacent to businesses whose customers require high availability of curbside parking, but short durations of stay, such as take-out restaurants and convenience stores. There are roughly 56 of these meters in place currently across the defined study area⁴, which are subject to enforcement from 8 AM until 6 PM, Monday through Saturday, with the exception of those meters located in the core downtown area.
- Mid-Term or "blue" meters, currently priced at \$1.00 per hour with prescribed time limits of 1 to 3 hours. These are commonly in areas of high demand across the downtown. There are

⁴ There are an additional 9 short-term meters located just outside the boundaries of the defined study area.

roughly 475 of these meters currently in place on city streets across the defined study area⁵, which are subject to enforcement from 8 AM until 6 PM, Monday through Saturday.

- Long-Term or “brown” meters, currently priced at \$0.40 per hour with prescribed time limits of 10 hours. These are commonly in areas of moderate to low demand across the downtown. There are roughly 53 of these meters currently in place on city streets across the defined study area⁶, which are subject to enforcement from 8 AM until 6 PM, Monday through Saturday.

In addition, according to DESMAN’s inventory, across the defined study area there are:

- 20 spaces that are subject to 15 to 30 minute time limits, without meters;
- 4 spaces that are subject to 1-2 hour time limits, without meters; and -
- 149 spaces with no meters or time restrictions regulating their usage.

As outlined in the Existing Conditions Analysis, curbside parking is at a constant premium across the defined study area, with those areas not subject to meters or defined time limits experiencing the highest consistent utilization.

DESMAN proposes the following steps to reorganize and expand the current parking meter system on downtown streets:

All Meters

Any policy for meter rates and enforcement times should support the parking best practice of 85% occupancy in metered parking spaces on average in the system. To evaluate occupancy and set policy Desman has recommended conducting in-field data on utilization throughout the pilot period. Using this data Go!Burlington will annually evaluate the current rates and hours of enforcement to look for opportunities to improve the efficiency of use of the system. Once more smart meters are added to the system, the City and Go!Burlington may want to consider harnessing the sophistication of the meters to remove time limits and incorporate rate structures which encourage parking space turnover. Specific policies to consider for review at all meters include:

- Removal of time limits combined with rate structures that encourage parking space turnover
- Sunday enforcement
- Seasonal rate adjustments for high-use locations on Burlington’s waterfront
- Uniform rates for weekends

Downtown Core Smart Meters

Based on data, the City should evaluate the current locations and hours of enforcement of the Downtown Core Smart Meters. Based on field observations of utilization through one year of data collection, evaluate the current hours of enforcement (8:00 AM - 10:00 PM) and extend enforcement to include Sundays effective January 1, 2016.

In addition, based on data collection, it is recommended that several additional blocks are added to the Downtown Core.

⁵ There are additional 52 mid-term meters located just outside the boundaries of the defined study area.

⁶ There are additional 74 mid-term meters located just outside the boundaries of the defined study area.

Extending the hours of operations to Sundays is estimated to generate an additional \$121,464 in annual revenues for calendar year 2016, based on current rates and conditions.

Short-Term Meters

1. Retain 23 existing short-term 'yellow' meters in their current locations with the current 30-minute maximum length of stay prescription by December 31, 2015.
2. Convert 24 existing short-term 'yellow' meters in their current locations from their current 15-minute maximum length of stay prescription to 30-minutes by December 31, 2015.
3. Convert 17 existing short-term 'yellow' time-limited spaces in their current locations to metered spaces and adjust those spaces with a current 15-minute maximum length of stay to 30-minutes by December 31, 2015.
4. Based on field observations of utilization, convert three (3) short-term 'yellow' meters into mid-term 'blue' smart meters with a maximum length of stay of 3 hours by June 30, 2016.
5. Based on field observations of utilization, extend the hours of enforcement to 8:00 AM to 10:00 PM, Monday through Saturday, and 12:00PM to 10:00PM on Sundays.

DESMAN estimates the total cost to implement these proposed changes will be roughly \$8,850 and will impact the city between October 1 and December 31, 2015. This figure includes costs to adjust rates in 23 existing meters, convert 24 meters from 15- to 30-minute maximums and adjust rates, remove 3 existing meters, and relocate and reprogram 17 existing meters to formerly free or time-limited parking spaces. Under this proposal, there would be a total of 64 short-term 'yellow' meters operating in the study area as of January 1, 2016.

Extending the hours of operations is estimated to generate an additional \$16,000 in annual revenues, based on current and proposed conditions and rates (outlined in a later section).

Mid-Term Meters

1. The City should evaluate based on data whether to retain the current 3 hour time limit, increase the pricing across the entire tier, or whether to create escalated rates of payment for hours beyond the first three.
2. Retain 389 existing mid-term 'blue' meters in their current locations, but convert them to 'smart meter' technology to enhance customer service between January 1 and December 31, 2017.
3. Based on field observations of utilization, convert three (3) short-term 'yellow' meters into mid-term 'blue' smart meters by June 30, 2016.
4. Based on field observations of utilization, convert two (2) long-term 'brown' meters into mid-term 'blue' smart meters by June 30, 2016.
5. Based on field observations of utilization, convert six (6) time-limited spaces into mid-term 'blue' smart meters by June 30, 2016.
6. Based on field observations of utilization, convert fifteen (15) currently unrestricted spaces into mid-term 'blue' smart meters between January 1 and June 30, 2016.
7. Based on field observations of utilization, convert one-hundred and five (105) mid-term 'blue' meters into long-term 'brown' meters with a maximum length of stay of 10 hours between July 1 and December 31, 2016.
8. Based on field observations of utilization, assign hours of enforcement from 8:00 AM to 6:00 PM, Monday through Saturday.

DESMAN estimates the total cost to implement these proposed changes will be roughly \$316,500 and will impact the city between January 1 and June 30, 2016. This figure includes



costs replace 394 existing coin-operated meters with state-of-the-art 'smart' meters, remove 105 existing meters, and relocate and install 21 new 'smart meters' in formerly free or time-limited parking spaces. Under this proposal, there would be a total of 415 mid-term 'blue' meters operating in the study area as of July 1, 2016.

Extending the hours of operations, installing new parking meters which accept debit/credit cards for payment, and introducing 21 meters to formerly free parking spaces will result in new revenues. However, converting 105 'blue' meters to 'brown' meters will result in a loss of roughly \$132,300 in gross revenues. Therefore, it is estimated that this initiative will generate a loss of approximately \$99,540 in annual revenues in the first year of operation, based on current and proposed rates (outlined in a later section) and conditions.

Long-Term Meters

1. Retain 61 existing long-term 'brown' meters in their current locations, with the current 10-hour maximum length of stay prescription.
2. Based on field observations of utilization, convert two (2) long-term 'brown' meters into mid-term 'blue' smart meters by June 30, 2016.
3. Based on field observations of utilization, convert one-hundred and five (105) mid-term 'blue' meters into long-term 'brown' meters with a maximum length of stay of 10 hours between July 1 and December 31, 2016.
4. Based on field observations of utilization, convert seven (7) time-limited spaces into long-term 'brown' meters with a maximum length of stay of 10 hours between July 1 and December 31, 2016.
5. Based on field observations of utilization, convert one hundred and thirty four (134) currently unrestricted spaces into long-term 'brown' meters with a maximum length of stay of 10 hours between July 1 and December 31, 2016.
6. Based on field observations of utilization, assign hours of enforcement from 8:00 AM to 6:00 PM, Monday through Saturday.

DESMAN estimates the total cost to implement these proposed changes will be roughly \$61,200 and will impact the city between July 1 and December 31, 2016. This figure includes costs to adjust rates in 61 existing meters, remove 2 existing meters, reprogram 105 existing 'blue' meters to 'brown' meters, and relocate and reprogram 134 existing meters to formerly free or time-limited parking spaces. Under this proposal, there would be a total of 307 long-term 'brown' meters operating in the study area as of January 1, 2017.

Installing 134 new parking meters to formerly free parking spaces and converting 105 'blue' meters will result in an estimated \$251,800 in new gross revenues, based on current and proposed rates (outlined in a later section) and conditions.

5.4.2.4. Pay-by-Cell

It should be noted that DESMAN's proposals for reorganizing short-term (yellow) and long-term (brown) metered parking involve reusing the existing coin-operated electronic meters, rather than upgrading to 'smart' meters. This is driven largely by the capital cost in converting these 371 spaces. DESMAN estimates it will cost roughly \$50.00 per unit to reprogram an existing meter with new rates and/or hours of operation, \$150.00 per unit to reprogram an existing meter with new rates



and/or hours of operation and refurbish the exterior to match the new assignment, and roughly \$300.00 per unit to relocate an existing meter to a new location, install it and reprogram it. In comparison, the cost to purchase and install a 'smart' meter is estimated at roughly \$750.00 per unit.

An alternative way to improve customer service, as well as voluntary payment rates, to coin only meters is to introduce a 'pay by cell' program. This service, provided by a commercial vendor, allows the individual to establish an account with the vendor via an application on their cellular telephone. The application requires the individual to create a registration with the vendor which includes specific on their vehicle, including license plate number, and a credit/debit card or bank account against which the vendor can bill.

Once the user is registered, using the service is fast and simple. The individual parks and takes note of the zone, meter number or space number prominently displayed upon or adjacent to the space where they are parked. They open the application on their cell phone, enter this information into the application, and select the amount of time they wish to purchase, which is automatically billed to their account. The vendor then issues a notice to the appropriate municipal parking enforcement personnel that the vehicle driven by the user (identified by its license plate number) has purchased the right to park in the identified space for the determined term. Many applications include features which remember where the user parked, alert the user via text message when their time is about to expire, and even allow them the option of extending their time, if allowed by municipal policy. Some vendors offer the ability to pay for this service through an online sign-up system and text-only payment system. (In other words, you don't have to have a smart phone to use the system.)

End users report great satisfaction with these systems, citing the convenience of not having to carry change or run back to feed the meter before it expires. Business persons like the end of month reports that can be issued by the application, summarizing charges included by location, date and time of day, which can be used for expense or tax accounting. Parking enforcement personnel report greater ease with patrolling and enforcement in facilities or areas where pay-by-cell has been put in place, as they need only scan the parker's license plate number and run it against their database of authorized users to determine if the vehicle is in violation. In municipalities using automated License Plate Recognition systems this is done automatically as the officer drives down the street. Municipalities report good results with these programs, as they reduce the frequency (and associated costs) of meter collection efforts, provide better data regarding where and when people are parking and for how long, and allow the funds from those fees to be deposited in the City's accounts the same day they are collected.

DESMAN believes a service such as this will allow parkers who elect to use it the same standard of care and convenience enjoyed by parkers occupying spaces with smart meters. The cost of these programs is typically negligible to the municipality, as the vendor's business model is to collect surcharge fees on each transaction from the end users and many vendors provide signage and other branding and marketing materials at no cost when entering into a market.

For the purposes of this analysis, DESMAN has assumed a one-time cost of \$5,000 to the City for procurement and miscellaneous start-up costs associated with this initiative. DESMAN recommends the City move to begin due diligence process to select a vendor at the outset of the next fiscal year with the objective of having this service in place by January 1, 2016.

5.4.2.5. Process Automation

There are three processes which the City of Burlington currently performs manually which DESMAN believes can be automated at a significant savings in labor and cost.

Permit Application

Currently, individuals wishing to attain a monthly permit to park in one of the city's garages must manually fill out an application and drop it off the DPW offices. An individual then must review the application and issue a notice of refusal or process the application manually and issue credentials to the applicant. The process could be significantly streamlined by purchasing software or third-party services which would allow the individual to submit an application electronically and self-manage their account online.

Colleges and universities have been automating the permit application and management process for over a decade successfully and many municipalities are adopting the practice as well. In systems where the client needs a physical credential, the majority of the process is handled online and the credential is mailed to the applicant within 48 hours of application acceptance. In municipalities and institutions where the PARCS equipment has the capability to read barcodes, credentials can be issued electronically immediately.

Municipalities can purchase this capability through parking permit management software or contract with a third-party agency to provide the web portal and manage the permit process according to their specifications. Costs vary widely between vendors according the size, complexity and volume of the client's operation and the number of features sought by the client. For the purposes of this analysis, DESMAN assumed the City would purchase software to manage this service at a cost of \$3,500 for the software package plus an annual licensing/service fee of \$1,000.

DESMAN advocates for purchase and installation of this software no later than July 1, 2016.

Ticket Adjudication

Individuals wishing to contest a parking ticket issued by the City of Burlington must do so in writing within 30 days of receipt. These appeals are directed to the City Attorney's office, which reviews each submission and responds back to the complainant in writing with a judgement. If the registered owner of the vehicle is unsatisfied with the Attorney's decision, they must contact the Police Department to arrange a court hearing on the matter.

Again, this is process which could be shortened with considerable benefit to both the individual and the City by the purchase of software facilitating faster and better communication between parties. Software packages typically include features such as a FAQ forum which may assist the individual in assessing the likely outcome of an appeal and a scheduling function which will allow the complainant the ability to schedule their own hearing date and time. Costs vary widely between vendors according the size, complexity and volume of the client's operation and the number of features sought by the client. For the purposes of this analysis, DESMAN assumed the City would purchase software to manage this service at a cost of \$2,000 for the software package plus an annual licensing/service fee of \$200.

DESMAN advocates for purchase and installation of this software no later than July 1, 2016.

Citation Payment



Individuals wishing to pay a parking ticket issued by the City of Burlington must do it by mail, over the phone during standard business hours or by dropping payment off at the Police Department. Payments are processed manually by a clerk as they are received. Again, this is a process which could be shortened with considerable benefit to both the individual and the City by the purchase of software allowing for online payment via credit card, debit card or bank draft. This would save time and labor on the part of the end user and the Police Department, allow both parties to dedicate their efforts to higher, better uses. DESMAN recommends the City analyze the citation payment and appeal process in order to streamline operations and create a better customer experience.

Costs vary widely between vendors according the size, complexity and volume of the client's operation and the number of features sought by the client. For the purposes of this analysis, DESMAN assumed the City would purchase software to manage this service at a cost of \$3,000 for the software package plus an annual licensing/service fee of \$300.

DESMAN advocates for purchase and installation of this software no later than July 1, 2016.

5.4.2.6. Pricing

On-Street Meters

The City currently has four types of meters operating across the downtown area. These are:

- 284 "Smart Meters" installed in the downtown core, priced at \$1.50 per hour to promote turnover, but with no prescribed time limit. These meters have distinctive silver heads and are currently subject to enforcement for 8 AM until 10 PM, Monday through Saturday.
- Short-Term or "yellow" meters, currently priced at \$1.00 per hour with prescribed time limits of 15 to 30 minutes. These are commonly located adjacent to businesses whose customers which require high availability of curbside parking, but short durations of stay, such as take-out restaurants and convenience stores. There are roughly 56 of these meters in place currently across the defined study area, which are subject to enforcement from 8 AM until 6 PM, Monday through Saturday, with the exception of those meters located in the core downtown area.
- Mid-Term or "blue" meters, currently priced at \$1.00 per hour with prescribed time limits of 1 to 3 hours. These are commonly in areas of high demand across the downtown. There are roughly 475 of these meters currently in place on city streets across the defined study area, which are subject to enforcement from 8 AM until 6 PM, Monday through Saturday.
- Long-Term or "brown" meters, currently priced at \$0.40 per hour with prescribed time limits of 10 hours. These are commonly in areas of moderate to low demand across the downtown. There are roughly 53 of these meters currently in place on city streets across the defined study area, which are subject to enforcement from 8 AM until 6 PM, Monday through Saturday.

This system organization represents four distinct 'tiers' of parking, defined by time limit and/or parking rate. DESMAN advocates for maintaining this four tier structure, with certain adjustments.

In addition to the metered spaces, according to DESMAN's inventory across the defined study area there are:

- 20 spaces that are subject to 15- to 30- minute time limits, without meters;
- 4 space that are subject to 1-2 hour time limits, without meters; and -
- 149 spaces with no meters or time restrictions regulating their usage.

As outlined in the Existing Conditions Analysis, curbside parking is at a constant premium across the defined study area, with those areas not subject to meters or defined time limits experiencing

the highest consistent utilization. These parking spaces, which are consistently utilized at rates of 90% or higher, are to be incorporated in one of the four tiers as defined in the prior section of this report.

Parking management best practices are to manage demand through pricing such that there is consistently 15% of curbside parking available curbside. These practices advocate for reducing pricing when utilization is low (average utilization of 65% or less) and raising them when it is high (average utilization of 85% or more). DESMAN proposes the following steps to manage parking for metered on-street spaces through differential pricing as follows:

Short-Term Meters (Tier 1)

DESMAN recommends the following actions to organize this tier:

1. Retain 23 existing short-term 'yellow' meters in their current locations with the current 30-minute maximum length of stay prescription.
2. Convert 24 existing short-term 'yellow' meters in their current locations from their current 15-minute maximum length of stay prescription to 30-minutes.
3. Convert 17 existing short-term 'yellow' time-limited spaces in their current locations to metered spaces and adjust those spaces with a current 15-minute maximum length of stay to 30-minutes.
4. Based on field observations of utilization, convert three (3) short-term 'yellow' meters into mid-term 'blue' smart meters.
5. Set a fixed rate of \$2.00 per hour (\$0.50/15 minutes) for all Tier 1 meters.

DESMAN estimates the total cost to implement these proposed changes will be roughly \$10,000. This figure includes costs to adjust rates in existing meters, convert meters from 15- to 30-minute maximums, adjust rates, remove three existing meters, and relocate and reprogram some existing meters to formerly free or time-limited parking spaces. Under this proposal, there would be a total of 64 short-term 'yellow' meters operating in the study area as of January 1, 2016. Extending the hours of operations is estimated to generate an additional \$16,000 in annual revenues, based on current and proposed conditions and rates (outlined in a later section).

Smart Meters (Tier 2)

DESMAN recommends the following actions to organize this tier:

1. Based on field observations of utilization, retain the current hours of enforcement (8:00 AM to 10:00 PM, Monday through Saturday) and extend enforcement to include Sundays starting at 12:00 PM effective January 1, 2016.
2. Retain the existing pricing policy of \$1.50 per hour with no time limits.

Extending the hours of operations is estimated to generate an additional \$121,464 in annual revenues for calendar year 2016 from the 284 meters, based on current rates and conditions.

Mid-Term Meters (Tier 3)

DESMAN recommends the following actions to organize this tier:

1. The City should evaluate based on data whether to retain the current 3 hour time limit, increase the pricing across the entire tier, or whether to create escalated rates of payment for hours beyond the first three.

2. Retain 389 existing mid-term 'blue' meters in their current locations, but convert them to 'smart meter' technology to enhance customer service.
3. Based on field observations of utilization, convert three (3) short-term 'yellow' meters into mid-term 'blue' smart meters.
4. Based on field observations of utilization, convert two (2) long-term 'brown' meters into mid-term 'blue' smart meters.
5. Based on field observations of utilization, convert six (6) time-limited spaces into mid-term 'blue' smart meters.
6. Based on field observations of utilization, convert fifteen (15) currently unrestricted spaces into mid-term 'blue' smart meters.
7. Based on field observations of utilization, convert one-hundred and five (105) mid-term 'blue' meters into long-term 'brown' meters with a maximum length of stay of 10 hours.
8. Based on field observations of utilization, assign hours of enforcement from 8:00 AM to 6:00 PM, Monday through Saturday.
9. Set a fixed rate of \$1.00 per hour (\$0.25/15 minutes) for all Tier 3 meters.

DESMAN estimates the total cost to implement these proposed changes will be roughly \$316,500. This figure includes costs replace 394 existing coin-operated meters with state-of-the-art 'smart' meters, remove 105 existing meters, and relocate and install 21 new 'smart meters' in formerly free or time-limited parking spaces. Under this proposal, there would be a total of 415 mid-term 'blue' meters operating in the study area as of July 1, 2016.

Extending the hours of operations, installing new parking meters which accept debit/credit cards for payment, and introducing 21 meters to formerly free parking spaces will result in new revenues. However, converting 105 'blue' meters to 'brown' meters will result in a loss of roughly \$132,300 in gross revenues. Therefore, it is estimated that this initiative will generate a loss of approximately \$99,540 in annual revenues in the first year of operation, based on current and proposed rates and conditions.

Long-Term Meters (Tier 4)

DESMAN recommends the following actions to organize this tier:

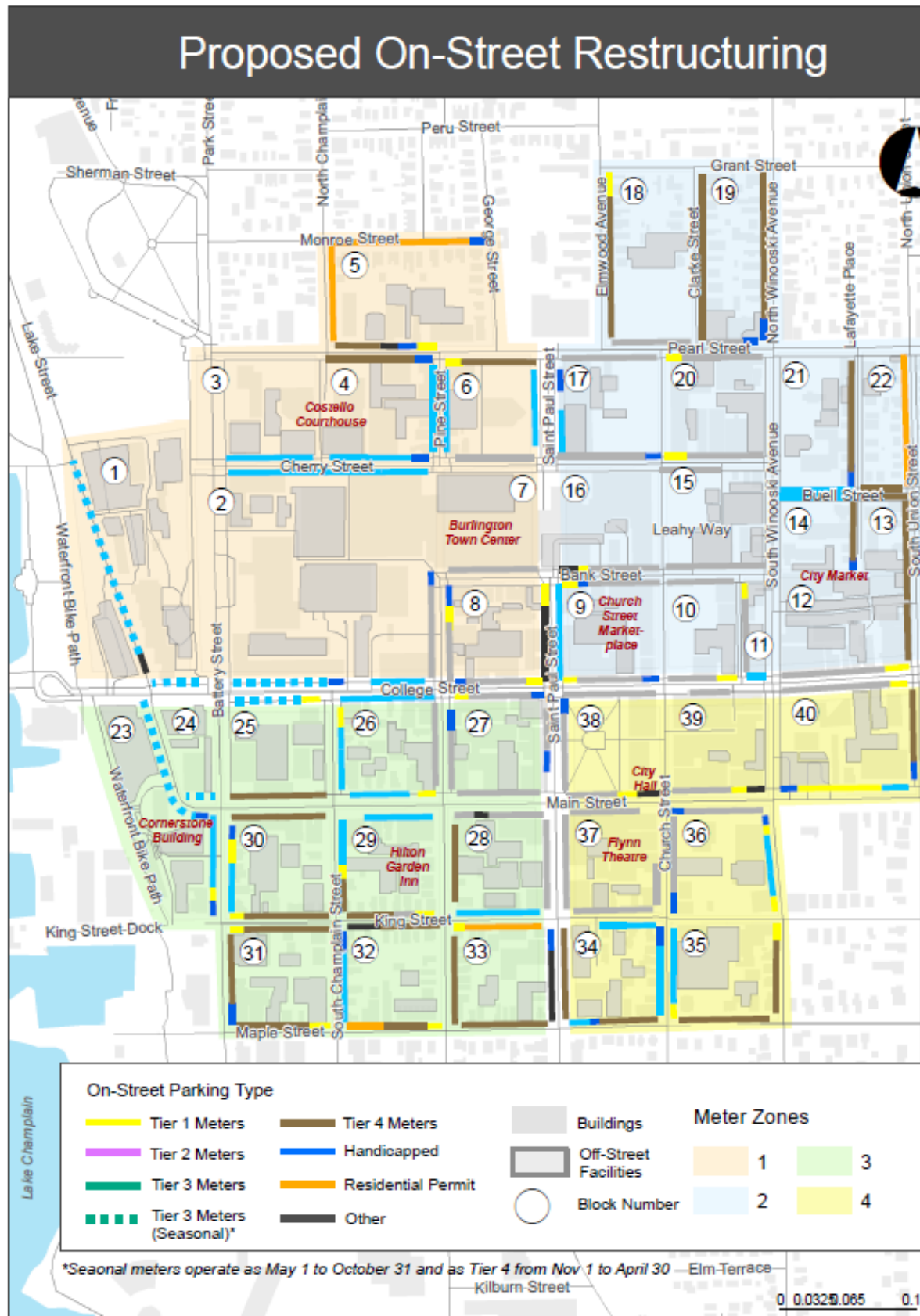
1. Retain 61 existing long-term 'brown' meters in their current locations, with the current 10-hour maximum length of stay prescription.
2. Based on field observations of utilization, convert two (2) long-term 'brown' meters into mid-term 'blue' smart meters.
3. Based on field observations of utilization, convert one-hundred and five (105) mid-term 'blue' meters into long-term 'brown' meters with a maximum length of stay of 10 hours.
4. Based on field observations of utilization, convert seven (7) time-limited spaces into long-term 'brown' meters with a maximum length of stay of 10 hours.
5. Based on field observations of utilization, convert one hundred and thirty four (134) currently unrestricted spaces into long-term 'brown' meters with a maximum length of stay of 10 hours.
6. Based on field observations of utilization, assign hours of enforcement from 8:00 AM to 6:00 PM, Monday through Saturday.
7. Set a fixed rate of \$0.50 per hour for all Tier 4 meters.

DESMAN estimates the total cost to implement these proposed changes will be roughly \$61,200. This figure includes costs to adjust rates in 61 existing meters, remove 2 existing meters, reprogram 105 existing 'blue' meters to 'brown' meters, and relocate and reprogram 134 existing meters to formerly free or time-limited parking spaces. Under this proposal, there would be a total of 307 long-term 'brown' meters operating in the study area as of January 1, 2017.

Installing 134 new parking meters to formerly free parking spaces and converting 105 'blue' meters will result in an estimated \$251,800 in new gross revenues, based on current and proposed rates and conditions.

As shown in the table below, DESMAN estimates these changes will increase annual revenues from on-street metering from roughly \$1.64M annually to approximately \$1.92M, an increase of roughly \$280,700 which can be used to offset the improvements to the on-street parking system as well as other proposed improvements to off-street assets.

PROPOSED CONDITIONS								
Designation:	Tier 1	Tier 2	Tier 3	Tier 4	External Short-Term Meters	External Mid-Term Meters	External Short-Term Meters	TOTALS
Application:	All 15 and 30 minute meters and time limited spaces	"Smart" Meter pilot area	Selected time limited and 3-hour metered spaces	Selected unlimited, time limited, 3- and 10-hour metered spaces	15- and 30-minute meters outside the defined study area	3-hour meters outside the defined study area	10-hour meters outside the defined study area	
Impact:	61 spaces	284 spaces	415 spaces	307 spaces	9 spaces	52 spaces	74 spaces	1,295 spaces
Converting to:	Yellow 30-minute meters @ \$2.00/hour (\$0.50/15 minutes)	Pink "Smart" meters @ \$1.50/hour	Blue "Smart" meters @ \$1.00/hour w 3-hour maximum	Brown long-term meters @ \$0.50/hour w 10-hour maximum	Yellow meters @ \$1.00/hour (\$0.50/30 minutes)	Blue coin-operated meters @ \$1.00/hour w 3-hour maximum	Brown long-term meters @ \$0.40/hour w 10-hour maximum	
Est. Cost to Convert:	\$10,000.00	\$213,000.00	\$916,500.00	\$61,200.00	n/a	n/a	n/a	\$600,700.00
Equipment:	Existing or converted coin-op meters	Single-space meters with credit/debit card acceptance	Single-space meters with credit/debit card acceptance	Existing or converted coin-op meters	Existing coin-op meters	Existing coin-op meters	Existing coin-op meters	
Hours of Enforcement:	8 AM - 10 PM, Monday through Sunday	9A-10A Mon - Sat, 12P-8P Sundays	8 AM - 8 PM, Monday through Saturday	8 AM - 6 PM, Monday through Saturday	8 AM - 6 PM, Monday through Saturday	8 AM - 6 PM, Monday through Saturday	8 AM - 6 PM, Monday through Saturday	
Typical Occupancy:	50%	80%	70%	65%	55%	50%	75%	
Turns/Day:	4	4	3	2	4	3	2	
Avg. Rate/User:	\$0.50	\$3.00	\$2.00	\$2.50	\$0.25	\$1.50	\$1.40	
Operating Days/Year:	300	300	300	300	300	300	300	
Est. Rev/Year (Proposed):	\$23,040.00	\$961,504.00	\$522,300.00	\$293,325.00	\$1,485.00	\$35,100.00	\$53,280.00	\$1,916,634.00
EXISTING CONDITIONS								
Number of Meters:	50%	85%	70%	65%	55%	50%	75%	
Typical Occupancy:	50%	85%	70%	65%	55%	50%	75%	
Hourly Rate:								
Turns/Day:	4	4	3	2	4	3	2	
Avg. Rate/User:	\$0.25	\$3.00	\$2.00	\$2.00	\$0.25	\$1.50	\$1.40	
Operating Days/Year:	300	300	300	300	300	300	300	
Est. Rev/Year (Existing):	\$7,050.00	\$869,040.00	\$622,440.00	\$47,580.00	\$1,485.00	\$35,100.00	\$53,280.00	\$1,635,975.00
Est. Revenue Change:	\$15,990.00	\$112,464.00	(\$39,540.00)	\$251,745.00	\$0.00	\$0.00	\$0.00	\$280,659.00



5.4.2.7. Surface Lots

The City has already initiated a pilot to replace the 43 meters in the Main Street lot with two multi-space parking meters. It is DESMAN's understanding that the Browns Court Lot has only been partially active in the current fiscal year due to construction activities and is scheduled to close in short order to make way for new development on the site.

DESMAN advocates for elimination of the 98 remaining single-head meters in the Pearl Street, City Market, and Fletcher Library Lots, to be replaced by two multi-space meters in each facility, operating on a pay-by-plate format. Assuming meters units featuring solar-cells for supplementing internal batteries and wireless modems for processing real time transactions, DESMAN has conservatively budgeted \$9,000 per unit, for a total cost of \$54,000 across the three lots.

DESMAN would recommend the City eliminate maximum length of stay in each facility and price each facility competitively against the abutting curbside meters in the surrounding area, but slightly below them on an hourly cost basis. The objective of this strategy is to provide an incentive for longer term parkers to seek these off-street facilities, keeping the curbside spaces available for shorter term users.

DESMAN recommends pricing the Main Street and City Market lots, which see high utilization and are adjacent to the Tier 2 meter zone (\$1.50/hour) at \$1.25/hour. The Pearl Street and Fletcher Library lots, which straddle Tier 3 and Tier 4 zones, are recommended to be priced at \$0.75/hour.

At the Main Street lot, which experiences high rates of utilization on both weekends and weekdays from mid-morning until the late evening, DESMAN recommends adopting the hours of enforcement used in the Tier 2 meter zone. The hours of enforcement for Tier 3 would be applicable to the City Market lot and the hours of enforcement for Tier 4 would be applied to the Pearl Street and Fletcher Library lots.

At the future Brown's Court lot, (which will be below a newly constructed building to house Champlain College students, but open to transient parkers,) Desman recommends that the City work with the College to ensure similar technology is deployed with consistent rates and hours of enforcement as Tier 3.

DESMAN projects that adoption of these recommends will generate an additional ~ \$25,200 annually over current conditions, as illustrated on the table included on the next page. This additional revenue could be used to offset the improvements to the surface lots as well as other proposed improvements to other on- and off-street assets.

5.4.2.8. Marketplace Garage

The Marketplace Garage is highly utilized on weekday and weekends. During field observations the garage regularly averages 80% or higher utilization during the course of a typical weekday and weekend day between noon and 8:00 PM; and it is not unusual for the facility to reach capacity multiple times of day on a busy summer weekday or weekend day, or during the holidays. This implies that the facility may be underpriced, even with the most recent rate adjustment, and require further increases to mitigate over-utilization. In addition, the facility has been credited with a total \$3.8M in repairs necessitated by a combination of high daily use and deferred maintenance.

DESMAN proposes adjustments to the lower and upper end of the rate scale. At the lower end, parking is currently free for the first two hours in deference to the City Charter which stipulates the City will offer two hours of free parking as part of a larger parking management program. This

Charter language does not stipulate this will offered universally in all public facilities, nor specifically in the Marketplace Garage. Total transient volume between June 2014 and May 2015 for the garage was roughly 322,000 users of which two-thirds (~ 212,000) were parkers with stays of two hours or less.

DESMAN proposes to retain the two-hour free parking program in the College Street and Lakeview Garages, where there is adequate capacity, but begin collecting fees from these users in the Marketplace Garage at a rate of \$1.00 per hour for stays of one hour or less and \$2.00 for stays of two hours or less. Assuming a 35% loss rate between current user volume and future user volume associated with this change, DESMAN projects this will still generate roughly \$219,700 in new revenues.

Additionally, DESMAN also proposes to increase 'top end' rates from a daily maximum of \$10.00 (after 8 hours) to add two new rate increments:

\$12.00 for stays of more than 8 hours up to 12 hours and \$15.00 for stays of more than 12 hours up to 24 hours. These changes will impact roughly 10,300 users annually, based on ticket statistics between June 2014 and May 2015, but generate an additional ~ \$21,400, even when factoring a 5% loss rate over historical user volumes due to the rate change.

In total, DESMAN projects these two rate changes will generate an additional ~ \$241,100 in revenue, as shown in the table on the following page, while still keeping the facility priced substantially lower than its closest competitor, the Burlington Town Center Garage.

DESMAN proposes this rate increase be instituted as of January 1, 2017, after substantial repairs have been initiated and completed on the garage and changes to the on-street system and parking lots are complete.

	BTC Garage (current)	Marketplace (current)	Marketplace (proposed)
DURATION			
0-.5 hrs	\$ 2.00	\$ -	\$ 1.00
.5-1 hrs	\$ 2.00	\$ -	\$ 1.00
1.0-1.5 hrs	\$ 4.00	\$ -	\$ 2.00
1.5-2.0 hrs	\$ 4.00	\$ -	\$ 2.00
2.0-2.5 hrs	\$ 6.00	\$ 3.00	\$ 3.00
2.5-3.0 hrs	\$ 6.00	\$ 4.00	\$ 4.00
3.0-3.5 hrs	\$ 8.00	\$ 5.00	\$ 5.00
3.5-4.0 hrs	\$ 8.00	\$ 6.00	\$ 6.00
4.0-5.0 hrs	\$ 10.00	\$ 7.00	\$ 7.00
5.0-6.0 hrs	\$ 10.00	\$ 8.00	\$ 8.00
6.0-7.0 hrs	\$ 12.00	\$ 8.00	\$ 8.00
7.0-8.0 hrs	\$ 12.00	\$ 9.00	\$ 9.00
8.0-9.0 hrs	\$ 14.00	\$ 10.00	\$ 12.00
9.0-10.0 hrs	\$ 14.00	\$ 10.00	\$ 12.00
10.0-12.0 hrs	\$ 16.00	\$ 10.00	\$ 12.00
12.0-24.0 hrs	\$ 22.00	\$ 10.00	\$ 15.00

DURATION	ADJUSTED TICKETS	CURRENT RATES	ESTIMATED REVENUES	PROPOSED RATES	PROJECTED GROSS	ADJUSTED NET	REVENUE CHANGE
0-.5 hrs	32,057	\$ -	\$ -	\$ 1.00	\$ 32,057	\$ 20,837	\$ 20,837
.5-1 hrs	52,114	\$ -	\$ -	\$ 1.00	\$ 52,114	\$ 33,874	\$ 33,874
1.0-1.5 hrs	66,468	\$ -	\$ -	\$ 2.00	\$ 132,936	\$ 86,408	\$ 86,408
1.5-2.0 hrs	60,458	\$ -	\$ -	\$ 2.00	\$ 120,916	\$ 78,595	\$ 78,595
2.0-2.5 hrs	32,731	\$ 3.00	\$ 98,193	\$ 3.00	\$ 98,193	\$ 98,193	\$ -
2.5-3.0 hrs	21,210	\$ 4.00	\$ 84,840	\$ 4.00	\$ 84,840	\$ 84,840	\$ -
3.0-3.5 hrs	13,674	\$ 5.00	\$ 68,370	\$ 5.00	\$ 68,370	\$ 68,370	\$ -
3.5-4.0 hrs	9,134	\$ 6.00	\$ 54,804	\$ 6.00	\$ 54,804	\$ 54,804	\$ -
4.0-5.0 hrs	10,882	\$ 7.00	\$ 76,174	\$ 7.00	\$ 76,174	\$ 76,174	\$ -
5.0-6.0 hrs	5,681	\$ 8.00	\$ 45,448	\$ 8.00	\$ 45,448	\$ 45,448	\$ -
6.0-7.0 hrs	3,874	\$ 9.00	\$ 34,866	\$ 9.00	\$ 34,866	\$ 34,866	\$ -
7.0-8.0 hrs	3,140	\$ 10.00	\$ 31,400	\$ 10.00	\$ 31,400	\$ 31,400	\$ -
8.0-12.0 hrs	8,475	\$ 10.00	\$ 84,750	\$ 12.00	\$ 101,700	\$ 96,615	\$ 11,865
12.0-24.0 hrs	1,549	\$ 10.00	\$ 15,490	\$ 15.00	\$ 23,235	\$ 22,073	\$ 6,583
1-2 days	252	\$ 20.00	\$ 5,040	\$ 30.00	\$ 7,560	\$ 7,182	\$ 2,142
2-3 days	23	\$ 30.00	\$ 690	\$ 45.00	\$ 1,035	\$ 983	\$ 293
3-4 days	4	\$ 40.00	\$ 160	\$ 60.00	\$ 240	\$ 228	\$ 68
4-5 days	7	\$ 50.00	\$ 350	\$ 75.00	\$ 525	\$ 499	\$ 149
5-6 days	2	\$ 60.00	\$ 120	\$ 90.00	\$ 180	\$ 171	\$ 51
6-7 days	2	\$ 70.00	\$ 140	\$ 105.00	\$ 210	\$ 200	\$ 60
7-8 days	2	\$ 80.00	\$ 160	\$ 120.00	\$ 240	\$ 228	\$ 68
8-9 days	1	\$ 90.00	\$ 90	\$ 135.00	\$ 135	\$ 128	\$ 38
9-10 days	1	\$ 100.00	\$ 100	\$ 150.00	\$ 150	\$ 143	\$ 43
10-11 days	-	\$ 110.00	\$ -	\$ 165.00	\$ -	\$ -	\$ -
11-12 days	-	\$ 120.00	\$ -	\$ 180.00	\$ -	\$ -	\$ -
12-13 days	-	\$ 130.00	\$ -	\$ 195.00	\$ -	\$ -	\$ -
13-14 days	-	\$ 140.00	\$ -	\$ 210.00	\$ -	\$ -	\$ -
14-15 days	-	\$ 150.00	\$ -	\$ 225.00	\$ -	\$ -	\$ -
15-16 days	1	\$ 160.00	\$ 160	\$ 240.00	\$ 240	\$ 228	\$ 68
TOTAL	321,742		\$ 601,345		\$ 967,568	\$ 842,487	\$ 241,142

5.4.2.9 Lakeview/College Street Garages

In contrast with the Marketplace Garage, the Lakeview and College Street Garages are consistently underutilized, averaging 50-60% utilization on a typical weekday and even lower levels on a weekend day, which would suggest rates may need to be decreased. However, the two facilities also account for a total of \$4.5M in capital projects to address deferred maintenance, so some form of rate adjustment to help support that work must be instituted.

There were an estimated 271,800 transients that parked in the two garages between June 2014 and May 2015. Roughly 48% of these users (~ 75,283) were hotel guests, using a coupon for parking. The remainder (81,560) of annual parkers were general transients paying the posted rates.

DESMAN proposes to adjust the top end rate at the two facilities to generate additional revenues to address the necessary capital repairs. Specifically, DESMAN proposes to increase



the daily maximum rate from \$8.00 (after 6 hours) to \$8.00 for stays of more than 6 hours up to 8 hours, \$9.00 for stays of more than 8 hours up to 12 hours, and \$10.00 for stays of more than 12 hours up to 24 hours.

This would place the garages well below the adjacent Burlington Town Center Garage in terms of pricing, but would allow the facility to generate an additional ~ \$50,800 in annual transient revenues, as shown in the table on the following page, even factoring a 5% loss in current patronage due to the rate change.

In order to accommodate those part-time employees who may be displaced from the city's garages due to the cost of long-term parking, DESMAN recommends the City offer a 'pass card' program. This program would let an employee to purchase a pre-loaded pass card that would allow them to park for up to 12 hours in the College Street or Lakeview Garages at a fixed flat rate of \$5.00 per use (50% off the maximum daily rate). Cards could be loaded and reloaded in any amount specified by the purchaser, but purchasers staying over their 12 hour limit would be subject to standard fees, which would be automatically deducted from the card when they used it to exit the facility.

DURATION	BTC Garage (current)	CSG/LVG (current)	CSG/LVG (proposed)
0-.5 hrs	\$ 2.00	\$ -	\$ -
.5-1 hrs	\$ 2.00	\$ -	\$ -
1.0-1.5 hrs	\$ 4.00	\$ -	\$ -
1.5-2.0 hrs	\$ 4.00	\$ -	\$ -
2.0-2.5 hrs	\$ 6.00	\$ 2.00	\$ 2.00
2.5-3.0 hrs	\$ 6.00	\$ 3.00	\$ 3.00
3.0-3.5 hrs	\$ 8.00	\$ 4.00	\$ 4.00
3.5-4.0 hrs	\$ 8.00	\$ 5.00	\$ 5.00
4.0-5.0 hrs	\$ 10.00	\$ 6.00	\$ 6.00
5.0-6.0 hrs	\$ 10.00	\$ 7.00	\$ 7.00
6.0-7.0 hrs	\$ 12.00	\$ 8.00	\$ 8.00
7.0-8.0 hrs	\$ 12.00	\$ 8.00	\$ 8.00
8.0-9.0 hrs	\$ 14.00	\$ 8.00	\$ 9.00
9.0-10.0 hrs	\$ 14.00	\$ 8.00	\$ 9.00
10.0-12.0 hrs	\$ 16.00	\$ 8.00	\$ 9.00
12.0-24.0 hrs	\$ 22.00	\$ 8.00	\$ 10.00

For a full-time worker, this program would be less appealing than purchasing a monthly lease at \$80.00 - \$96.00 per month, as 20 days per month would equate to \$100.00 in total charges. But for an individual working 16 days or less per month, this program would be a superior option. DESMAN estimates that there will be roughly 1,154 current transients⁷ who will stop parking in the facilities due to the rate increases. If the City can attract just 10% of these users to this program and they purchase an average of \$50.00 per month (10 days) over a year, this program could generate an additional \$69,000 in annual revenues for the two garages.

Cost to establish and operate this program will consist of pass card stock and a software upgrade to accommodate the declining debit function using the current proximity cards. DESMAN estimates total

cost for this improvement to be roughly \$10,000 for materials and software and recommends.

Finally, the rate changes will have an impact on revenue from the sale of

	Coupons/ Year	Value @ \$4.00	Value @ \$5.00	Revenue Change
Hotel VT/Marriot Coupons (up to 1 day)	42,455	\$ 169,820	\$ 212,275	\$ 42,455
Hotel VT/Marriot Coupons (up to 2 days)	869	\$ 3,476	\$ 4,345	\$ 869
Hotel VT/Marriot Coupons (up to 3 days)	350	\$ 1,400	\$ 1,750	\$ 350
Hotel VT/Marriot Coupons (up to 4 days)	46	\$ 184	\$ 230	\$ 46
Hotel VT/Marriot Coupons (up to 5 days)	20	\$ 80	\$ 100	\$ 20
Hotel VT/Marriot Coupons (up to 6 days)	7	\$ 28	\$ 35	\$ 7
Hotel VT/Marriot Coupons (up to 7 days)	9	\$ 36	\$ 45	\$ 9
Hotel VT/Marriot Coupons (up to 8 days)	3	\$ 12	\$ 15	\$ 3
Hotel VT/Marriot Coupons (up to 9 days)	5	\$ 20	\$ 25	\$ 5
Hotel VT/Marriot Coupons (up to 10 days)				
TOTAL	43,709	\$ 175,100	\$ 219,620	\$ 43,709

⁷ Calculated based on 5% of total parking between 6.0 and 24.0 hours in the City Garages between June 2014 and May 2015.



parking coupons to the abutting hotels. The Hilton currently pays a flat rate of \$11,432.00 per month to the city for their guests to park in the garage, but the Marriott and the Hotel Vermont have both entered into an agreement which allows them to pay the City half the maximum daily rate each time a guest parks. Currently, this rate is \$4.00 per coupon.

Between June 2014 and May 2015, a total of roughly 75,300 hotel coupons were redeemed, of which 43% were attributed to the Hilton, the remaining 42,455 were attributed to the Marriott and Hotel Vermont. If the maximum daily rate is adjusted from \$8.00 to \$10.00, this would adjust coupon values from \$4.00 to \$5.00 apiece. This \$1.00 adjustment could net the City and additional \$43,780 in revenues to address the garage repairs.

DURATION	HOTEL GUESTS	ALL OTHERS	CURRENT RATES	ESTIMATED REVENUES	PROPOSED RATES	PROJECTED GROSS	ADJUSTED NET	REVENUE CHANGE
0-.5 hrs	6,854	7,426	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
.5-1 hrs	11,122	12,050	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
1.0-1.5 hrs	9,369	10,150	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
1.5-2.0 hrs	9,368	10,148	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2.0-2.5 hrs	5,546	6,008	\$ 2.00	\$ 12,016	\$ 2.00	\$ 12,016	\$ 12,016	\$ -
2.5-3.0 hrs	4,179	4,527	\$ 3.00	\$ 13,581	\$ 3.00	\$ 13,581	\$ 13,581	\$ -
3.0-3.5 hrs	3,079	3,335	\$ 4.00	\$ 13,340	\$ 4.00	\$ 13,340	\$ 13,340	\$ -
3.5-4.0 hrs	2,334	2,529	\$ 5.00	\$ 12,645	\$ 5.00	\$ 12,645	\$ 12,645	\$ -
4.0-5.0 hrs	3,297	3,573	\$ 6.00	\$ 21,438	\$ 6.00	\$ 21,438	\$ 21,438	\$ -
5.0-6.0 hrs	2,031	2,200	\$ 7.00	\$ 15,400	\$ 7.00	\$ 15,400	\$ 15,400	\$ -
6.0-7.0 hrs	1,752	1,898	\$ 8.00	\$ 15,184	\$ 8.00	\$ 15,184	\$ 15,184	\$ -
7.0-8.0 hrs	1,978	2,144	\$ 8.00	\$ 17,152	\$ 8.00	\$ 17,152	\$ 17,152	\$ -
8.0-12.0 hrs	5,306	5,749	\$ 8.00	\$ 45,992	\$ 9.00	\$ 51,741	\$ 49,154	\$ 3,162
12.0-24.0 hrs	6,743	7,305	\$ 8.00	\$ 58,440	\$ 10.00	\$ 73,050	\$ 69,398	\$ 10,958
1-2 days	1,524	1,652	\$ 8.00	\$ 13,216	\$ 20.00	\$ 33,040	\$ 31,388	\$ 18,172
2-3 days	614	665	\$ 8.00	\$ 5,320	\$ 30.00	\$ 19,950	\$ 18,953	\$ 13,633
3-4 days	81	87	\$ 16.00	\$ 1,392	\$ 40.00	\$ 3,480	\$ 3,306	\$ 1,914
4-5 days	35	37	\$ 24.00	\$ 888	\$ 50.00	\$ 1,850	\$ 1,758	\$ 870
5-6 days	28	30	\$ 32.00	\$ 960	\$ 60.00	\$ 1,800	\$ 1,710	\$ 750
6-7 days	13	15	\$ 40.00	\$ 600	\$ 70.00	\$ 1,050	\$ 998	\$ 398
7-8 days	16	17	\$ 48.00	\$ 816	\$ 80.00	\$ 1,360	\$ 1,292	\$ 476
8-9 days	6	6	\$ 56.00	\$ 336	\$ 90.00	\$ 540	\$ 513	\$ 177
9-10 days	8	9	\$ 64.00	\$ 576	\$ 100.00	\$ 900	\$ 855	\$ 279
10-11 days	-	-	\$ 72.00	\$ -	\$ 110.00	\$ -	\$ -	\$ -
11-12 days	-	-	\$ 80.00	\$ -	\$ 120.00	\$ -	\$ -	\$ -
12-13 days	-	-	\$ 88.00	\$ -	\$ 130.00	\$ -	\$ -	\$ -
13-14 days	-	-	\$ 96.00	\$ -	\$ 140.00	\$ -	\$ -	\$ -
14-15 days	-	-	\$ 104.00	\$ -	\$ 150.00	\$ -	\$ -	\$ -
15-16 days	-	-	\$ 112.00	\$ -	\$ 160.00	\$ -	\$ -	\$ -
TOTAL	75,283	81,560		\$ 249,292		\$ 309,517	\$ 300,081	\$ 50,789

In total, DESMAN estimates these rate and program changes could generate an additional ~ \$50,789 in gross revenues for the Lakeview and College Street Garages. DESMAN proposes this rate increase and

new programming be instituted as of January 1, 2017, after substantial repairs have been initiated and completed on the garage and changes to the on-street system and parking lots are complete.

5.4.2.9. Merchant Validation

DESMAN estimates that roughly 35% of current transients parking in the Marketplace Garage for free will likely elect to not patronize the facility in the future when rates are imposed for parking for 2 hours or less. The majority of the proposed changes in this report will lead to a better customer experience, with more predictable vacancy, online tools, payment by other means, and better facilities - but a shift in the Marketplace Garage will likely cause some anxiety, despite the aforementioned data substantiating the proposed changes. DESMAN anticipates that area merchants will want a program that allows them to continue to offer their customers free parking and proposes the establishment of a validation program to address this need.

With the current SkiData equipment in place, the program will be administered by the creation and issue of 'chaser tickets' which will reflect a value of \$1.00 (one hour) or \$2.00 (two hours). When the City converts to a newer, better technology, validations may be handled via web application which will allow the merchant to apply the validation electronically right to the customer's ticket, but in the immediate future the DPW will have to 'make' coupons at cost of \$0.25 per unit.

DESMAN estimates that 10% of short-term garage patron loss will remain static regardless of any program or incentive. This accounts for an estimated 21,110 existing parkers annually, or roughly 59 users per day. However, DESMAN believes 25% of lost existing patronage (~ 52,775 users per year) can be enticed to return to using the garage through this validation program.

DESMAN proposes that the DPW or Go!Burlington make and sell coupons to individual businesses at a rate of 50% of face value. Merchants are asked to pay something toward each coupon to offset the cost of the program as well as provide an incentive for the merchant to monitor and control how their coupons are being distributed. Since Property Owners and therefore indirectly Merchants are currently paying \$300,000 per year to DPW's Traffic Fund to support a 2-Hour Free Parking Program; the validation program will need to make allowances for this contribution.

The goal of this PMD during the pilot period is to create a Full-Service DID (See Downtown Improvement District (DID) section). The DID would make use of the \$300,000 contribution to provide parking services initially with the goal of expanding the scope of services. The City has pledged to also contribute new net revenues to services for betterment of the downtown. Until such time as these programs are in place, DPW will credit merchants with a set number of chaser tickets at no cost pro-rated based on the properties contribution to the DID.

A \$1.00 coupon which would allow the holder to park in the garage for free for up to 1 hour would have a purchase price of \$0.50 to the merchant. Two hours of free parking would have a value of \$2.00, but a purchase price of \$1.00 per coupon. At these rates 52,775 coupons would cost roughly \$13,194 to produce but generate annual sales of \$42,254, leaving a net cash flow of \$29,060 which could be applied to support other downtown parking initiatives.

5.4.2.9.1 Downtown Employees

Downtown employees constitute a significant portion of parking customers in our downtown. They drive our economy, add vibrancy, and are significant customers for other business. Transportation management and changes to the parking system need to address their needs, and acknowledge that low wage earners have different needs than other parking users.

It is important that currently restricted parking assets be opened to downtown employees at appropriate market rates, likely through a parking broker working on behalf of the parking management district and/or with employers. This serves the dual purpose of moving employees out of on-street spaces while ensuring they have consistently available and appropriately priced parking. In order to make this parking attractive, particularly for employees in the night-time service industry, appropriate investments in facility safety will also have to be made.

Another possibility for downtown employees, particularly during peak evening hours, is the creation of “flat-rate” parking at garages with excess capacity. At current occupancy rates, Lakeview and College Street garages would be good options for this strategy.

Better information and access to multiple transportation options are also important to downtown employees. For instance, awareness of the hundreds of parking spaces that remain free after 6:00 is important, as is information about cheaper parking options during daytime hours. Increased information about transit options and car share opportunities are also important. Employers play a role in facilitating transportation options for employees, as does CATMA. Increased subsidy of transit passes and/or car share memberships, as well as accommodations for walkers and bikers would improve employee transportation options. To provide better transportation options for downtown employees, large downtown employers should work with the City and regional partners to explore the possibility of developing intercept and satellite lots.

5.4.2.10. *Performance Monitoring*

Under the proposed plan, DPW and the Go!Burlington committee will negotiate a mutually agreeable set of performance metrics which stipulate standards of care for the operation and maintenance of the assets. These metrics will be used to evaluate customer service and efficiency of DPW parking personnel and the cleanliness and state of repair for the assets. Once these metrics are set, Go!Burlington will be charged with monitoring compliance with these standards on a monthly basis and identifying violations of the same to DPW, which will be committed to correcting them before the next evaluation period.

Evaluating maintenance performance should be fairly straightforward. DPW and the Go!Burlington committee will develop a checklist of daily, weekly, monthly and seasonal tasks to be executed by maintenance personnel in each facilities. This checklist should include everything from the most mundane detail (i.e. all trash receptacles should be emptied on a daily basis and lined with a standard garbage bag) to major periodic tasks (i.e. parking lane and stall painting should be replaced every third year or when it is no longer clearly visible from a distance of 30’ under nighttime conditions). Examples of these checklists are included in the [Appendix 5.1](#).

An evaluator should be able to walk through each facility and check off whether the assigned tasks have been recently completed or not. Evaluations should be timed in such a way so that the assigned personnel have had reasonable time to complete their assigned tasks and should include photographic evidence of standards violations. Evaluations should be scheduled to occur on



different days each month and different days of the week to provide a good sample of conditions.

Service delivery is harder to evaluate. For cashiers, measurable metrics often include the speed at which they process a transaction and the accuracy of their accounting of fee due and change issued. Intangibles, which may be graded on a sliding scale provided clear definitions are provided of what constitutes a low and high score that can be measured and evaluated include appearance/grooming, professionalism, friendliness, and responsiveness. These are best evaluated by a 'secret shopper' sent in to the facility to pose as a customer and present a situation in which the individual's reaction and performance can be evaluated. Some examples of forms and procedure used by 'secret shopper' surveys are included in the [Appendix 5.1](#)

It is recommended that a uniform policy be reviewed and updated to require clean logoed collared shirts. Public Works provides an annual clothing allowance to ensure attendants can obtain clothing that is consistent with the uniform policy. In addition, nametags on the attendant or nameplates on the booth should be visible at all times.

When evaluating personnel performance it is important that the DPW, Go!Burlington AND the personnel being evaluated must all understand the metrics and how they are being applied and measured.

5.4.2.11. Parking in Transition Areas Around Downtown

DESMAN encourages the City to employ the management strategies in this report to limit the impact of downtown-bound drivers seeking parking in surrounding neighborhoods. Concurrent with this downtown study, the City has undertaken a study of the Residential Parking Program (RPP) and other management strategies. The RPP study proposes a menu of strategies for managing parking in high-demand areas that should be evaluated for residential areas adjacent to downtown. Expanding elements of the Residential Parking Program into currently unmanaged areas adjacent to downtown should be explored, including:

- Expansion of permit areas if appropriate
- Shared use of private lots
- Use of parking meters
- Painted parking spaces and/or stalls
- Adoption of time limits for non-permit holders
- Other strategies found within the Residential Parking Plan

These strategies can be used individually or together. The consistent message in both studies is that carefully crafted, data-driven policies must be implemented to manage parking demand in a way that achieves the community's desired outcomes, often on a block-by-block basis with specific strategies for each.

The Public Works Commission is responsible for regulating parking in the Right Of Way in both downtown and residential areas. A clear process is needed to evaluate options and bring forth management proposals to the Public Works Commission. This process must be led by the City and engage the diverse constituencies in the neighborhoods adjacent to downtown.

5.4.2.11.1 *Downtown Residents*

City plans have called for more residential development downtown, and serving the parking needs of downtown residents is a critical need moving forward. Specific services need to be offered to downtown residents, including access to long-term leases in parking garages and/or surface lots, particularly for evening hours in garages with existing capacity; access to convenient car share opportunities; access to transit passes, potentially through their employers; easy ways to obtain guest permits if needed for events at their residences in under-utilized parking assets; and an opportunity for input into infrastructure investments that make their streets more walk and bike friendly. Some cities utilize a pass card for downtown residents to be able to utilize garages after peak hours for flat monthly fees. It is also important to communicate to downtown residents where parking remains free after 6:00PM - the majority of the system, in fact.

Downtown residents intentionally or not act as ambassadors to a city, and their transportation needs are in some ways unique - they live where most everyone else shops, works, worships, or goes to events. The excess capacity in the system needs to be opened to these customers. Without servicing their needs, the City will not be able to realize its goal of increasing residential density in the Downtown. Employers share a role in meeting the needs of downtown residents' transportation. Subsidized transit passes, car share memberships, and other TDM strategies make it possible for downtown residents to forgo car ownership.

5.4.2.12. *Wayfinding*

Wayfinding, a system of signage which guides individuals unfamiliar with an area from the arterial roadways accessing that area to public parking facilities, is a key component of a successful parking system and a transportation demand management program.

Customers and visitors, those users most in need of assistance when entering unfamiliar territory, come to a destination to patronize a particular business, institution or event; parking is an ancillary activity. These individuals will typically drive to their destination and then search for available parking; this is one reason that having available curbside parking is critical to the success of a downtown. A first-time visitor will typically seek parking within line-of-sight of their destination to assure they can find their way there and back.

If a first-time visitor has trouble finding available parking, either due to overuse or difficulty in identifying where they can legally park, their first impression will be of a downtown that lacks adequate parking and is difficult to navigate. This will color their experience and inform their evaluation of the area when speaking to others. An effective wayfinding program prevents this by guiding visitors close to their destination, identifying locations where they can park, and clearly stating the rules for use (i.e. rates, hours of operation, authorized length of stay, etc.). Superior systems also provide wayfinding which directs the visitor, once they've exited their vehicle, to their destination on foot and eventually back to the facility in which they parked.

Wayfinding is also key to transportation demand management as it provides a system for guiding drivers to their destination in the most expedient fashion, thereby reducing emissions, and will allow



the designer to direct them along streets away from pedestrian travel routes, improving safety. Additionally, good signage actually reduces the number of vehicles on the road at a given time, as fewer drivers are circling particular destinations, looking for an available space.

There are four general kinds of wayfinding signage: trailblazing, identification, informational and geolocation. The City has conducted an extensive design process to implement a new wayfinding system which is scheduled to commence in July 2015 and conclude in September 2015. The program will remove 41 existing static⁸ signs and replace them with 99 static and dynamic⁹ signs which will include three of the four kinds of signage.

Trailblazing

Trailblazing signage assists drivers coming into a central business district along the most efficient route to common destinations. Trailblazing signage is typically posted at major intersections and other decision points to direct drivers from point to point until they arrive in the area they are seeking. The City's program will include 49 (Type H) signs directing drivers from the main arterial roadways feeding into downtown Burlington (i.e. Main Street, Colchester Avenue, South Willard Street, etc.) to common destinations such as the Church Street Marketplace, the Waterfront, the Ferry Terminal and the Old North End. Most of these signs will be static but some will incorporate dynamic LED elements featuring multiple directional arrows.

In addition, the program includes six static directional signs (Type S) which will direct drivers to public parking facilities once they reach their destination area.

Identification

Identification signage assists drivers and pedestrians to locate an available parking facility once the trailblazing signage has delivered them to their destination area. The City's program includes four freestanding dynamic signs which include an LED display and four static signs with internal illumination which will be used to identify the location and entrance of each public garage in downtown.

Informational

Informational signage provides approaching drivers with the details regarding the facility's operation, such as hours of operation, rates, policies, and procedures. This signage is typically installed on the exterior façade of the facility or within it. The City's current wayfinding program does not include this component, but it is also not critical to upgrade these signs to incorporate the City's branding efforts.

Geolocation

Geolocation signage is focused on the user after they exit their vehicle and are walking to their final destination. It is the last link in the wayfinding chain that delivers a first-time visitor from the highway to the door of the business or institution they've come to patronize. The City's program includes 31 signs designed to direct pedestrian flow in and out of the City's garages and around the downtown area. Some of these signs will guide pedestrians parked within each facility along paths to common destinations such as the Church Street Marketplace and the Waterfront. Other signs will be installed along pedestrian pathways external to the garage and will serve to direct pedestrians to common area destinations. Much like the trailblazing signs are designed to bring drivers from arterial roadways to

⁸ Signs with a fixed message, typically painted or imprinted on the surface.

⁹ Signs featuring LED elements which allow multiple or variable messages to be broadcast.

public parking facilities, these signs are designed to bring pedestrians from the facility they've parked within to their final destination.

Municipalities with superior parking programs often include additional geolocation signage in the form of large scale maps or aerial photographs with graphic overlays which identify the facility the individual parked in and the surrounding businesses, institutions and popular destinations within reasonable walking distance (2-5 blocks) of the facility. This serves to reinforce and support the static signage directing visitors from the garage onto city streets and then along city streets to their final destination.

Under the proposed parking and transportation management plan advanced by DESMAN, production of this signage and system design would remain a DPW responsibility with strong partnership and guidance from the BBA and Go!Burlington as part of their larger branding efforts to connect local businesses and institutions with the public parking system. The next section expands on this concept and how it might be implemented.

5.4.2.13. *Communications*

The BBA and eventually Go!Burlington will act as the central information clearinghouse. As such, they will be responsible for promoting the full array of public parking and transportation options to Burlington's visitors and constituents. The BBA and/or Go!Burlington will also be responsible for drawing private parking facility owners into the City's new wayfinding program under a larger branding effort aimed at unifying the appearance of publicly accessible parking facilities and making them easier to identify. Finally, with the constant evolution of the City's parking system and regular introduction of new programs and initiatives, the BBA and/or Go!Burlington will need to develop mechanisms to announce changes and promote new offerings to the general public.

Website

Review of other municipal parking and transportation management programs indicates that a well-designed, dynamic website is among the most effective vehicles for reach the public and making them aware of the full scope of their parking and transportation options. The BBA and/or Go!Burlington would be responsible for dissemination of information on parking and transportation initiatives, specifically by maintaining and expanding the ParkBurlington website (<http://parkburlington.com/>) to include the following:

- A downloadable map¹⁰ (PDF) showing the location of each publicly accessible parking facility in downtown Burlington within the district. This map should include points of interest and landmarks within the district; the hourly, daily and event rates for each parking facility shown on the map; hours of operation for each parking facility; and the address, phone number and web address for each parking facility.
- Links to the websites of partner organizations including: *Go!Chittenden County*, *Go!Vermont*, *CarShare Vermont*, *Local Motion*, *CATMA*, *Chittenden County Transportation Authority*, *the Green Mountain Transportation Authority*, *Lake Champlain Ferries*, *Vermont Translines*, *Megabus*, *the Burlington Police Department*, etc.
- Information regarding special programs (i.e. pay-by-phone, discounts, transit passes, etc.).

¹⁰ This could also offer an opportunity for the BBA/Go!Burlington to sell sponsorships/subscriptions to local businesses willing to pay to have their facility specifically identified on the map.

- A map showing bike trails, bike parking, storage and shower facilities across the district (and links as appropriate).
- A list of resources for prospective developers, with FAQ and links to the appropriate agency (i.e. Planning & Zoning, CEDO, the DID, etc.)
- FAQ and links for prospective residents.
- FAQ and links for prospective businesses.
- Links to regularly occurring festivals and events as well as travel and parking information for these events.
- A news crawler feature which addresses special circumstances or events impacting the City's parking or transportation environment.

Branding

While the City will be able to draw from current funding sources to pay for improvements to the parking facilities and wayfinding system, the BBA, Go!Burlington and DPW will need to seek out funding for branding under this plan. Some of this is anticipated to come from a reallocation of DID funds currently pledged to the City per charter to support a downtown parking program, but it is unlikely that figure (~\$300,000/ year) will be adequate to cover the full scope of tasks and duties under this plan. As such, DESMAN has attempted to identify other opportunities for the agencies to generate funds through the provision of special services.

As referenced earlier, the BBA and/or Go!Burlington could help offset the costs of some of these initiatives by selling subscriptions or sponsorships to private parking facility owners seeking to promote their facility on ParkBurlington.com. The BBA and/or Go!Burlington would also lead the ParkBurlington branding campaign, soliciting private parking facility owners to consider 'buying' into the ParkBurlington brand. Purchase of an annual membership would get the owner up to two signs (30"x30") with the name of their facility, listing of authorized users and the ParkBurlington logo and identification on the interactive website with a link to their business website for one year.

Public Outreach

One of the biggest issues identified in both the PlanBTV process and DESMAN's stakeholder outreach process was the frustration of constituents experiencing interruptions in service due to events impacting the City's parking system. Whether the issue was an access control equipment failure or scheduled maintenance of an asset, many users expressed frustration when arriving on site, expecting to access the facility only to find it closed to them with no alternative identified.

With the current state of social media, issuing information about system impacts should be a fairly simple and straightforward process. The news crawler function on the website will be able to be updated to announce issues and events and the BBA and/or Go!Burlington will develop and maintain social media accounts (i.e. Twitter, Facebook, etc.) as well as an account to Front Porch Forum to alert the general public of service impacts in advance or as they occur. The City and participating private property owners should also provide to the BBA/Go!Burlington up-to-date email contact information for monthly pass holders which can be used to issue periodic 'blasts' to alert users of events or issues that may impact their access to a facility and direct them to a suitable alternative.

Finally, both the City and the BBA/Go!Burlington should collaborate to issue an annual 'state of the

system' report which details successful initiatives completed, new initiatives scheduled and conditions across the system.

5.4.2.14. *Private Sector Collaboration*

As outlined in the Existing Conditions section, roughly half the parking inventory in downtown Burlington is privately owned and at any given time, only half utilized. These parking assets are confusing to access for transient and monthly parkers, and are mostly operated by an array of private operators or property owners with different levels of experience in parking management. By offering these private asset managers a suite of options for parking management, additional capacity could be added to the publicly accessible downtown inventory. When branding, online presence, and standard of care are made consistent with public assets, the customer experience will be improved. The options for agreements should attempt to follow pricing and hours of enforcement models similar to the public assets, while addressing the needs of existing tenants.

This underused supply could represent up to 2,000 spaces at certain times. Under current market conditions, developing that kind of supply carries a hard cost, excluding land acquisition, of between \$10M¹¹ for surface parking and \$50M¹² for structured parking.

DESMAN believes there are a number of ways in which private facilities may be made more public without building additional facilities. It is DESMAN's belief that these initiatives are best championed by a private agency such as the BBA or Go!Burlington rather than the City, to maintain the separation of private and public enterprise.

Contract Management

The BBA and/or Go!Burlington could improve utilization of existing privately owned but publicly accessible parking facilities by agreeing to assume operations and management responsibilities. The primary objective of this initiative would be to transfer responsibility for promoting these facilities to the general public from the current ownership to the BBA/Go!Burlington, which will possess better mechanisms for making the general public aware of these facilities and their available capacity. In addition, the BBA/Go!Burlington may be able to improve the standard of care and performance of these facilities by subcontracting the day-to-day operations to a professional parking management company. BBA/Go!Burlington could also serve as a liaison for Downtown residents who need to secure overnight or daily parking options. Finally, any revenue stream that the BBA/Go!Burlington generates from these contracts could be pledged to support the agency's other programs.

One of two management programs could be offered to private parking facility owners:

1. *Lease Program:* Under this program, the BBA/GB leases the facility from the property owner for a fixed period. During the lease term, the BBA/GB agrees to extend negotiated rates to a select number of users per the owner's terms and to adhere to negotiated standards for care of the property, but otherwise enjoys traditional tenant rights, including the ability to dictate rates and hours of operation and the ability to open access to the general public outside of negotiated limitations. The BBA/GB would pay a flat monthly fee to the owner to lease the property and would be responsible for all expenses associated with operations and custodial maintenance,

¹¹ At \$5,000/space

¹² At \$25,000/space

plus any capital improvements negotiated within the lease, but could retain all revenues for the term of the lease. This program benefits the BBA/GB by placing more parking inventory under control of the agency and accessible to the general public (albeit at select times).

2. *Management Program:* Under this program, the BBA/GB manages the facility for the property owner for a fixed period. The Owner dictates all aspects of operations, including rates, hours of operation, standard of care and accessibility to the general public. The BBA/GB is paid a flat monthly fee by the owner to manage the property. The Owner is responsible for all expenses associated with operations and any capital improvements, but retains all revenues. This program offers only marginal benefit to the community, but would improve uniformity of appearance, standard of care and user experience among parking facilities downtown as well as fund other BBA/GB programs; and potentially add spaces to the public inventory.

Concession Agreements

A concession agreement differs from the management agreements explored in the previous section in several ways. First, a concession agreement is not a contract to actively manage a facility, but rather an agreement to provide PARCS equipment such as multi-space parking meters in exchange for opening the facility to the general public during appointed days and/or hours. Second, unlike a management agreement where the BBA/Go!Burlington might receive a fixed fee for services or a lease where the agencies would retain the rights to all revenues after rent payment, a concessioner retains the rights to a portion of the revenue generated by the equipment, but is fully responsible for its acquisition, installation and upkeep.

Finally, unlike management agreements, where the property owner is responsible for all operating expenses and therefore carries the majority of risk, or leases, where the leaseholder carries the majority of risk, there is very little risk for either party. The BBA/Go!Burlington would only be out the cost of the meter if a particular program does not succeed in drawing in an adequate number of users to support the cost of its acquisition and installation and the property owner incurs no direct risk at all beyond the standard liability which exists when any user – public or private – enters the property.

Under this program, the BBA/GB agrees to furnish a privately-owned parking facility with PARCS equipment, maintain the equipment and ensure compliance with posted limitations of use in exchange for a portion of the net revenues and opening the facility to use by the general public during select periods. This program would benefit the community by generating more funding for BBA/GB parking and transportation programs and opening additional inventory to the public.

Event Management

The City of Burlington hosts hundreds of events annually, from the weekly Farmer's Market to the annual Vermont Brewer's Festival. Each of these events presents parking and transportation challenges which could be eased through collaboration between event planners and the BBA/Go!Burlington. Under the proposed plan, the BBA/Go!Burlington will offer two programs to assist with event planning and management in downtown Burlington:

- *Promotional Program:* The BBA/Go!Burlington would maintain a database of privately held parking spaces for purchase or short-term lease by event organizers. This program will improve the user experience, as well as netting the owner new users and revenues from a previously underutilized asset.
- *Marketing/Branding Program:* The BBA/Go!Burlington would allow private parking facility owners to rent ParkBurlington signage and promote their facilities through the



website to prospective users on an event-by-event basis. This benefits the community by improving both wayfinding and uniformity/appearance among different parking facilities and directing event attendees to specific facilities.

Shared Parking

Shared Parking is the concept of allowing two or more complementary land uses to share the same parking facility, rather than building separate facilities for each land use that stand unutilized when those land uses are dormant. Examples of land uses with complementary utilization patterns include hotels and office buildings and residential buildings and retail stores, as hotels and residences have their greatest need in late evenings and overnight while office buildings and retail stores experience their highest patronage during the day.

Shared Parking is typically governed by an agreement which stipulates each participating party's rights and responsibilities. Shared Parking agreements often include clauses which stipulate what portion of a facility is to be shared, the days and/or hours during which each party has rights to the facility, how maintenance and operating costs are to be divided between the two parties, and any compensation due to either party. This agreement can be held by both parties or rest with a third party and can be negotiated between two individual entities or brokered by a third.

Under the proposed plan, DESMAN envisions the BBA/Go!Burlington in the role of brokering agreements between interested parties wherein the parties would hold the ratified agreement. The only instance where a third party may hold an agreement would be for shared parking agreements supporting new development, wherein the agreement may rest with the city's Planning & Zoning Department as a condition of approval.

It should be noted that current zoning in Burlington DOES NOT support Shared Parking and would have to be amended to allow this in any form.

Shared use programs could address shared use to support development, shared use to support existing or new activity, or shared use to support commerce.

Shared use programs to support development would include the BBA/GB identifying, approaching and negotiating 'shared use' agreements with private parking facility owners and developers to facilitate acquisition of permitting for new development. In this instance, the BBA/GB acts as 'broker' between private facility owners with excess capacity and potential developers coming into the market seeking a variance relative to existing code. BBA/GB would be constantly updating this database with opportunities, rather than responding to a development proposal as it was submitted.

Shared use programs to support existing or new activity would include the BBA/GB identifying, approaching and negotiating 'shared use' agreements with private parking facility owners to ease parking shortfalls in the downtown district. In this instance, the BBA/GB would be part of the contracted party seeking access to a facility on a defined basis. The BBA/GB may do this to support the relocation of new business downtown or to address existing, regular shortfalls in specific areas. The BBA/GB would agree to provide management services in the facility during the defined period of use and offer the owner a share of net revenues or a flat fee for use. The BBA/GB would assume all risk during the period of use and guarantee the facility would be cleared and cleaned after the period expires.

Shared use programs to support commerce would include the BBA/GB maintaining a database of parking spaces available for purchase in public and/private parking facilities on a daily or monthly basis across the downtown district. The BBA/GB would maintain a constantly updated database of opportunities to purchase parking in the district to support employers, event planners and residents.

Sample shared parking/use contracts are included in the [Appendix 5.2](#)

5.4.2.15. *Data Collection & Analysis*

Data collection and analysis is a key component to any ‘smart growth’ approach to parking and transportation policy development and assessment. Data will be needed from both public and private parking assets. DESMAN anticipates that DPW parking personnel will perform data collection in the city’s garages, lots and right-of-ways as part of their standard duties. The BBA/Go!Burlington will manage their data collection duties through a combination of collaboration with private property owners and operators, the University of Vermont’s Transportation Research Center, and contract labor.

Periodic Occupancy Counts

Occupancy data is crucial for evaluating fluctuations in availability according to time of day, day of week and time of year, as well as measuring the impact of recently enacted policy. Occupancy data does not necessarily need to be collected by hand, as many modern access control systems can provide this information as part of their standard reporting package.

DPW will be responsible for:

- Daily occupancy counts performed in each off-street public parking asset at mid-morning (10-11 AM) and mid-evening (7-8 PM) to establish a record of utilization and availability. These counts should also include specific data on bicycle parking, and other types of nontraditional parking.
- Periodic occupancy counts performed in each block face to establish a record of utilization and availability for on-street parking. Counts should alternate as often as possible between mid-morning and mid-evening. Counts should differentiate between utilization of different types of on-street parking including ‘smart’, short-, mid- and long-term meters, time-limited spaces and residential parking permit zones.

The BBA/Go!Burlington will be responsible for:

- Daily occupancy counts performed in each off-street private parking asset at mid-morning (10-11 AM) and mid-evening (7-8 PM) to establish a record of utilization and availability.

The BBA and/or Go!Burlington will also work with private parking facility owners managing and operating their own assets to develop a similar program of data collection to be performed either by the owner or BBA/Go!Burlington.

License Plate Inventories

License plate inventories should be done nightly (or on an agreed to schedule) in each off-street facility as a best practice. The primary purpose of a license plate inventory is to establish a record for how long vehicles staying multiple days have been in a facility. These records are used to ensure that the parker pays for the full length of their stay, and not just one day, which they may be claiming a lost ticket unless the manager has documentation to prove they have been in the facility longer.

License plate inventory records can also be used to identify abandoned vehicles, which sometimes prove to be stolen, and are a critical component of anti-terrorism tactics in major municipalities or sensitive sites where car bombs are a concern. Finally, by simply requiring personnel to walk through the facility and record the plate of each vehicle parked therein late at night, security in the facility is improved.

License plate inventories for curbside spaces are key to evaluating compliance with posted time limits and the effectiveness of enforcement efforts. The data from these exercises also indicates how often parking spaces are turning over in a particular location, which can in turn inform policy decisions.

DPW will be responsible for:

- License plate inventories for each off-street public parking asset during the overnight hours (12 – 4 AM) to establish utilization trends for overnight parkers and identify potential abandoned vehicles.
- Monthly license plate inventories on selected streets to measure typical length of stay and turnover throughout the year. DESMAN would recommend these inventories, which should be executed between 10 AM and 10 PM on a representative weekday and representative weekend day, be scheduled for the length of a different street each month.

Go!Burlington will be responsible for:

- License plate inventories in each off-street private parking asset during the overnight hours (12 – 4 AM) to establish utilization trends for overnight parkers and identify potential abandoned vehicles.

The BBA and/or Go!Burlington will also work with private parking facility owners managing and operating their own assets to develop a similar program of data collection to be performed either by the owner or BBA/Go!Burlington.

User Composition Reporting

User composition data can be acquired from the operating records or access control systems of off-street parking facilities. This data can be used to evaluate the impact of policy changes, as well as a representation of total activity within the downtown.

DPW will be responsible for:

- Total daily transient volumes and monthly pass holder presence in each off-street public parking asset.

Go!Burlington will be responsible for developing a program to track utilization of all public assets under its care and control. At a minimum, this program should include:

- Total daily transient volumes and monthly pass holder presence in each off-street parking asset.

The BBA and/or Go!Burlington will also work with private parking facility owners managing and operating their own assets to develop a similar program of data collection to be performed either by the owner or BBA/Go!Burlington.

On-Street Data Analysis

The on-street component of the analysis should include the following items:

- Meter revenues by meter type and month during the prior year;
- Curbside occupancy trends;
- Parking ticket issuance and collections, organized by offense;

- Parking ticket issuance and collections, preferably organized by street and comparing/contrasting according to the time of day, day of week and time of year of issuance;
- Residential parking permit issuance by street or zone;
- Enumeration of improvements and/or policy changes enacted during the prior year;
- Impact analysis featuring before and after occupancy reports and license plate inventories for policy changes enacted in the prior year.

Off-Street Data Analysis

The DPW and Go!Burlington will collaboratively prepare a 'state of the city' report annually incorporating this data and publishing the analyzed impact of various policy initiatives and system improvements in terms of utilization, availability, economic impact and success in achieving stated policy objectives.

The off-street component of the analysis should include the following items:

- City garage and parking lot revenues by type and month during the prior year;
- Occupancy trends by facility according to time of day, day of week and month;
- Parker composition trends by facility by month;
- Typical length of stay for transients, by facility;
- Monthly transient volumes, by facility;
- Enumeration of improvements and/or policy changes enacted during the prior year;
- Impact analysis featuring before and after occupancy reports and license plate inventories for policy changes enacted in the prior year.

5.5. Expand Transportation Options and System Efficiency

Vehicle parking is part of a total accessibility strategy that must also incorporate other transportation modes for connecting citizens and visitors to and from the downtown. The more sustainable transportation options are used by residents, commuters and visitors, the more space in our downtown can be allocated to other uses than parking -- whether for offices, housing, retail, plazas, green space, bike lanes, or other enhancements to the public realm. This perspective is fully consistent with the City's Municipal Development Plan.

Burlington's Transportation Vision (from the Municipal Development Plan)

[Burlington's] transportation functions as part of an interconnected system which offers a range of choices that are safe, affordable, efficient, and convenient for residents, employees, and visitors alike. As a result, rail, air, ferries, transit, cycling, and walking are successfully competing with the automobile for the dominant mode of choice. Local and regional multimodal corridors and centers are maximizing our use of existing infrastructure, while eliminating congestion, preserving air quality, and conserving energy. Commuters, families, and employers are benefiting from a diverse array of transportation demand management strategies such as car- and van-pools, flexible work schedules, and telecommuting. Land use and transportation decisions are considered together, significantly reducing the need for individual automobiles and large parking facilities.

To achieve this vision and to ensure the future vitality of downtown, the City needs an efficient and safe multi-modal transportation system. This study's recommendations for expanded transportation options and increased system efficiency are fully consistent with the recommendations in the Municipal Development Plan. Specifically, this study recommends the City of Burlington:

- **Expand and Enhance Transportation Demand Management services** in coordination with an entity such as Downtown Improvement District and/or a Transportation Management Association (TMA,) most likely in Burlington's case CATMA.
- **Implement Transportation System Management (TSM) strategies** including the optimization of Burlington's traffic signal system harnessing new technology such as Adaptive Signal Control (ASC).
- **Improve transit and increase the number of satellite and intercept lots** by partnering with regional entities, adjacent municipalities and large employers.
- **Improve facilities for walking and biking** through short-term implementation of low-cost strategies to enhance on-street safety, investment in major new facilities as guided by PlanBTV Walk Bike, enhanced streetscape investment funded by Tax Increment Financing (TIF), and expanded and improved downtown bike parking options.
- **Expand carsharing downtown and in the greater Burlington area** through provision of parking spaces, expansion of pods, and other municipal support. Directly support requests for parking spaces to support carsharing, a proven TDM strategy.
- **Extend intercity passenger rail** to Burlington by supporting the efforts of the State of Vermont, Vermont Railway and other key stakeholders.
- **Increase the number of transient boat slips** on Burlington's waterfront to enable more visitors to arrive by boat.

Even modest investments in the City's pedestrian infrastructure and streetscape design can have significant impacts on the downtown transportation system.

- Improving walkability increases "park once" trips, parking in one location and walking rather than driving to other destinations, which reduces vehicle trips and the amount of parking required at each destination.
- Improving walkability expands the range of parking facilities that serve a destination. It increases the feasibility of shared parking facilities and use of remote parking facilities.
- Walking improvements encourage transit use since most transit trips begin and end as pedestrian trips.

Transportation Demand Management:

What is TDM?

Transportation Demand Management (TDM) refers to a collection of strategies and policies that seek to decrease commuting by Single Occupancy Vehicle (SOV) and increase the value and convenience



of using sustainable modes of transportation through a set of incentives and disincentives. TDM initiatives help specific corridors and business districts reduce congestion, encourage healthy travel, reduce harmful vehicle emissions, and reduce downtown parking demand. The strategies and structure of TDM programs are tailored to the needs and preferences of individual communities.

Partners:

Key partners in the region focused on TDM efforts include:

- Chittenden Area Transportation Management Association (CATMA)
- Go!Chittenden County and Go!Vermont

Chittenden Area Transportation Management Agency (CATMA) currently acts as a liaison between public and private transportation providers and its members, to develop and promote programs which encourage diverse transportation choices including carpool services, acquisition and distribution of discounted transit passes and Unlimited Access program, incentives for biking/walking, 'guaranteed ride home' and direct commuter assistance and planning support. In 2014, CATMA expanded its focus beyond its founding hill institutions and has opened up membership to employers and employees across the county. In addition, CATMA launched its free Employee Transportation Coordinator Network providing an opportunity for businesses to collaborate and engage in transportation solutions. CATMA will serve as the key partner for delivery of TDM services for employers and employees in downtown Burlington. BBA, Go!Burlington and DPW will work to support CATMA in its efforts to deliver TDM services.

Related Activities

In 2014, the City of Burlington, through grants from the High Meadows Fund and the Chittenden County Regional Planning Commission (CCRPC)'s annual work program, sought to implement a Transportation Demand Management (TDM) Action Plan among City staff to reduce congestion, encourage healthy travel choices, reduce harmful vehicle emissions, and reduce downtown parking demand. A secondary goal of this Action Plan is to provide a model for other employers and employees in downtown Burlington interested in reducing their transportation and parking impacts. To fulfill this directive, the City contracted with RSG and CATMA to work with the City and the CCRPC to develop an actionable TDM plan. The Action Plan recommends a set of TDM strategies that balance incentives and disincentives to influence commuter behavior appropriately while being sensitive to the daily transportation needs of City and downtown employees.

Why do we need a coordinating TDM entity in the downtown?

Transportation services are delivered by various different public and private providers. To ensure coordination of these services for the convenience of the end user, it is important to have an entity bundle the transportation options into a unified package. TDM services also need to be coordinated to be efficiently delivered and to achieve effective results. Downtown has many small employers. It is beyond the capacity of many downtown businesses to manage their own employee commute incentives.



Many leading small cities, some of which were identified in Chapter 5, have robust TDM services coordinated by the same entity that manages downtown parking. Parking policy and TDM services should work in tandem to achieve the same goals. Having one public/private policy-making body setting policy for parking and transportation helps ensure that the incentives and disincentives are coordinated in a way that best meets the needs of the downtown community.

TDM Recommendations

To develop an effective TDM program that can expand transportation options and reduce parking demand, we recommend the following steps be taken:

Go!Burlington will:

1. **Coordinate the provision of TDM services downtown** – whether through a contract with a Transportation Management Association such as CATMA or through another provider. An incorporated Downtown Improvement District with staff capacity will strengthen the TDM incentives, and the marketing of such incentives, to downtown employees. Upon launch of a website to coordinate parking initiatives, Go!Burlington/DID should integrate web tools for all modes of transportation through partnerships or links to other providers, or by providing new web content so that visitors have a one-stop shop.
2. **Work with CATMA to develop a customized menu of TDM services** and cost allocation plan for downtown businesses. The menu of TDM services should provide all downtown businesses that contribute to the DID a base level of TDM services. Additional services could be acquired through Go!Burlington for an additional cost. Downtown employers who do not pay into the DID will have access to CATMA and TDM services.

The City of Burlington will be responsible for:

1. **Implementing the recommendations from its TDM Action Plan** developed in 2015 and use the City's experience as an employer to influence future downtown TDM efforts.
2. **Determining the best way to assist with funding downtown TDM activities** – whether through DID funding or Traffic Fund revenues – and then provide annual support.

Bicycle Parking

Increased and improved bicycle parking lowers the barriers for people considering biking to and around downtown. As this report recommends a range of parking options for motor vehicles downtown, a range of bicycle parking should also be provided to address the varying needs of bicyclists downtown -- both on private and public property (right-of-way and public land).

A number of studies have looked at the purchasing activity of shoppers in urban areas traveling to their retail destination by different modes. Many of these studies found cyclists and walkers to be competitive consumers, spending similar amounts, on average, than their counterparts arriving by automobile. Considering that parking for 6 or more bikes can be accommodated in one vehicle-sized parking space, this plan recognizes that establishing convenient, well-utilized bike parking can deliver an economic benefit to downtown.

Types of Bicycle Parking

Type	Short Term Parking	Long Term Parking
Duration	2 hours or less	2 hours or more
Facility	Bicycle rack -- covered or uncovered	Bike Lockers, secure storage area or room, covered rack
Typical land uses	Commercial, retail, healthcare	Residential, workplace, transit

The City of Burlington currently offers the following bike parking services:

- **Bicycle Lockers:** Bicycle Lockers are available in the Marketplace Parking Garage. CCTA and Local Motion provide bike lockers at additional Burlington locations.
- **Bicycle Racks:** The City installs bike parking on city sidewalks, in parks and within the right-of-way and offers discounted racks for property owners to install in places that will be publicly accessible.
- **Burlington's Bicycle Parking Guidelines:** These Guidelines contain information on how to install useful bicycle parking and assist developers in following the City's Bicycle Parking Ordinance through the Planning and Zoning Department.

For an additional bicycle parking resources in Burlington, see: <http://www.burlingtonvt.gov/DPW/Walk-Bike-In-Burlington>.

5.5.1.1. Bicycle Parking Recommendations

Consistent with the three main goals for this plan (a vibrant downtown, great customer service, and a sustainable parking system), the City and its partners need to improve the bicycle parking system as well as the parking system for motor vehicles. This improvement will require clear direction, collaboration among stakeholders and consistent funding.

- Regarding clear direction, the current bike parking requirements in zoning code and the Bicycle Parking Guidelines should be updated to improve the quantity and quality of bike parking.
- Regarding collaboration, bicycle parking stakeholders need to clarify roles and responsibilities as it relates to the development, marketing, operation and maintenance of the downtown bicycle parking system. Currently, the bike locker installations downtown are maintained by three different entities. During the pilot period, it is proposed that the City lead the development and maintenance of the bike parking facilities and Go!Burlington will promote the various bike parking facilities. Go!Burlington will ensure the bike locker rental process is convenient for the public. This structure will be evaluated at the end of the pilot period and adjusted as needed.
- Regarding funding, the expansion of downtown bike parking requires additional funding beyond periodic grants and a portion of the 2% bicycle set aside in the street & sidewalk capital budget. This plan recommends additional funding be allocated to improve, expand, maintain and promote publicly accessible bike parking from one or more of the following sources: the Traffic Fund, the Downtown Improvement District assessment and/or Tax Increment Financing.

- Just as private parking asset owners will collaborate with the new parking management system for parking for vehicles, private parking owners should be part of the strategy for bicycle parking downtown. This parking could serve both the public or specific tenants - but should be coordinated as part of the larger transportation system.

DPW will be responsible for:

- Working with the Department of Planning & Zoning and bicycle organizations to update the City's bicycle parking requirements and the City's Bicycle Parking Guidelines to set policy for type, quantity, placement, and management of public bike parking facilities in downtown Burlington
- Working with Go!Burlington to secure additional funding (from sources identified above) for the expansion of bicycle parking facilities downtown
- Working with bicycling organizations and Go!Burlington to inventory existing facilities, prioritize new or expanded bicycle parking facilities, and then install and maintain those facilities during the pilot period.
- Evaluating the utilization and performance of existing bike parking facilities during the pilot and upgrade, move, or eliminate facilities as appropriate
- Carrying out recommendations in the City's PlanBTV Walk Bike to improve on-street accommodations, wayfinding, and other infrastructure to ensure safe and easy access to downtown bicycle parking facilities

Go!Burlington will be responsible for:

- Publicizing and promoting downtown bicycle parking facilities in particular and bicycle transport in general to a wide range of transportation users in and around Burlington's downtown with other entities that have installed lockers downtown (CCTA, Local Motion)
- Managing and renting publicly accessible downtown bicycle lockers
- Offering guidance and support to downtown businesses regarding siting, design, installation, and promotion of bike parking and storage facilities
- Working with DPW after the pilot period to determine the optimal roles for each entity to well manage the various aspects of the downtown bicycle parking system
- Working with DPW and bicycling organizations after the pilot to create and update a multi-year plan with clear goals for expanding the bicycle parking system

5.5.2. Downtown Improvement District

5.5.2.1. *Introduction*

The City of Burlington in collaboration with the Burlington Business Association created a Downtown Improvement District (DID) via Charter Change in the early 2000's. That DID was created specifically to collect tax revenue to support a parking program which provided no less than two hours of free parking in designated parking facilities. This DID program with its finite scope was well suited for a time when downtown garage usage was well below today's optimal standard of 85% occupancy. In the 15 + years since its inception parking has changed.

Today the Marketplace garage is above 85% occupancy at most hours of the day and often is closed due to its being above 95% occupied. In addition, the needs of Downtown Burlington and the city have changed.

The Church Street Marketplace is also an operating DID in Burlington. It collects common area fees from commercial properties on Church Street and as a result provides a list of services common to DIDs including:

- Keeping the street clean
- Safety programs
- Marketing and branding
- Merchant programs
- Event management
- Street management

Most attribute the vibrancy of Church Street to more than 30 years of effective management and oversight from its DID.

5.5.2.2. Comparable BID's & DID's

In the US alone there are more than 1,000 DID in operation today. DID's have been credited with transforming Battery Park and saving Times Square both in New York City. New York City today has 68 DID's. (They use the more current term "Business Improvement District, as the terms are considered interchangeable.) The NYC BID Association defines DID's or Business Improvement Districts as follows:

A Business Improvement District is a formal organization made up of property owners and commercial tenants who are dedicated to promoting business development and improving an area's quality of life. BIDs deliver supplemental services such as sanitation and maintenance, public safety and visitor services, marketing and promotional programs, capital improvements, and beautification for the area - all funded by a special assessment paid by property owners within the district.

All of the cities this study uses as benchmarks for our PMD have established DID's. In Boise, ID the DID also manages parking and transportation. Nationwide, DID's are considered the most effective model for supporting downtown vitality, creating public/private partnerships and supplementing city services to better the downtown.

Burlington's downtown district would be well-served by a full-service DID in much the same way Church Street and countless U.S. cities are today.

5.5.2.3. Proposed Scope

For Burlington's Downtown District, this plan proposes the creation, in phases, of a full-service DID. Services provided would supplement those provided by the City of Burlington and could include:

- Sanitation and maintenance of the streetscape
- Streetscape improvements
- Downtown Ambassador programs
- Visitor services
- Marketing and promotional services
- Capital improvements
- Event creation and management
- Parking and transportation services

Today the DID assesses the downtown businesses a total for over \$300,000 annually. Under our current DID structure these funds are a part of DPW's Traffic Fund revenue and serve to help underwrite the cost of the 2-hour Free parking program. As this plan completes its work to improve the

management and fiscal stability of the parking system, including the re-tooling of the 2-hour Free program, it is likely that the funds from the DID assessment would be freed up for other critical downtown improvement work such as the items listed above.

Over the course of this pilot program, Go!Burlington is charged with developing a plan for the implementation of a full-service DID for Burlington. As Burlington's DID was created by a change to City Charter, a change in its scope would involve at a minimum action by City Council and possibility a vote by the citizens of Burlington. The business plan by Go!Burlington will include language to address:

- The value a full-service DID would deliver to the community
- Scope of services provided
- Pro forma budgets
- Capital improvements the DID may undertake
- Governance structure
- Collaboration with city departments including DPW and Church Street Marketplace.
- Implementation Plan

5.5.3. Implementation Plan

Please see the attached Implementation chart for details on the implementation timeline with deliverables and milestones.

The project implementation timeline covers a three-year period with benchmarks for the programs and services outlined above. The proposed changes to parking rates, parking meters, time of parking enforcement, and parking technology fall under the oversight of Burlington's Public Works Commission. Proposed changes to the Downtown Improvement District and the creation of Go!Burlington would be subject to review and approval by Burlington City Council. The Burlington City Council and its Board of Finance have authority over all fiscal proposals and the city's Traffic Fund Budget.

6. FINANCIAL ANALYSIS AND PROJECTS OF PROGRAM RECOMMENDATIONS

As part of the overall engagement, DESMAN was charged with developing financing strategies to support the proposed Parking & Transportation Management Plan and preparing an analysis which demonstrated the plan would be self-sustaining. The Traffic Fund, a special revenue fund of the City, has until recently faced significant budget challenges. These challenges included:

- Lack of available funds to complete necessary repairs and maintenance on city owned garages
- Lack of available funds to improve parking system equipment and signage
- Garages operating at a loss
 - o The City's 2-Hour Free parking program is a key contributor to the garages operational loss due to the fact that between 60 and 75% of garage users qualify for this free parking program.
- The Traffic Funds financial support for other City of Burlington programs such as the School Crossing Guard program.

When this downtown parking improvement initiative began, the Traffic Fund faced a dwindling fund balance, a low-tech operation and \$9 million dollars of deferred capital repairs according to the 2014 Hoyle Tanner report. The program recommended by Desman Associates follows parking best practices, improves parking technology, improves the usefulness of the parking and transportation system, creates an improved customer experience, funds the repair and maintenance of the garages and provides balanced budgets for the traffic fund.

The following details DESMAN methodology and findings specific to this task.

6.1. General Methodology

DESMAN developed three separate financial models to measure the impact of proposed initiatives contained within the proposed plan. These models focused on the impact of changes proposed for the **Marketplace Garage (MPG)**, the **Lakeview & College Street Garages (LVG/CSG)**, and **Right-of-Way (ROW)** operations which included on-street parking meters and municipal parking lots. DESMAN also prepared a conceptual pro forma statement for the **Traffic Fund** which consolidates these three models into a single statement. All of these analyses covered the period from FY2016 to FY2020.

In each case, these models were developed from actual operating statistics and budgets provided by the Burlington Department of Public Works (DPW) to ensure a solid foundation for projections. Materials incorporated into this analysis included operating reports from the three garages and the 'smart meters' installed on-street, some of which spanned back two full fiscal years. DESMAN also examined and incorporated historical and current staffing schedules, financial reports, capital cost estimates, payroll and operating budgets, and other documentation as provided by the DPW.

6.2. MARKETPLACE GARAGE MODEL

6.2.1. Transient Parking Revenue Projections

DESMAN's model was based on actual operating statistics from the garage spanning the period of June 2014 or May 2015; roughly the span of FY2015. There were roughly 418,000 transient parkers that used the garage during this time. Applying the current rate structure to this volume, the facility is projected to generate roughly \$707,000 for FY2015 as shown in Figure 1

MPG Base Year (FY2015) Model Volume and Revenue Projections

Duration	Jun-14	Jul-14	Aug-14	Sep-14	Oct-14	Nov-14	Dec-14	Jan-15	Feb-15	Mar-15	Apr-15	May-15	TOTAL	Rate	Revenue
0.0-1.0 hours	9,604	9,671	9,208	9,195	10,013	8,838	9,527	8,168	6,809	9,064	10,888	10,334	111,319	\$ -	\$ -
1.0-2.0 hours	15,022	15,127	14,402	14,382	15,661	13,823	14,902	12,776	10,650	14,062	17,029	16,164	174,000	\$ -	\$ -
2.0-2.5 hours	3,727	4,038	3,828	3,237	3,652	3,006	3,313	2,570	2,104	2,900	3,484	3,326	39,185	\$ 3.00	\$ 117,555
2.5-3.0 hours	2,588	2,764	2,765	2,126	2,481	2,005	2,402	1,795	1,396	1,911	2,180	2,238	26,651	\$ 4.00	\$ 106,604
3.0-3.5 hours	1,638	1,813	1,772	1,426	1,690	1,292	1,486	1,121	953	1,159	1,420	1,352	17,122	\$ 5.00	\$ 85,610
3.5-4.0 hours	1,043	1,186	1,146	950	1,137	925	992	771	679	766	916	874	11,385	\$ 6.00	\$ 68,310
4.0-5.0 hours	1,308	1,471	1,375	1,116	1,312	1,080	1,122	905	695	885	1,033	1,109	13,411	\$ 7.00	\$ 93,877
5.0-6.0 hours	693	752	713	552	693	622	512	448	388	415	532	520	6,840	\$ 8.00	\$ 54,720
6.0-7.0 hours	440	536	499	493	465	363	327	294	270	262	320	419	4,688	\$ 9.00	\$ 42,192
7.0-24.0 hours	1,300	1,263	1,379	1,416	1,418	971	1,038	1,025	913	870	933	984	13,510	\$ 10.00	\$ 135,100
24.0-48.0 hours	1	6	13	9	8	7	15	7	10	4	10	11	101	\$ 20.00	\$ 2,020
48.0-72.0 hours	-	2	1	3	1	1	7	1	2	1	-	-	19	\$ 30.00	\$ 570
72.0+ hours	1	3	-	3	1	1	1	-	2	1	3	-	16	\$ 40.00	\$ 640
TOTAL	37,365	38,632	37,101	34,908	38,532	32,934	35,644	29,881	24,871	32,300	38,748	37,331	418,247		\$ 707,198

Figure 6-1

For FY2016, DESMAN did not recommend any changes to operations or pricing, but did note that the garage would be transitioning to 24/6 operations with the activation of the automated pay-in-lane function already installed within the facility. DESMAN assumed that this function, paired with natural growth, would drive user volumes up by 1% over the prior year, resulting in revenues of roughly \$714,000 or about \$7,000 more than the prior fiscal year, detailed in Figure 2

FY2016 Transient Revenue Projections

FY2016												TOTAL			
1Q-2Q (7/1/15-12/31/15)						3Q-4Q (1/1/16-6/30/16)									
0.0-1.0 hours	57,017	\$ -	\$ -			0.0-1.0 hours	55,416	\$ -	\$ -			112,432	\$ -	\$ -	
1.0-2.0 hours	89,180	\$ -	\$ -			1.0-2.0 hours	86,560	\$ -	\$ -			175,740	\$ -	\$ -	
2.0-2.5 hours	21,285	\$ 3.00	\$ 63,854			2.0-2.5 hours	18,292	\$ 3.00	\$ 54,876			39,577	\$ 3.00	\$ 118,731	
2.5-3.0 hours	14,688	\$ 4.00	\$ 58,754			2.5-3.0 hours	12,229	\$ 4.00	\$ 48,916			26,918	\$ 4.00	\$ 107,670	
3.0-3.5 hours	9,574	\$ 5.00	\$ 47,869			3.0-3.5 hours	7,719	\$ 5.00	\$ 38,597			17,293	\$ 5.00	\$ 86,466	
3.5-4.0 hours	6,399	\$ 6.00	\$ 38,396			3.5-4.0 hours	5,099	\$ 6.00	\$ 30,597			11,499	\$ 6.00	\$ 68,993	
4.0-5.0 hours	7,551	\$ 7.00	\$ 52,855			4.0-5.0 hours	5,994	\$ 7.00	\$ 41,960			13,545	\$ 7.00	\$ 94,816	
5.0-6.0 hours	3,882	\$ 8.00	\$ 31,060			5.0-6.0 hours	3,026	\$ 8.00	\$ 24,208			6,908	\$ 8.00	\$ 55,267	
6.0-7.0 hours	2,710	\$ 9.00	\$ 24,388			6.0-7.0 hours	2,025	\$ 9.00	\$ 18,225			4,735	\$ 9.00	\$ 42,614	
7.0-24.0 hours	7,560	\$ 10.00	\$ 75,599			7.0-24.0 hours	6,085	\$ 10.00	\$ 60,853			13,645	\$ 10.00	\$ 136,451	
24.0-48.0 hours	59	\$ 20.00	\$ 1,172			24.0-48.0 hours	43	\$ 20.00	\$ 869			102	\$ 20.00	\$ 2,040	
48.0-72.0 hours	15	\$ 30.00	\$ 455			48.0-72.0 hours	4	\$ 30.00	\$ 121			19	\$ 30.00	\$ 576	
72.0+ hours	9	\$ 40.00	\$ 364			72.0+ hours	7	\$ 40.00	\$ 283			16	\$ 40.00	\$ 646	
	219,929		\$ 394,765				202,501		\$ 319,505			422,429		\$ 714,270	

Figure 6-2

During the course of this fiscal year, DESMAN has recommended that DPW prepare and issue bid documents to replace the existing Parking Access and Revenue Control Systems (PARCS) equipment with a state-of-the-art package which will support future operational recommendations including automated fee collection via pay-on-foot machines, real-time occupancy monitoring and reporting, online validation and payment systems, and 24/7 operations. DESMAN estimates it will take three months for the DPW to complete the bid and award process and another three months to complete the retrofit. DESMAN estimates this retrofit will cost roughly \$366,700 which will be financed at a 4.0% interest rate over a term of five years, with the first payment due on 1/1/2016, the day the new system goes live.

DESMAN believes that conversion to the new system will generate immediate benefits to the City. First, the new system will still support free parking on Sundays, but will now have the ability to process these users in and out without cost, while still keeping the gates down. This capacity to process every parker in and out of the facility without having an attendant present will reduce 'leakage' currently occurring from parkers who entered the garage during operating hours, but exited after attendants had left, avoiding the fee rightfully due to the City. Additionally, automation will provide greater revenue controls and higher credit/debit card use, reducing the impact of occasional loss during cash transactions. Over all, DESMAN projections that the new system will allow the City to capture 5% more parkers than the current equipment allows, increasing the number of captured transactions in the first two quarters of FY2017 by almost 11,000 over the same period in FY2016 and generating roughly \$19,700 in new revenues.

As outlined in the proposed plan, DESMAN is recommending a rate change for the garage to be implemented at the start of the third quarter of FY2017 (i.e. January 1, 2017). The primary objective of this rate increase is to mitigate some of the demand currently impacting the facility, which consistently operates at 80% or greater utilization through much of the year and regularly reaches capacity on weekdays during the summer and weekends throughout the year. As this facility is located near many popular destinations for casual visitors and patrons, DESMAN focused on affecting rate changes that would impact longer term parkers, creating an incentive for these users to seek cheaper available parking elsewhere within the downtown. This is in keeping with best practices, which holds that discretionary users such as shoppers or diners should be afforded parking closest to popular destinations to assure repeat business, while captive users who are more familiar with the area should be afforded parking which is less proximate, but also less expensive.

As such DESMAN proposed raising rates at the upper end of the current structure from \$10.00 for stays of 7-24 hours, to \$10.00 for a stay of 7-8 hours, \$12.00 for a stay of 8-12 hours and \$15.00 for a stay of 12-24 hours. DESMAN anticipates that these rate changes will cause roughly 5% of the parkers previously using the garage for periods of eight hours or more to seek parking elsewhere, but this loss will be mitigated by the 5% recapture from installation of the new equipment.

The secondary objective of the proposed rate increase is creating adequate revenue to support the substantial capital investment planned for the structure in the next few years, including upgrading lighting, elevators, access control systems and general maintenance of the facility. In keeping with parking industry best practices, DESMAN sought to seek these funds from the individuals who

will directly benefit from them (i.e. the shorter term users) and recommended a strategy which would limit the impact to users who currently bear no financial burden; those parking in the garage for two hours or less.

DESMAN proposes introducing a rate of \$1.00 for stays up to 1 hour and \$2.00 for a stay of 1-2 hours. DESMAN anticipates that these rate changes will cause roughly 35% of the parkers previously using the garage for periods of up to two hours to seek parking elsewhere, but this loss will be partially mitigated by the 5% recapture from installation of the new equipment. The net impact of these changes will be a loss of roughly 40,000 parkers when compared to the same period the prior year, but a gain of almost \$185,000 in revenues.

The net impact of these rate and operation changes will be to increase FY2017 total transient revenues – estimated at \$918,929 as shown in Table 3– by \$204,659 over the prior fiscal year (\$714,270) due to the impact of activation of the new equipment in the first half of the year and implementation of the proposed rates in the second half of the year.

These impacts carry over into FY2018, when user volume in the first half of the year is projected to drop by over 54,000 parkers when compared to the same two quarters in FY2017, but revenues will increase by almost \$173,000. While revenues and user volumes remaining stable in the second half of the year as compared to the same period in FY2017, FY2018 is still projected to generate almost \$1.1M as shown in Table 4, or just slightly less than \$173,000 in new revenues when compared to FY2017.

FY2017 Transient Revenue Projections

				FY2017							
1Q-2Q (7/1/16-12/31/16)				3Q-4Q (1/1/17-6/30/17)				TOTAL			
0.0-1.0 hours	59,867	\$	-	0.0-1.0 hours	38,791	\$	1.00	98,658	\$	1.00	\$ 38,791
1.0-2.0 hours	93,639	\$	-	1.0-2.0 hours	60,592	\$	2.00	154,231	\$	2.00	\$ 121,184
2.0-2.5 hours	22,349	\$	3.00	2.0-2.5 hours	19,207	\$	3.00	41,556	\$	3.00	\$ 124,667
2.5-3.0 hours	15,423	\$	4.00	2.5-3.0 hours	12,841	\$	4.00	28,263	\$	4.00	\$ 113,054
3.0-3.5 hours	10,052	\$	5.00	3.0-3.5 hours	8,105	\$	5.00	18,158	\$	5.00	\$ 90,789
3.5-4.0 hours	6,719	\$	6.00	3.5-4.0 hours	5,354	\$	6.00	12,074	\$	6.00	\$ 72,443
4.0-5.0 hours	7,928	\$	7.00	4.0-5.0 hours	6,294	\$	7.00	14,222	\$	7.00	\$ 99,557
5.0-6.0 hours	4,077	\$	8.00	5.0-6.0 hours	3,177	\$	8.00	7,254	\$	8.00	\$ 58,031
6.0-7.0 hours	2,845	\$	9.00	6.0-7.0 hours	2,126	\$	9.00	4,972	\$	9.00	\$ 44,745
7.0-8.0 hours	1,905	\$	10.00	7.0-8.0 hours	1,460	\$	10.00	3,366	\$	10.00	\$ 33,655
8.0-12.0 hours	5,080	\$	10.00	8.0-12.0 hours	3,895	\$	12.00	8,975	\$	12.00	\$ 97,537
12.0-24.0 hours	953	\$	10.00	12.0-24.0 hours	730	\$	15.00	1,683	\$	15.00	\$ 20,479
24.0-48.0 hours	62	\$	20.00	24.0-48.0 hours	43	\$	30.00	105	\$	30.00	\$ 2,533
48.0-72.0 hours	16	\$	30.00	48.0-72.0 hours	4	\$	45.00	20	\$	45.00	\$ 659
72.0+ hours	10	\$	40.00	72.0+ hours	7	\$	60.00	17	\$	60.00	\$ 806
	230,925		\$ 414,503		162,628		\$ 504,426		393,552		\$ 918,929

Figure 6-3

FY2018 Transient Revenue Projections

				FY2018							
1Q-2Q (7/1/17-12/31/17)				3Q-4Q (1/1/18-6/30/18)				TOTAL			
0.0-1.0 hours	38,914	\$ 1.00	\$ 38,914	0.0-1.0 hours	38,791	\$ 1.00	\$ 38,791	77,705	\$ 1.00	\$ 77,705	
1.0-2.0 hours	60,865	\$ 2.00	\$ 121,731	1.0-2.0 hours	60,592	\$ 2.00	\$ 121,184	121,457	\$ 2.00	\$ 242,915	
2.0-2.5 hours	22,349	\$ 3.00	\$ 67,047	2.0-2.5 hours	19,207	\$ 3.00	\$ 57,620	41,556	\$ 3.00	\$ 124,667	
2.5-3.0 hours	15,423	\$ 4.00	\$ 61,691	2.5-3.0 hours	12,841	\$ 4.00	\$ 51,362	28,263	\$ 4.00	\$ 113,054	
3.0-3.5 hours	10,052	\$ 5.00	\$ 50,262	3.0-3.5 hours	8,105	\$ 5.00	\$ 40,527	18,158	\$ 5.00	\$ 90,789	
3.5-4.0 hours	6,719	\$ 6.00	\$ 40,316	3.5-4.0 hours	5,354	\$ 6.00	\$ 32,127	12,074	\$ 6.00	\$ 72,443	
4.0-5.0 hours	7,928	\$ 7.00	\$ 55,498	4.0-5.0 hours	6,294	\$ 7.00	\$ 44,058	14,222	\$ 7.00	\$ 99,557	
5.0-6.0 hours	4,077	\$ 8.00	\$ 32,612	5.0-6.0 hours	3,177	\$ 8.00	\$ 25,418	7,254	\$ 8.00	\$ 58,031	
6.0-7.0 hours	2,845	\$ 9.00	\$ 25,608	6.0-7.0 hours	2,126	\$ 9.00	\$ 19,137	4,972	\$ 9.00	\$ 44,745	
7.0-8.0 hours	1,905	\$ 10.00	\$ 19,051	7.0-8.0 hours	1,460	\$ 10.00	\$ 14,605	3,366	\$ 10.00	\$ 33,655	
8.0-12.0 hours	4,826	\$ 12.00	\$ 57,914	8.0-12.0 hours	3,895	\$ 12.00	\$ 46,735	8,721	\$ 12.00	\$ 104,649	
12.0-24.0 hours	905	\$ 15.00	\$ 13,574	12.0-24.0 hours	730	\$ 15.00	\$ 10,953	1,635	\$ 15.00	\$ 24,527	
24.0-48.0 hours	58	\$ 30.00	\$ 1,753	24.0-48.0 hours	43	\$ 30.00	\$ 1,303	102	\$ 30.00	\$ 3,056	
48.0-72.0 hours	15	\$ 45.00	\$ 680	48.0-72.0 hours	4	\$ 45.00	\$ 182	19	\$ 45.00	\$ 862	
72.0+ hours	9	\$ 60.00	\$ 544	72.0+ hours	7	\$ 60.00	\$ 424	16	\$ 60.00	\$ 968	
	176,892		\$ 587,196		162,628		\$ 504,426	339,519		\$ 1,091,622	

Table 6-4

For FY2019, DESMAN assumed that the City would move to collecting for parking in the garage on a 24/7 basis, increasing total user volumes and revenue by roughly 10% by moving to charge on Sunday, even with a loss of roughly 4.25% of traditional usage due to the change in policy. The change will net roughly 34,000 new parkers on the year and roughly \$1.2M, approximately \$109,000 over FY2018.

FY2019 Transient Revenue Projections

				FY2019							
1Q-2Q (7/1/18-12/31/18)				3Q-4Q (1/1/19-6/30/19)				TOTAL			
0.0-1.0 hours	42,805	\$ 1.00	\$ 42,805	0.0-1.0 hours	42,670	\$ 1.00	\$ 42,670	85,475	\$ 1.00	\$ 85,475	
1.0-2.0 hours	66,952	\$ 2.00	\$ 133,904	1.0-2.0 hours	66,651	\$ 2.00	\$ 133,302	133,603	\$ 2.00	\$ 267,206	
2.0-2.5 hours	24,584	\$ 3.00	\$ 73,752	2.0-2.5 hours	21,127	\$ 3.00	\$ 63,382	45,711	\$ 3.00	\$ 137,134	
2.5-3.0 hours	16,965	\$ 4.00	\$ 67,861	2.5-3.0 hours	14,125	\$ 4.00	\$ 56,498	31,090	\$ 4.00	\$ 124,359	
3.0-3.5 hours	11,058	\$ 5.00	\$ 55,289	3.0-3.5 hours	8,916	\$ 5.00	\$ 44,580	19,974	\$ 5.00	\$ 99,868	
3.5-4.0 hours	7,391	\$ 6.00	\$ 44,348	3.5-4.0 hours	5,890	\$ 6.00	\$ 35,339	13,281	\$ 6.00	\$ 79,687	
4.0-5.0 hours	8,721	\$ 7.00	\$ 61,048	4.0-5.0 hours	6,923	\$ 7.00	\$ 48,464	15,645	\$ 7.00	\$ 109,512	
5.0-6.0 hours	4,484	\$ 8.00	\$ 35,874	5.0-6.0 hours	3,495	\$ 8.00	\$ 27,960	7,979	\$ 8.00	\$ 63,834	
6.0-7.0 hours	3,130	\$ 9.00	\$ 28,169	6.0-7.0 hours	2,339	\$ 9.00	\$ 21,050	5,469	\$ 9.00	\$ 49,219	
7.0-8.0 hours	2,096	\$ 10.00	\$ 20,956	7.0-8.0 hours	1,607	\$ 10.00	\$ 16,065	3,702	\$ 10.00	\$ 37,021	
8.0-12.0 hours	5,309	\$ 12.00	\$ 63,706	8.0-12.0 hours	4,284	\$ 12.00	\$ 51,408	9,593	\$ 12.00	\$ 115,114	
12.0-24.0 hours	995	\$ 15.00	\$ 14,931	12.0-24.0 hours	803	\$ 15.00	\$ 12,049	1,799	\$ 15.00	\$ 26,980	
24.0-48.0 hours	64	\$ 30.00	\$ 1,928	24.0-48.0 hours	48	\$ 30.00	\$ 1,433	112	\$ 30.00	\$ 3,361	
48.0-72.0 hours	17	\$ 45.00	\$ 748	48.0-72.0 hours	4	\$ 45.00	\$ 200	21	\$ 45.00	\$ 948	
72.0+ hours	10	\$ 60.00	\$ 598	72.0+ hours	8	\$ 60.00	\$ 467	18	\$ 60.00	\$ 1,065	
	194,581		\$ 645,915		178,890		\$ 554,869	373,471		\$ 1,200,784	

Table 6-5

For FY2020, DESMAN assumed no change in policy in the first half of the year, but a \$0.50 per rate band increase for stays of between one and twelve hours effective 1/1/2020. This would be the first rate adjustment in three years and will be necessary to offset the cost of inflation on operating expenses. DESMAN projects this change will reduce patronage in these rate bands by 5%, losing roughly 8,900

parkers from the same period the prior fiscal year, but generate an roughly \$57,500 in new revenues, increasing total transient revenues to roughly \$1.25M.

FY2020 Transient Revenue Projections

FY2020									
1Q-2Q (7/1/19-12/31/19)				3Q-4Q (1/1/20-6/30/20)				TOTAL	
0.0-1.0 hours	42,805	\$ 1.00	\$ 42,805	0.0-1.0 hours	40,537	\$ 1.50	\$ 60,805	83,342	\$ 1.50 \$ 103,610
1.0-2.0 hours	66,952	\$ 2.00	\$ 133,904	1.0-2.0 hours	63,319	\$ 2.50	\$ 158,297	130,271	\$ 2.50 \$ 292,200
2.0-2.5 hours	24,584	\$ 3.00	\$ 73,752	2.0-2.5 hours	20,071	\$ 3.50	\$ 70,249	44,655	\$ 3.50 \$ 144,000
2.5-3.0 hours	16,965	\$ 4.00	\$ 67,861	2.5-3.0 hours	13,418	\$ 4.50	\$ 60,383	30,383	\$ 4.50 \$ 128,243
3.0-3.5 hours	11,058	\$ 5.00	\$ 55,289	3.0-3.5 hours	8,470	\$ 5.50	\$ 46,586	19,528	\$ 5.50 \$ 101,874
3.5-4.0 hours	7,391	\$ 6.00	\$ 44,348	3.5-4.0 hours	5,595	\$ 6.50	\$ 36,370	12,987	\$ 6.50 \$ 80,718
4.0-5.0 hours	8,721	\$ 7.00	\$ 61,048	4.0-5.0 hours	6,577	\$ 7.50	\$ 49,330	15,298	\$ 7.50 \$ 110,378
5.0-6.0 hours	4,484	\$ 8.00	\$ 35,874	5.0-6.0 hours	3,320	\$ 8.50	\$ 28,222	7,804	\$ 8.50 \$ 64,096
6.0-7.0 hours	3,130	\$ 9.00	\$ 28,169	6.0-7.0 hours	2,222	\$ 9.50	\$ 21,109	5,352	\$ 9.50 \$ 49,278
7.0-8.0 hours	2,096	\$ 10.00	\$ 20,956	7.0-8.0 hours	1,526	\$ 10.50	\$ 16,025	3,622	\$ 10.50 \$ 36,981
8.0-12.0 hours	5,309	\$ 12.00	\$ 63,706	8.0-12.0 hours	4,070	\$ 12.50	\$ 50,873	9,379	\$ 12.50 \$ 114,579
12.0-24.0 hours	995	\$ 15.00	\$ 14,931	12.0-24.0 hours	803	\$ 15.00	\$ 12,049	1,799	\$ 15.00 \$ 26,980
24.0-48.0 hours	64	\$ 30.00	\$ 1,928	24.0-48.0 hours	48	\$ 30.00	\$ 1,433	112	\$ 30.00 \$ 3,361
48.0-72.0 hours	17	\$ 45.00	\$ 748	48.0-72.0 hours	4	\$ 45.00	\$ 200	21	\$ 45.00 \$ 948
72.0+ hours	10	\$ 60.00	\$ 598	72.0+ hours	8	\$ 60.00	\$ 467	18	\$ 60.00 \$ 1,065
	194,581		\$ 645,915		169,989		\$ 612,395	364,570	\$ 1,258,311

Table 6-6

Total Marketplace Garage Transient Revenue Projections - 2016 to 2020

	2016	2017	2018	2019	2020
Gross Revenue	\$707,198	\$918,923	\$1,091,622	\$1,200,784	\$1,258,311
Notes:					
2016	New PARCS System Installed 01/01/16				
2017	2-Hr Free Programs Moves to Validation 01/01/17				
2018	Full year of Validation program				
2019	No change				
2020	Rate increase of \$0.50/hr. 01/01/19				

6.2.2. Merchant Validation Program Financial Impact

In an effort to recapture those short-term parkers impacted by changes in rates at the lower end of the scale, DESMAN recommended the City initiate a merchant validation program. This program would allow merchants to purchase coupons or credit equivalent to a one- or two-hour stay in the garage at one-half the actual cost. For example, if it costs \$1.00 to park in the garage for one hour, the City would sell a validation for one hour's worth of parking to the merchant at \$0.50. If the City were to initiate the program in FY2016, DESMAN would anticipate it would cost roughly \$0.20 per validation to administer to the program.

As noted previously, DESMAN assumes that roughly 35% of the total number of one and two hour parkers that normally use the MPG will reject the idea of having to pay to park in the facility when the new rate structure goes into effect and instead use facilities that still offer the 2-Hr. Free Program. In order of magnitude, it is estimated that a total of roughly 288,000 parkers will use the MPG in FY2016 for stays of two hours or less; 35% of this number is roughly 100,800 lost parkers. DESMAN

believes that a well-publicized and promoted validation program could recapture roughly 72,000 of the 100,800 lost parkers, if a rate change was planned for the start of FY2017, reducing the permanent loss rate to just 10% of total population, assuming that participating merchants use the program to continue to offer 'free' parking to their patrons.

In actual terms, the impact of the proposed rate change would not be felt until midway into FY2017 and DESMAN projects the City will sell roughly 35,500 validations. The initial cost of production is assumed to be roughly \$0.20 per validation, as DESMAN estimates 75% of participating merchants will elect to use manual chaser tickets initially, while the remaining 25% adopt electronic measures. As shown in Table 7, total sales are estimated to be \$28,567 against costs of \$7,099, netting the City \$21,468.

FY2017 Validation Program Estimates

FY2017						
Coupon	Volume	Value	Tot. Sales	Cost/Unit	Tot. Cost	Tot. Net
0-1 hour	13,854	\$ 0.50	\$ 6,927	\$ 0.20	\$ 2,771	\$ 4,156
1-2 hour	21,640	\$ 1.00	\$ 21,640	\$ 0.20	\$ 4,328	\$ 17,312
TOTAL	35,494		\$ 28,567		\$ 7,099	\$ 21,468

Table 6-7

FY2018 is the first full year of operation for the program, so total sales are expected to roughly double, as are revenues. However, the cost of production is projected to decrease as half of participating merchants adopt electronic features, reducing the cost of labor and materials to produce chaser tickets.

FY2018 Validation Program Estimates

FY2018						
Coupon	Volume	Value	Tot. Sales	Cost/Unit	Tot. Cost	Tot. Net
0-1 hour	28,821	\$ 0.50	\$ 14,411	\$ 0.15	\$ 4,323	\$ 10,087
1-2 hour	45,050	\$ 1.00	\$ 45,050	\$ 0.15	\$ 6,758	\$ 38,293
TOTAL	73,871		\$ 59,461		\$ 11,081	\$ 48,380

Table 6-8

In the later years, DESMAN assumed that validation sales would jump by 10% year-to-year in FY2019 when the garage converted to charging on Sundays and additional 3% year-to-year in FY2020 when the next proposed rate changes were implemented. Additionally, production costs per unit were anticipated to fall further and then stabilize as up to two-thirds of all participating merchants adopted electronic

validations. By FY2020, DESMAN estimated the program would generate net income of just under \$68,000 annually.

FY2019-2020 Validation Program Estimates

FY2019						
Coupon	Volume	Value	Tot. Sales	Cost/Unit	Tot. Cost	Tot. Net
0-1 hour	31,703	\$ 0.50	\$ 15,852	\$ 0.12	\$ 3,804	\$ 12,047
1-2 hour	49,555	\$ 1.00	\$ 49,555	\$ 0.12	\$ 5,947	\$ 43,608
TOTAL	81,258		65,407		9,751	55,656

FY2020						
Coupon	Volume	Value	Tot. Sales	Cost/Unit	Tot. Cost	Tot. Net
0-1 hour	32,654	\$ 0.75	\$ 20,409	\$ 0.12	\$ 3,918	\$ 16,490
1-2 hour	51,042	\$ 1.25	\$ 57,422	\$ 0.12	\$ 6,125	\$ 51,297
TOTAL	83,696		77,831		10,044	67,787

Table 6-9

6.2.3. Monthly Lease Program Financial Impact

The proposed transient rate changes will mandate commensurate adjustments in the cost of monthly passes in the garage. According to DPW records, the MPG currently has 43 pass holders parking in the lowest level of the garage at \$96.00 per month and 6 pass holders parking in the upper portions of the garage at \$80.00 per month. Assuming stable user volumes and fixed rates, this translates to annual revenues of just over \$55,000 for FY2016.

FY2016-2020 Monthly Lease Revenue Projections

FY2016				FY2017			
	Users	Rate	Total		Users	Rate	Total
Lower Level	43	\$ 96.00	\$ 49,536	Lower Level	43	\$ 100.00	\$ 50,568
Upper Level	6	\$ 80.00	\$ 5,760	Upper Level	4	\$ 90.00	\$ 5,040
Total	49		\$ 55,296	Total	47		\$ 55,608
<i>Revenue Change (Year-over-Year)</i>			<i>\$ -</i>	<i>Revenue Change (Year-over-Year)</i>			<i>\$ 312</i>

FY2018				FY2019			
	Users	Rate	Total		Users	Rate	Total
Lower Level	43	\$ 100.00	\$ 51,600	Lower Level	43	\$ 100.00	\$ 51,600
Upper Level	20	\$ 90.00	\$ 21,600	Upper Level	40	\$ 90.00	\$ 43,200
Total	63		\$ 73,200	Total	83		\$ 94,800
<i>Revenue Change (Year-over-Year)</i>			<i>\$ 17,592</i>	<i>Revenue Change (Year-over-Year)</i>			<i>\$ 21,600</i>

FY2020			
	Users	Rate	Total
Lower Level	43	\$ 110.00	\$ 56,760
Upper Level	50	\$ 100.00	\$ 60,000
Total	93		\$ 116,760
<i>Revenue Change (Year-over-Year)</i>			<i>\$ 21,960</i>

Table 6-10

In tandem with the proposed transient rate increases in FY2017, DESMAN recommends adjusting pass rates to \$100.00 per month for the lower level of the garage and \$90.00 per month for the upper level. Initially, DESMAN assumes that the two of the existing six upper level pass holders will terminate their lease in the facility as a result of the rate increase. However, with the increase in available capacity in the garage and stabilization of pass rates, DESMAN believes the City can sell an additional 16 upper level passes in FY2018, 20 in FY2019 and 10 in the first half of 2020. A second rate adjustment, planned for January 1, 2020, will halt additional pass sales without impact the total number of pass holders. These accumulated changes will more than double total annual revenues from leases between FY2016 and FY2020.

6.2.4. Garage Operations - Financial Impact

Three factors will impact operating expenses associated with the garage over the next five fiscal years:

- **Operational Performance Standards:** First, the performance standards to be developed cooperatively between DPW and Go!Burlington will result in more focused and efficient efforts from Parking Department personnel going forward, allowing each staff member to accomplish slightly more within the limitations of their current schedules by clarifying performance expectations and standardizing duties and tasks.
- **Capital Improvement and Repair:** Second, significant reinvestment in the garage will reduce the amount of time and labor required to repair damage incurred over time,

allowing personnel to be more efficient and effective in their efforts to improve the condition of the facility.

- **New PARCS System:** Finally, installation of the recommended PARCS equipment will automate fee collection and ticket processing, allowing the City to adjust staffing so attendants are available and on hand during peak periods, but are not necessary during off-peak periods, when the amount of money collected doesn't serve to cover the cost of placing someone on site to collect it.

In FY2016, when the garage is still operating primarily as a booth-staffed, pay-at-exit facility, with automation in place only as secondary or redundant system, and operating standards still in the process of being developed and implemented, staffing is projected to equal roughly 12,688 regularly scheduled hours annually at a total cost of \$652,776.

In FY2017, with the full implementation of operating standards and activation of the new PARCS equipment, schedules can be adjusted to accommodate the greater efficiency of personnel as well as the garage's capacity to operate as a fully automated, pay-on-foot facility during overnight hours. During other hours, the staff on hand can function more as ambassadors, focusing on delivery service to patrons and visitors rather than calculating and collecting fees. These changes will allow the City to reduce staffing by 3,744 hours relative to the prior year at a cost savings of over \$91,000, even after adjusting compensation by 3.0% year over year.

In FY2018, the City will be able to reduce total annual labor hours again, dropping to 8,424 total staffing hours and saving an additional \$6,500 over the prior year, even with standard cost of living adjustments to wages and benefits.

In FY2019, DESMAN anticipates the City increasing total annual staffing by 832 hours to cover the conversion to 24/7 operations in the garage, driving annual operating costs by roughly \$32,000.

In FY2020, DESMAN projects no change in total staffing hours, but roughly \$8,600 in additional expenses driven by cost of living adjustments.

FY2016-2020 Staffing Estimates

Year	Staff Hours	Total Cost
2016	12,688	\$352,766
2017	9,944	\$261,603
2018	8,242	\$255,098
2019	9,296	\$287,143
2020	9,296	\$295,759

Table 6-11

FY2016-2020 Staffing Estimates

FY2016													
Position	Hours	Days	Annual Hours	Wage Rate	Annual Salary	Overtime	Personal Time	FICA	Unemployment Insurance	Retirement	Worker's Comp Ins.	Private Insurance	GRAND TOTAL
Manager	Variable	Variable	520	\$ 26.26	\$ 13,657	\$ 1,161	\$ 1,134	\$ 1,045	\$ 27	\$ 1,722	\$ 205	\$ 4,240	\$ 23,191
Supervisor	Variable	Variable	520	\$ 20.64	\$ 10,735	\$ 912	\$ 891	\$ 821	\$ 21	\$ 1,354	\$ 161	\$ 3,333	\$ 18,228
Attendant #1	8a-4p	Tu-Sa	2,080	\$ 15.45	\$ 32,135	\$ 2,731	\$ 2,667	\$ 2,458	\$ 64	\$ 4,052	\$ 482	\$ 9,978	\$ 54,567
Attendant #2	12p-8p	Mo-Fr	2,080	\$ 15.32	\$ 31,871	\$ 2,709	\$ 2,645	\$ 2,438	\$ 64	\$ 4,019	\$ 478	\$ 9,896	\$ 54,120
Attendant #3	4p-12a	Th-Sa	1,248	\$ 16.21	\$ 20,231	\$ 1,720	\$ 1,679	\$ 1,548	\$ 40	\$ 2,551	\$ 303	\$ 6,282	\$ 34,354
Attendant #4	Floater	Floater	1,248	\$ 15.70	\$ 19,597	\$ 1,666	\$ 1,627	\$ 1,489	\$ 39	\$ 2,471	\$ 294	\$ 6,085	\$ 33,278
Attendant #5	Floater	Floater	1,664	\$ 15.32	\$ 25,497	\$ 2,167	\$ 2,116	\$ 1,951	\$ 51	\$ 3,215	\$ 382	\$ 7,917	\$ 43,296
Maintenance #1	Unknown	Unknown	2,080	\$ 17.11	\$ 35,596	\$ 3,026	\$ 2,954	\$ 2,723	\$ 71	\$ 4,489	\$ 534	\$ 11,053	\$ 60,446
Maintenance #2	Unknown	Unknown	832	\$ 14.94	\$ 12,432	\$ 1,057	\$ 1,032	\$ 951	\$ 25	\$ 1,588	\$ 186	\$ 3,860	\$ 21,111
Maintenance #3	Unknown	Unknown	416	\$ 14.42	\$ 5,998	\$ 510	\$ 498	\$ 459	\$ 12	\$ 756	\$ 90	\$ 1,862	\$ 10,385
TOTAL			12,688		\$ 207,749	\$ 17,659	\$ 17,243	\$ 15,893	\$ 414	\$ 26,197	\$ 3,115	\$ 64,506	\$ 352,776

FY2017													
Position	Hours	Days	Annual Hours	Wage Rate	Annual Salary	Overtime	Personal Time	FICA	Unemployment Insurance	Retirement	Worker's Comp Ins.	Private Insurance	GRAND TOTAL
Manager	Variable	Variable	520	\$ 27.05	\$ 14,067	\$ 1,196	\$ 1,168	\$ 1,076	\$ 28	\$ 1,774	\$ 211	\$ 4,368	\$ 23,888
Supervisor	Variable	Variable	520	\$ 21.26	\$ 11,057	\$ 940	\$ 918	\$ 846	\$ 22	\$ 1,394	\$ 166	\$ 3,433	\$ 18,776
Attendant #1	8a-4p	Mo-Fr	2,080	\$ 15.91	\$ 33,099	\$ 2,813	\$ 2,747	\$ 2,532	\$ 66	\$ 4,174	\$ 496	\$ 10,277	\$ 56,204
Attendant #2	4p-12a	Mo-Fr	2,080	\$ 15.78	\$ 32,827	\$ 2,790	\$ 2,725	\$ 2,511	\$ 66	\$ 4,139	\$ 492	\$ 10,193	\$ 55,743
Attendant #3	10a-6p	Sa	416	\$ 16.53	\$ 6,877	\$ 585	\$ 571	\$ 526	\$ 14	\$ 867	\$ 103	\$ 2,135	\$ 11,678
Attendant #4	6p-2a	Sa	416	\$ 16.01	\$ 6,661	\$ 566	\$ 553	\$ 510	\$ 13	\$ 840	\$ 100	\$ 2,068	\$ 11,311
Attendant #5	-	-	0	#DIV/0!	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Maintenance #1	10p-6a	Mo-Fr	2,080	\$ 17.63	\$ 36,664	\$ 3,116	\$ 3,043	\$ 2,805	\$ 73	\$ 4,623	\$ 550	\$ 11,384	\$ 62,258
Maintenance #2	10p-6a	Sa-Su	832	\$ 15.39	\$ 12,805	\$ 1,088	\$ 1,063	\$ 980	\$ 26	\$ 1,615	\$ 192	\$ 3,976	\$ 21,745
Maintenance #3	-	-	0	#DIV/0!	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
TOTAL			8,944		\$ 154,057	\$ 13,094	\$ 12,788	\$ 11,786	\$ 308	\$ 19,426	\$ 2,310	\$ 47,834	\$ 263,603

FY2018													
Position	Hours	Days	Annual Hours	Wage Rate	Annual Salary	Overtime	Personal Time	FICA	Unemployment Insurance	Retirement	Worker's Comp Ins.	Private Insurance	GRAND TOTAL
Manager	Variable	Variable	520	\$ 27.86	\$ 14,489	\$ 1,232	\$ 1,203	\$ 1,108	\$ 29	\$ 1,827	\$ 217	\$ 4,499	\$ 24,604
Supervisor	Variable	Variable	520	\$ 21.90	\$ 11,389	\$ 968	\$ 945	\$ 871	\$ 23	\$ 1,436	\$ 171	\$ 3,536	\$ 19,339
Attendant #1	10a-6p	Mo-Fr	2,080	\$ 16.39	\$ 34,092	\$ 2,898	\$ 2,830	\$ 2,608	\$ 68	\$ 4,299	\$ 511	\$ 10,586	\$ 57,892
Attendant #2	6p-12a	Mo-Fr	1,560	\$ 16.26	\$ 25,359	\$ 2,156	\$ 2,105	\$ 1,940	\$ 51	\$ 3,198	\$ 380	\$ 7,874	\$ 43,063
Attendant #3	10a-6p	Sa	416	\$ 17.03	\$ 7,083	\$ 602	\$ 588	\$ 542	\$ 14	\$ 893	\$ 106	\$ 2,199	\$ 12,027
Attendant #4	6p-2a	Sa	416	\$ 16.49	\$ 6,861	\$ 583	\$ 569	\$ 525	\$ 14	\$ 865	\$ 103	\$ 2,130	\$ 11,650
Attendant #5	-	-	0	#DIV/0!	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Maintenance #1	10p-6a	Mo-Fr	2,080	\$ 18.16	\$ 37,764	\$ 3,210	\$ 3,134	\$ 2,889	\$ 76	\$ 4,762	\$ 566	\$ 11,726	\$ 64,127
Maintenance #2	10p-6a	Sa-Su	832	\$ 15.85	\$ 13,189	\$ 1,121	\$ 1,095	\$ 1,009	\$ 26	\$ 1,663	\$ 198	\$ 4,095	\$ 22,396
Maintenance #3	-	-	0	#DIV/0!	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
TOTAL			8,424		\$ 150,226	\$ 12,770	\$ 12,469	\$ 11,492	\$ 301	\$ 18,943	\$ 2,252	\$ 46,645	\$ 255,098

FY2019													
Position	Hours	Days	Annual Hours	Wage Rate	Annual Salary	Overtime	Personal Time	FICA	Unemployment Insurance	Retirement	Worker's Comp Ins.	Private Insurance	GRAND TOTAL
Manager	Variable	Variable	520	\$ 28.70	\$ 14,924	\$ 1,269	\$ 1,239	\$ 1,142	\$ 30	\$ 1,882	\$ 224	\$ 4,634	\$ 25,344
Supervisor	Variable	Variable	520	\$ 22.56	\$ 11,731	\$ 997	\$ 974	\$ 897	\$ 23	\$ 1,479	\$ 176	\$ 3,642	\$ 19,919
Attendant #1	10a-6p	Mo-Fr	2,080	\$ 16.88	\$ 35,115	\$ 2,985	\$ 2,915	\$ 2,686	\$ 70	\$ 4,428	\$ 527	\$ 10,903	\$ 59,629
Attendant #2	6p-12a	Mo-Fr	1,560	\$ 16.74	\$ 26,120	\$ 2,220	\$ 2,168	\$ 1,998	\$ 52	\$ 3,294	\$ 392	\$ 8,110	\$ 44,354
Attendant #3	10a-6p	Sa-Su	832	\$ 17.54	\$ 14,591	\$ 1,240	\$ 1,211	\$ 1,116	\$ 29	\$ 1,840	\$ 219	\$ 4,531	\$ 24,777
Attendant #4	6p-2a	Sa-Su	832	\$ 16.99	\$ 14,134	\$ 1,201	\$ 1,173	\$ 1,081	\$ 28	\$ 1,782	\$ 212	\$ 4,389	\$ 24,000
Attendant #5	-	-	0	#DIV/0!	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Maintenance #1	10p-6a	Mo-Fr	2,080	\$ 18.70	\$ 38,897	\$ 3,306	\$ 3,228	\$ 2,976	\$ 78	\$ 4,905	\$ 583	\$ 12,078	\$ 66,051
Maintenance #2	10p-6a	Sa-Su	832	\$ 16.33	\$ 13,585	\$ 1,155	\$ 1,128	\$ 1,039	\$ 27	\$ 1,713	\$ 204	\$ 4,238	\$ 23,069
Attendant #5	-	-	0	#DIV/0!	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
TOTAL			9,255		\$ 169,097	\$ 14,373	\$ 14,036	\$ 12,985	\$ 337	\$ 21,323	\$ 2,537	\$ 52,505	\$ 287,143

FY2020													
Position	Hours	Days	Annual Hours	Wage Rate	Annual Salary	Overtime	Personal Time	FICA	Unemployment Insurance	Retirement	Worker's Comp Ins.	Private Insurance	GRAND TOTAL
Manager	Variable	Variable	520	\$ 29.56	\$ 15,372	\$ 1,307	\$ 1,276	\$ 1,176	\$ 31	\$ 1,938	\$ 231	\$ 4,773	\$ 26,104
Supervisor	Variable	Variable	520	\$ 23.24	\$ 12,083	\$ 1,027	\$ 1,003	\$ 924	\$ 24	\$ 1,524	\$ 181	\$ 3,752	\$ 20,518
Attendant #1	10a-6p	Mo-Fr	2,080	\$ 17.39	\$ 36,188	\$ 3,074	\$ 3,002	\$ 2,767	\$ 72	\$ 4,561	\$ 543	\$ 11,230	\$ 61,417
Attendant #2	6p-12a	Mo-Fr	1,560	\$ 17.25	\$ 26,904	\$ 2,287	\$ 2,233	\$ 2,058	\$ 54	\$ 3,393	\$ 404	\$ 8,354	\$ 45,887
Attendant #3	10a-6p	Sa-Su	832	\$ 18.06	\$ 15,029	\$ 1,277	\$ 1,247	\$ 1,150	\$ 30	\$ 1,895	\$ 225	\$ 4,667	\$ 25,520
Attendant #4	6p-2a	Sa-Su	832	\$ 17.50	\$ 14,558	\$ 1,237	\$ 1,208	\$ 1,114	\$ 29	\$ 1,836	\$ 218	\$ 4,520	\$ 24,720
Attendant #5	-	-	0	#DIV/0!	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Maintenance #1	10p-6a	Mo-Fr	2,080	\$ 19.26	\$ 40,064	\$ 3,405	\$ 3,325	\$ 3,065	\$ 80	\$ 5,052	\$ 601	\$ 12,440	\$ 88,032
Maintenance #2	10p-6a	Sa-Su	832	\$ 16.82	\$ 13,993	\$ 1,189	\$ 1,161	\$ 1,070	\$ 28	\$ 1,765	\$ 210	\$ 4,345	\$ 23,761
Attendant #5	-	-	0	#DIV/0!	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
TOTAL			9,255		\$ 174,171	\$ 14,803	\$ 14,455	\$ 13,324	\$ 348	\$ 21,964	\$ 2,613	\$ 54,081	\$ 295,759

Table 6-12

6.2.5. Capital Improvement Project Financial Impact

DPW is scheduled to spend a total of \$4,769,888 in capital improvement projects to restore the MPG and extend its lifecycle an additional 20-30 years. For this analysis, DESMAN assumed the City would spread this investment out over a three-year period, drawing against a line of credit as the outset of each fiscal year to cover the budgeted projections scheduled for that period. DESMAN assumed each loan would be amortized at 4.0% annually over a fifteen year term, with the following issue dates:

7/1/2015	\$2,604,944	Capital Projects spanning FY2015-2016
7/1/2016	\$1,631,744	Capital Projects spanning FY2017
7/1/2017	\$ 803,200	Capital Projects spanning FY2018

This progressive borrowing schedule resulted in ascending debt service obligations that ranged from \$231,221 per year in FY2016 to \$423,387 by FY2020. In addition, the debt service for the new PARCS equipment, initiating at \$40,516 in FY2017, increased to \$81,033 in FY2018 through FY2022.

All fixed line item costs (i.e. supplies, utilities, security, etc.) were assumed to increase at a rate of 3.0% annually from the adopted FY2016 budget figures provided by DPW.

DESMAN prepared a conceptual pro forma statement for the MPG which incorporated all of the conditions and impacts as previously presented with two exceptions:

1. The statement did not include the cost allocation for the Assistant Director of Public Works to the facility. DESMAN included this cost in the Traffic Fund pro forma, but omitted it here as this was perceived as allocation of an indirect overhead expense, not a direct labor cost.
2. The statement includes allocation of \$146,840 in Intergovernmental Revenues, transferred from the DID assessment, for FY2016. It was assumed that these funds would be reallocated to the BBA and/or Go!Burlington at the outset of FY2017 to support their activities under the plan, as the Traffic Fund could bear the loss at that time.

As Table 13 on the next page shows, the facility can cover its own operating expense each year, but does not generate adequate net operating income to offset debt service obligations until FY2019, when the combination of rate increases, rising patronage and reduced labor costs allow the facility to generate positive net cash flow even after debt service.

FY2016-2020 Marketplace Garage Pro Forma

	FY2016	FY2017	FY2018	FY2109	FY2020
REVENUES					
Transients	714,270	918,929	1,091,622	1,200,784	1,258,311
Monthlies	55,296	55,608	73,200	94,800	113,760
Intergovernmental	146,840	-	-	-	-
Validations	-	28,567	59,461	65,407	77,831
Subtotal	\$ 916,406	\$ 1,003,104	\$ 1,224,282	\$ 1,360,990	\$ 1,449,902
EXPENSES					
Salaries & Wages	207,749	154,057	150,226	169,097	174,171
Overtime	17,659	13,094	12,770	14,373	14,803
Personal Time	17,243	12,788	12,469	14,036	14,455
FICA	15,893	11,786	11,492	12,935	13,324
Unemployment Insurance	414	308	301	21,323	348
Retirement	26,197	19,426	18,943	21,323	21,964
Worker's Compensation	3,115	2,310	2,252	2,537	2,613
Private Insurance	64,506	47,834	46,645	52,505	54,081
Capital Outlay	7,500	-	-	-	-
Supplies	35,300	36,359	37,450	38,573	39,730
Uniforms	3,000	3,090	3,183	3,278	3,377
Repair & Maintenance	24,000	24,720	25,462	26,225	27,012
Utilities	59,100	60,873	62,699	64,580	66,518
Security	85,680	88,250	90,898	93,625	96,434
Professional Services	17,600	18,128	18,672	19,232	19,809
Maintenance Contracts	18,375	18,926	19,494	20,079	20,681
Property Repairs	61,640	81,620	116,600	120,098	123,701
Travel & Training	7,500	7,725	7,957	8,195	8,441
Fees for Services (Street)	20,000	20,600	21,218	21,855	22,510
Insurance	14,392	14,824	15,268	15,727	16,198
Bank Fees	12,000	12,360	12,731	13,113	13,506
Validation Program	-	7,099	11,081	9,751	10,044
Interfund Transfers	32,629	33,608	34,616	35,654	36,724
Subtotal	\$ 751,492	\$ 689,785	\$ 732,426	\$ 798,114	\$ 800,444
NET OPERATING INCOME	\$ 164,914	\$ 313,319	\$ 491,857	\$ 562,876	\$ 649,458
DEBT SERVICE					
Garage Repairs	231,221	352,093	423,387	423,387	423,387
New PARCS Equipment	40,516	81,033	81,033	81,033	81,033
Subtotal	\$ 271,738	\$ 433,126	\$ 504,420	\$ 504,420	\$ 504,420
NET CASH FLOW	\$ (106,824)	\$ (119,807)	\$ (12,564)	\$ 58,456	\$ 145,038

Table 6-13

6.3. LAKEVIEW/ COLLEGE STREET GARAGE MODEL

6.3.1. Transient Parking Revenue Projections

DESMAN's model was based on actual operating statistics from the garage spanning the period of June 2014 or May 2015; roughly the span of FY2015. As shown in Table 15, there were



roughly 410,000 transient parkers that used the garage during this span. Applying the current rate structure to this volume, the facility is projected to generate roughly \$278,000 for FY2015.

LVG/CSG Base Year (FY2015) Model Volume and Revenue Projections

Duration	Jun-14	Jul-14	Aug-14	Sep-14	Oct-14	Nov-14	Dec-14	Jan-15	Feb-15	Mar-15	Apr-15	May-15	TOTAL	Rate	Revenue
0.0-1.0 hours	13,945	12,156	15,032	14,210	15,759	13,153	16,204	12,181	11,893	13,788	15,304	13,861	167,486	\$ -	\$ -
1.0-2.0 hours	15,107	13,169	16,284	15,394	17,073	14,250	17,554	13,196	12,884	14,938	16,580	15,016	181,445	\$ -	\$ -
2.0-2.5 hours	1,324	1,459	1,603	1,185	1,447	1,512	1,917	1,005	954	1,122	1,112	1,249	15,889	\$ 2.00	\$ 31,778
2.5-3.0 hours	821	982	1,085	802	943	998	1,353	648	660	793	830	932	10,847	\$ 3.00	\$ 32,541
3.0-3.5 hours	543	638	714	560	670	642	824	399	402	477	472	507	6,848	\$ 4.00	\$ 27,392
3.5-4.0 hours	1,430	1,474	1,475	1,316	417	411	561	291	257	323	320	385	8,660	\$ 5.00	\$ 43,300
4.0-5.0 hours	451	485	529	433	522	498	557	301	361	345	398	502	5,382	\$ 6.00	\$ 32,292
5.0-6.0 hours	230	261	231	224	283	241	241	163	194	279	196	300	2,843	\$ 7.00	\$ 19,901
6.0-7.0 hours	177	182	182	201	250	224	192	185	193	262	191	247	2,486	\$ 8.00	\$ 19,888
7.0-24.0 hours	679	480	522	736	970	751	641	618	644	877	639	829	8,386	\$ 8.00	\$ 67,088
24.0-48.0 hours	10	18	25	18	17	11	9	8	11	17	11	19	174	\$ 16.00	\$ 2,784
48.0-72.0 hours	4	5	5	4	2	4	2	-	-	2	-	1	29	\$ 24.00	\$ 696
72.0+ hours	1	2	6	6	4	2	1	1	2	1	-	1	27	\$ 32.00	\$ 864
TOTAL	34,722	31,311	37,693	35,089	38,357	32,697	40,056	28,996	28,455	33,224	36,053	33,849	410,502		\$ 278,524

Table 6-14

For FY2016, DESMAN did not recommend any changes to operations or pricing, and assumed that user volumes and revenues would remain flat.

FY2016 Transient Revenue Projections

FY2016											
1Q-2Q (7/1/15-12/31/15)				3Q-4Q (1/1/16-6/30/16)				TOTAL			
0.0-1.0 hours	86,514	\$ -	\$ -	0.0-1.0 hours	80,972	\$ -	\$ -	167,486	\$ -	\$ -	
1.0-2.0 hours	93,724	\$ -	\$ -	1.0-2.0 hours	87,721	\$ -	\$ -	181,445	\$ -	\$ -	
2.0-2.5 hours	9,123	\$ 2.00	\$ 18,246	2.0-2.5 hours	6,766	\$ 2.00	\$ 13,532	15,889	\$ 2.00	\$ 31,778	
2.5-3.0 hours	6,163	\$ 3.00	\$ 18,489	2.5-3.0 hours	4,684	\$ 3.00	\$ 14,052	10,847	\$ 3.00	\$ 32,541	
3.0-3.5 hours	4,048	\$ 4.00	\$ 16,192	3.0-3.5 hours	2,800	\$ 4.00	\$ 11,200	6,848	\$ 4.00	\$ 27,392	
3.5-4.0 hours	5,654	\$ 5.00	\$ 28,270	3.5-4.0 hours	3,006	\$ 5.00	\$ 15,030	8,660	\$ 5.00	\$ 43,300	
4.0-5.0 hours	3,024	\$ 6.00	\$ 18,144	4.0-5.0 hours	2,358	\$ 6.00	\$ 14,148	5,382	\$ 6.00	\$ 32,292	
5.0-6.0 hours	1,481	\$ 7.00	\$ 10,367	5.0-6.0 hours	1,362	\$ 7.00	\$ 9,534	2,843	\$ 7.00	\$ 19,901	
6.0-7.0 hours	1,231	\$ 8.00	\$ 9,848	6.0-7.0 hours	1,255	\$ 8.00	\$ 10,040	2,486	\$ 8.00	\$ 19,888	
7.0-24.0 hours	4,100	\$ 8.00	\$ 32,800	7.0-24.0 hours	4,286	\$ 8.00	\$ 34,288	8,386	\$ 8.00	\$ 67,088	
24.0-48.0 hours	98	\$ 16.00	\$ 1,568	24.0-48.0 hours	76	\$ 16.00	\$ 1,216	174	\$ 16.00	\$ 2,784	
48.0-72.0 hours	22	\$ 24.00	\$ 528	48.0-72.0 hours	7	\$ 24.00	\$ 168	29	\$ 24.00	\$ 696	
72.0+ hours	21	\$ 32.00	\$ 672	72.0+ hours	6	\$ 32.00	\$ 192	27	\$ 32.00	\$ 864	
	215,203		\$ 155,124		195,299		\$ 123,400	410,502		\$ 278,524	

Table 6-15

During the course of this fiscal year, DESMAN has recommended that DPW prepare and issue bid documents to replace the existing Parking Access and Revenue Control Systems (PARCS) equipment with a state-of-the-art package which will support future operational recommendations including automated fee collection via pay-on-foot machines, real-time occupancy monitoring and reporting, online validation and payment systems, and 24/7 operations. DESMAN estimates it will take three months for the DPW to complete the bid and award process and another three months to complete the retrofit. DESMAN

estimates this retrofit will cost roughly \$733,000 which will be financed at 4.0% over a term of five years, with the first payment due on 1/1/2016, the day the new system goes live.

The benefits of the new PARCS System are discussed in the MPG section above and in Section 6.2.4. Over all, DESMAN projections that the new system will allow the City to capture 5% more parkers than the current equipment allows, increasing the number of captured transactions in the first two quarters of FY2017 by almost 10,800 over the same period in FY2016 and generating roughly \$7,800 in new revenues.

As outlined in the proposed plan, DESMAN is recommending a rate change for the garage to be implemented at the start of the third quarter of FY2017 (i.e. January 1, 2017). The primary objective of this rate increase is to support the substantial capital investment planned for the structure in the next few years, including upgrading lighting, elevators, access control systems and general maintenance of the facility. Over the past year of outreach, the Downtown Parking Team has heard from the public that the physical conditions of garages needs to be addressed. Many community members shared that they don't park in city garages because they are not clean and appear to be unsafe. In addition, there is a significant community benefit from the avoided cost of having to build new parking facilities by investment in repair and maintenance to extend the lifespan of existing parking facilities. In keeping with parking industry best practices, DESMAN sought to seek these funds from the individuals who will directly benefit from them (i.e. the end users). Some of these end users will be community members, others will be visitors.

As DESMAN had already introduced fee-for-use parking for parkers staying two hours or less in the Marketplace Garage as part of the FY2017 rate adjustment and the City had adjusted mid-term rates in the same facility in FY2015, DESMAN did not advocate for rate adjustments to stays of less than 8 hours. Instead, DESMAN recommended creation of new rate bands for stays of 8-12 hours and 12-24 hours as modest \$1.00 and \$2.00 increases over the current \$8.00 per day maximum. While this rate is higher than the current structure, it is substantially lower than the rates proposed for the Marketplace Garage in FY2017 for the same stays and likely less than those charged at the Burlington Town Center Garage next door.

FY2017 Transient Revenue Projections

FY2017											
1Q-2Q (7/1/16-12/31/16)				3Q-4Q (1/1/17-6/30/17)				TOTAL			
0.0-1.0 hours	90,840	\$ -	\$ -	0.0-1.0 hours	85,021	\$ -	\$ -	175,861	\$ -	\$ -	
1.0-2.0 hours	98,410	\$ -	\$ -	1.0-2.0 hours	92,107	\$ -	\$ -	190,517	\$ -	\$ -	
2.0-2.5 hours	9,579	\$ 2.00	\$ 19,158	2.0-2.5 hours	7,104	\$ 2.00	\$ 14,208	16,683	\$ 2.00	\$ 33,366	
2.5-3.0 hours	6,471	\$ 3.00	\$ 19,413	2.5-3.0 hours	4,918	\$ 3.00	\$ 14,754	11,389	\$ 3.00	\$ 34,167	
3.0-3.5 hours	4,250	\$ 4.00	\$ 17,000	3.0-3.5 hours	2,940	\$ 4.00	\$ 11,760	7,190	\$ 4.00	\$ 28,760	
3.5-4.0 hours	5,937	\$ 5.00	\$ 29,685	3.5-4.0 hours	3,156	\$ 5.00	\$ 15,780	9,093	\$ 5.00	\$ 45,465	
4.0-5.0 hours	3,175	\$ 6.00	\$ 19,050	4.0-5.0 hours	2,476	\$ 6.00	\$ 14,856	5,651	\$ 6.00	\$ 33,906	
5.0-6.0 hours	1,555	\$ 7.00	\$ 10,885	5.0-6.0 hours	1,430	\$ 7.00	\$ 10,010	2,985	\$ 7.00	\$ 20,895	
6.0-7.0 hours	1,293	\$ 8.00	\$ 10,344	6.0-7.0 hours	1,318	\$ 8.00	\$ 10,544	2,611	\$ 8.00	\$ 20,888	
7.0-8.0 hours	603	\$ 8.00	\$ 4,824	7.0-8.0 hours	630	\$ 8.00	\$ 5,040	1,233	\$ 8.00	\$ 9,864	
8.0-12.0 hours	1,636	\$ 8.00	\$ 13,088	8.0-12.0 hours	1,629	\$ 9.00	\$ 14,661	3,265	\$ 9.00	\$ 27,749	
12.0-24.0 hours	2,066	\$ 8.00	\$ 16,528	12.0-24.0 hours	2,057	\$ 10.00	\$ 20,570	4,123	\$ 10.00	\$ 37,098	
24.0-48.0 hours	103	\$ 16.00	\$ 1,648	24.0-48.0 hours	76	\$ 20.00	\$ 1,520	179	\$ 20.00	\$ 3,168	
48.0-72.0 hours	23	\$ 24.00	\$ 552	48.0-72.0 hours	7	\$ 30.00	\$ 210	30	\$ 30.00	\$ 762	
72.0+ hours	22	\$ 32.00	\$ 704	72.0+ hours	6	\$ 40.00	\$ 240	28	\$ 40.00	\$ 944	
	225,963		\$ 162,879		204,875		\$ 134,153	430,838		\$ 297,032	

Table 6-16

The rate change for parkers staying over 8 hours will result in a 5% loss in historical user volumes for the latter half of FY2017, but this loss will be offset by the 5% additional capture in those rate bands allowed by the new PARCS system. The additional 5% gain for the other rate bands, combined with the rate change, will capture an additional 9,500 parkers when compared to the same period in FY2016 and over \$10,000 in new revenues. Overall, FY2017 should capture over 20,000 new parkers and over \$18,000 in new transient revenues when compared to FY2016.

These impacts carry over into FY2018, when user volume in the first half of the year is projected to drop by almost 200 parkers when compared to the same two quarters in FY2017, but revenues will increase by over \$4,500. While revenues and user volumes remaining stable in the second half of the year as compared to the same period in FY2017, FY2018 is still projected to generate over \$300,000 as shown in Table 17.

FY2018 Transient Revenue Projections

FY2018											
1Q-2Q (7/1/17-12/31/17)				3Q-4Q (1/1/18-6/30/18)				TOTAL			
0.0-1.0 hours	90,840	\$ -	\$ -	0.0-1.0 hours	85,021	\$ -	\$ -	175,861	\$ -	\$ -	
1.0-2.0 hours	98,410	\$ -	\$ -	1.0-2.0 hours	92,107	\$ -	\$ -	190,517	\$ -	\$ -	
2.0-2.5 hours	9,579	\$ 2.00	\$ 19,158	2.0-2.5 hours	7,104	\$ 2.00	\$ 14,208	16,683	\$ 2.00	\$ 33,366	
2.5-3.0 hours	6,471	\$ 3.00	\$ 19,413	2.5-3.0 hours	4,918	\$ 3.00	\$ 14,754	11,389	\$ 3.00	\$ 34,167	
3.0-3.5 hours	4,250	\$ 4.00	\$ 17,000	3.0-3.5 hours	2,940	\$ 4.00	\$ 11,760	7,190	\$ 4.00	\$ 28,760	
3.5-4.0 hours	5,937	\$ 5.00	\$ 29,685	3.5-4.0 hours	3,156	\$ 5.00	\$ 15,780	9,093	\$ 5.00	\$ 45,465	
4.0-5.0 hours	3,175	\$ 6.00	\$ 19,050	4.0-5.0 hours	2,476	\$ 6.00	\$ 14,856	5,651	\$ 6.00	\$ 33,906	
5.0-6.0 hours	1,555	\$ 7.00	\$ 10,885	5.0-6.0 hours	1,430	\$ 7.00	\$ 10,010	2,985	\$ 7.00	\$ 20,895	
6.0-7.0 hours	1,293	\$ 8.00	\$ 10,344	6.0-7.0 hours	1,318	\$ 8.00	\$ 10,544	2,611	\$ 8.00	\$ 20,888	
7.0-8.0 hours	603	\$ 8.00	\$ 4,824	7.0-8.0 hours	630	\$ 8.00	\$ 5,040	1,233	\$ 8.00	\$ 9,864	
8.0-12.0 hours	1,554	\$ 9.00	\$ 13,986	8.0-12.0 hours	1,629	\$ 9.00	\$ 14,661	3,183	\$ 9.00	\$ 28,647	
12.0-24.0 hours	1,963	\$ 10.00	\$ 19,630	12.0-24.0 hours	2,057	\$ 10.00	\$ 20,570	4,020	\$ 10.00	\$ 40,200	
24.0-48.0 hours	98	\$ 20.00	\$ 1,960	24.0-48.0 hours	76	\$ 20.00	\$ 1,520	174	\$ 20.00	\$ 3,480	
48.0-72.0 hours	22	\$ 30.00	\$ 660	48.0-72.0 hours	7	\$ 30.00	\$ 210	29	\$ 30.00	\$ 870	
72.0+ hours	21	\$ 40.00	\$ 840	72.0+ hours	6	\$ 40.00	\$ 240	27	\$ 40.00	\$ 1,080	
	225,771		\$ 167,435		204,875		\$ 134,153	430,646		\$ 301,588	

Table 6-17

For FY2019, DESMAN assumed that the City would move to collecting for parking in the garage on a 24/7 basis, increasing total user volumes and revenue by roughly 10% by moving to charge on Sunday, even with a loss of roughly 4.25% of traditional usage due to the change in policy. The change will net roughly 43,000 new parkers on the year and roughly \$332,000, an increase of \$30,000 over FY2018.

FY2019 Transient Revenue Projections

FY2019											
1Q-2Q (7/1/18-12/31/18)				3Q-4Q (1/1/19-6/30/19)				TOTAL			
0.0-1.0 hours	99,924	\$ -	\$ -	0.0-1.0 hours	93,523	\$ -	\$ -	193,447	\$ -	\$ -	
1.0-2.0 hours	108,251	\$ -	\$ -	1.0-2.0 hours	101,318	\$ -	\$ -	209,569	\$ -	\$ -	
2.0-2.5 hours	10,537	\$ 2.00	\$ 21,074	2.0-2.5 hours	7,814	\$ 2.00	\$ 15,628	18,351	\$ 2.00	\$ 36,702	
2.5-3.0 hours	7,118	\$ 3.00	\$ 21,354	2.5-3.0 hours	5,410	\$ 3.00	\$ 16,230	12,528	\$ 3.00	\$ 37,584	
3.0-3.5 hours	4,675	\$ 4.00	\$ 18,700	3.0-3.5 hours	3,234	\$ 4.00	\$ 12,936	7,909	\$ 4.00	\$ 31,636	
3.5-4.0 hours	6,531	\$ 5.00	\$ 32,655	3.5-4.0 hours	3,472	\$ 5.00	\$ 17,360	10,003	\$ 5.00	\$ 50,015	
4.0-5.0 hours	3,493	\$ 6.00	\$ 20,958	4.0-5.0 hours	2,724	\$ 6.00	\$ 16,344	6,217	\$ 6.00	\$ 37,302	
5.0-6.0 hours	1,711	\$ 7.00	\$ 11,977	5.0-6.0 hours	1,573	\$ 7.00	\$ 11,011	3,284	\$ 7.00	\$ 22,988	
6.0-7.0 hours	1,422	\$ 8.00	\$ 11,376	6.0-7.0 hours	1,450	\$ 8.00	\$ 11,600	2,872	\$ 8.00	\$ 22,976	
7.0-8.0 hours	663	\$ 8.00	\$ 5,304	7.0-8.0 hours	693	\$ 8.00	\$ 5,544	1,356	\$ 8.00	\$ 10,848	
8.0-12.0 hours	1,709	\$ 9.00	\$ 15,381	8.0-12.0 hours	1,792	\$ 9.00	\$ 16,128	3,501	\$ 9.00	\$ 31,509	
12.0-24.0 hours	2,159	\$ 10.00	\$ 21,590	12.0-24.0 hours	2,263	\$ 10.00	\$ 22,630	4,422	\$ 10.00	\$ 44,220	
24.0-48.0 hours	108	\$ 20.00	\$ 2,160	24.0-48.0 hours	84	\$ 20.00	\$ 1,680	192	\$ 20.00	\$ 3,840	
48.0-72.0 hours	24	\$ 30.00	\$ 720	48.0-72.0 hours	8	\$ 30.00	\$ 240	32	\$ 30.00	\$ 960	
72.0+ hours	23	\$ 40.00	\$ 920	72.0+ hours	7	\$ 40.00	\$ 280	30	\$ 40.00	\$ 1,200	
	248,348		\$ 184,169		225,365		\$ 147,611	473,713		\$ 331,780	

Table 6-18

For FY2020, DESMAN assumed no change in policy in the first half of the year. In the latter half of the year, DESMAN assumed several major rate changes including the following:

- Introduction of a rate of \$0.50 for up to one hour of parking in the garages and \$1.00 for up to two hours. Implementation of this structure assumes elimination of City Charter language mandating a free two-hour parking program in some public facility.
- Adjustment of the rate for stays of 7-8 hours from \$8.00 to \$9.00.
- Adjustment of the rate for stays of 8-12 hours from \$9.00 to \$10.00.
- Adjustment of the rate for stays of 12-24 hours from \$10.00 to \$12.00.

FY2020 Transient Revenue Projections

FY2020											
1Q-2Q (7/1/19-12/31/19)				3Q-4Q (1/1/20-6/30/20)				TOTAL			
0.0-1.0 hours	99,924	\$ -	\$ -	0.0-1.0 hours	60,790	\$ 0.50	\$ 30,395	160,714	\$ 0.50	\$ 30,395	
1.0-2.0 hours	108,251	\$ -	\$ -	1.0-2.0 hours	65,857	\$ 1.00	\$ 65,857	174,108	\$ 1.00	\$ 65,857	
2.0-2.5 hours	10,537	\$ 2.00	\$ 21,074	2.0-2.5 hours	7,814	\$ 2.00	\$ 15,628	18,351	\$ 2.00	\$ 36,702	
2.5-3.0 hours	7,118	\$ 3.00	\$ 21,354	2.5-3.0 hours	5,410	\$ 3.00	\$ 16,230	12,528	\$ 3.00	\$ 37,584	
3.0-3.5 hours	4,675	\$ 4.00	\$ 18,700	3.0-3.5 hours	3,234	\$ 4.00	\$ 12,936	7,909	\$ 4.00	\$ 31,636	
3.5-4.0 hours	6,531	\$ 5.00	\$ 32,655	3.5-4.0 hours	3,472	\$ 5.00	\$ 17,360	10,003	\$ 5.00	\$ 50,015	
4.0-5.0 hours	3,493	\$ 6.00	\$ 20,958	4.0-5.0 hours	2,724	\$ 6.00	\$ 16,344	6,217	\$ 6.00	\$ 37,302	
5.0-6.0 hours	1,711	\$ 7.00	\$ 11,977	5.0-6.0 hours	1,573	\$ 7.00	\$ 11,011	3,284	\$ 7.00	\$ 22,988	
6.0-7.0 hours	1,422	\$ 8.00	\$ 11,376	6.0-7.0 hours	1,450	\$ 8.00	\$ 11,600	2,872	\$ 8.00	\$ 22,976	
7.0-8.0 hours	663	\$ 8.00	\$ 5,304	7.0-8.0 hours	658	\$ 9.00	\$ 5,922	1,321	\$ 9.00	\$ 11,226	
8.0-12.0 hours	1,709	\$ 9.00	\$ 15,381	8.0-12.0 hours	1,702	\$ 10.00	\$ 17,020	3,411	\$ 10.00	\$ 32,401	
12.0-24.0 hours	2,159	\$ 10.00	\$ 21,590	12.0-24.0 hours	2,150	\$ 12.00	\$ 25,800	4,309	\$ 12.00	\$ 47,390	
24.0-48.0 hours	108	\$ 20.00	\$ 2,160	24.0-48.0 hours	80	\$ 24.00	\$ 1,920	188	\$ 24.00	\$ 4,080	
48.0-72.0 hours	24	\$ 30.00	\$ 720	48.0-72.0 hours	8	\$ 36.00	\$ 288	32	\$ 36.00	\$ 1,008	
72.0+ hours	23	\$ 40.00	\$ 920	72.0+ hours	7	\$ 48.00	\$ 336	30	\$ 48.00	\$ 1,256	
	248,348		\$ 184,169		156,929		\$ 248,647	405,277		\$ 432,816	

Table 6-19

Assuming the standard 35% loss rate for introduction of a fee into a formerly free rate band and 5% for upper end rate adjustments, DESMAN estimates these changes will result in a loss in roughly 68,000 annual transient transactions, but a revenue increase of over \$101,000 for just the last half of FY2020.

Lakeview and College Street Garage Transient Revenue Projections - 2016 to 2020

	2016	2017	2018	2019	2020
Gross Revenue	\$278,524	\$297,032	\$301,588	\$331,780	\$432,816
Notes:					
2016	New PARCS System Installed 01/01/16				
2017	Rate increase for long-term parkers				
2018	No Change				
2019	24/7 Garage Operation				
2020	Rate increase of \$0.50/hr. 01/01/19				

6.3.2. Hotel Guest Parking in City Garages - Financial Impact

The City currently operates two programs to accommodate hotel guests in the two garages that will be potentially impacted by future proposed rate adjustments. Currently, the Hilton pays a flat rate of \$11,432 per month to allow their guests to park in the College Street Garage. According to DPW records, the Hilton parked 31,737 vehicles in the garage between June 2014 and May 2015, at a value of \$4.32 per vehicle.

The Marriott and the Hotel Vermont pay the City half the posted daily maximum rate (\$8.00) per vehicle to park their guests in the Lakeview Garage, or \$4.00 per vehicle. For the period of June 2014 to May 2015, the Marriott parked 23,724 vehicles with a total value of \$94,896 and the Hotel Vermont parked 19,566 vehicles with a total value of \$78,264.

For FY2016, DESMAN assumed no changes in terms for any of these agreements, with the Hilton generating \$137,184 in annual lease revenues and the Marriott and the Hotel Vermont generating a collective \$173,160 in annual hotel coupon sales.

FY2016-2020 Hotel Coupon Program Calculations

Year	Hilton	Hotel Vermont	Marriott	Total
2016	\$137,184	\$78,264	\$94,896	\$310,344
2017	\$137,184	\$92,453	\$112,095	\$341,732
2018	\$137,184	\$102,725	\$124,550	\$364,459
2019	\$166,620	\$102,725	\$124,550	\$393,895
2020	\$183,282	\$112,998	\$137,005	\$433,285

FY2016				
Period	Hilton	Hotel VT	Marriott	Total
Jun-14	2,854	1,549	2,339	6,742
Jul-14	2,953	1,936	2,473	7,362
Aug-14	3,435	2,264	2,526	8,225
Sep-14	2,834	1,821	2,105	6,760
Oct-14	3,174	2,094	2,287	7,555
Nov-14	2,306	1,340	1,777	5,423
Dec-14	2,188	1,497	1,561	5,246
Jan-15	1,703	1,262	1,373	4,338
Feb-15	1,869	1,315	1,451	4,635
Mar-15	2,452	1,414	1,782	5,648
Apr-15	3,044	1,678	2,186	6,908
May-15	2,925	1,396	1,864	6,185
TOTAL	31,737	19,566	23,724	75,027
Value	\$ -	\$ 4.00	\$ 4.00	\$ 4.00
Annual Revenues	\$ -	\$ 78,264	\$ 94,896	\$ 173,160

FY2017				
Period	Hilton	Hotel VT	Marriott	Total
Jun-14	2,997	1,626	2,456	7,079
Jul-14	3,101	2,033	2,597	7,731
Aug-14	3,607	2,377	2,652	8,636
Sep-14	2,976	1,912	2,210	7,098
Oct-14	3,333	2,199	2,401	7,933
Nov-14	2,421	1,407	1,866	5,694
Dec-14	2,297	1,572	1,639	5,508
Jan-15	1,788	1,325	1,442	4,555
Feb-15	1,962	1,381	1,524	4,867
Mar-15	2,575	1,485	1,871	5,931
Apr-15	3,196	1,762	2,295	7,253
May-15	3,071	1,466	1,957	6,494
TOTAL	33,324	20,545	24,910	78,779
Value	\$ -	\$ 4.50	\$ 4.50	\$ 4.50
Annual Revenues	\$ -	\$ 92,453	\$ 112,095	\$ 204,548

FY2018				
Period	Hilton	Hotel VT	Marriott	Total
Jun-14	2,997	1,626	2,456	7,079
Jul-14	3,101	2,033	2,597	7,731
Aug-14	3,607	2,377	2,652	8,636
Sep-14	2,976	1,912	2,210	7,098
Oct-14	3,333	2,199	2,401	7,933
Nov-14	2,421	1,407	1,866	5,694
Dec-14	2,297	1,572	1,639	5,508
Jan-15	1,788	1,325	1,442	4,555
Feb-15	1,962	1,381	1,524	4,867
Mar-15	2,575	1,485	1,871	5,931
Apr-15	3,196	1,762	2,295	7,253
May-15	3,071	1,466	1,957	6,494
TOTAL	33,324	20,545	24,910	78,779
Value	\$ -	\$ 5.00	\$ 5.00	\$ 5.00
Annual Revenues	\$ -	\$ 102,725	\$ 124,550	\$ 227,275

FY2019				
Period	Hilton	Hotel VT	Marriott	Total
Jun-14	2,997	1,626	2,456	7,079
Jul-14	3,101	2,033	2,597	7,731
Aug-14	3,607	2,377	2,652	8,636
Sep-14	2,976	1,912	2,210	7,098
Oct-14	3,333	2,199	2,401	7,933
Nov-14	2,421	1,407	1,866	5,694
Dec-14	2,297	1,572	1,639	5,508
Jan-15	1,788	1,325	1,442	4,555
Feb-15	1,962	1,381	1,524	4,867
Mar-15	2,575	1,485	1,871	5,931
Apr-15	3,196	1,762	2,295	7,253
May-15	3,071	1,466	1,957	6,494
TOTAL	33,324	20,545	24,910	78,779
Value	\$ 5.00	\$ 5.00	\$ 5.00	\$ 5.00
Annual Revenues	\$ 166,620	\$ 102,725	\$ 124,550	\$ 393,895

FY2020				
Period	Hilton	Hotel VT	Marriott	Total
Jun-14	2,997	1,626	2,456	7,079
Jul-14	3,101	2,033	2,597	7,731
Aug-14	3,607	2,377	2,652	8,636
Sep-14	2,976	1,912	2,210	7,098
Oct-14	3,333	2,199	2,401	7,933
Nov-14	2,421	1,407	1,866	5,694
Dec-14	2,297	1,572	1,639	5,508
Jan-15	1,788	1,325	1,442	4,555
Feb-15	1,962	1,381	1,524	4,867
Mar-15	2,575	1,485	1,871	5,931
Apr-15	3,196	1,762	2,295	7,253
May-15	3,071	1,466	1,957	6,494
TOTAL	33,324	20,545	24,910	78,779
Value	\$ 5.50	\$ 5.50	\$ 5.50	\$ 5.50
Annual Revenues	\$ 183,282	\$ 112,998	\$ 137,005	\$ 433,285

Table 6-20

With the implementation of the proposed rate change, the maximum daily rate would increase from \$8.00 to \$10.00, raising the coupon rate from \$4.00 to \$5.00 for the Marriott and Hotel Vermont. DESMAN assumed that user volume rates would remain stable, as hotel guests are not particularly price sensitive and are not bearing directly the cost of any rate change unless the

hotel elects to pass it through. In FY2017, this would mean the average value of a coupon per vehicle would be \$4.50, as the rate change would hit mid-year, and \$5.00 in FY2018. This would increase annual coupons sales by roughly \$31,000 over the prior year in FY2017 and \$22,000 in FY2018.

Once the coupon rate reaches \$5.00, DESMAN would recommend the City terminate the flat lease agreement with the Hilton and move them onto the coupon program as well. Even with the loss of the annual lease income (\$137,184) the City will still increase net revenues by roughly \$29,000 through this change.

If all three hotels are on the coupon program in FY2020, the mid-year rate change will move the maximum daily rate from \$10.00 to \$12.00 and adjust the coupon rate to \$6.00 on a stabilized year. Even with the mid-year change, hotel coupon revenues will still improve by over \$39,000 over the prior year.

6.3.3. Garage Lease Agreements - Financial Impact

According to DPW records, there are currently 974 pass holders parking in the Lakeview and College Street Garages. These include the following:

- 12 'no charge' passes issued to Parking Department personnel;
- **RATE 1:** 111 discount passes (@\$20.00/month) issued to City employees and Burlington Telecom personnel;
- **RATE 2:** 33 passes (@\$66.00/month) issued to Burlington Free Press staff;
- **RATE 3:** 242 passes (@\$80.00/month) issued to corporate customers;
- **RATE 4:** 160 passes (@\$80.00/month) issued to private individuals;

RATE 5: 416 passes (@\$96.00/month) issued corporate agencies.

Revenue from these leases, along the with Hilton Hotel lease, accounts for roughly \$1.05M annually and is expected to remain stable through the next fiscal year.

As outlined in the proposed plan, DESMAN proposes introducing a new pass as part of the proposed FY2017 rate changes which would target part-time, lower-wage earners who want the convenience of a pass, but don't need access 5-6 days a week or the associated costs. This program would let an employee purchase a pre-loaded pass card that would allow them to park for up to 12 hours in the College Street or Lakeview Garages at a fixed flat rate of \$5.00 per use (50% off the maximum daily rate). Cards could be loaded and reloaded in any amount specified by the purchaser, but purchasers staying over their 12-hour limit would be subject to standard fees, which would be automatically deducted from the card when they used it to exit the facility. For a full-time worker, this program would be less appealing than purchasing a monthly lease at \$80.00 - \$96.00 per month, as 20 days per month would equate to \$100.00 in total charges. But for an individual working 16 days or less per month, this program would be a superior option.

DESMAN estimates that there will be roughly 420 current long-term transients who will stop parking in the Marketplace, College Street and Lakeview due to the proposed rate increases impacting



stays for seven hours or longer. If the City can attract just 10% of these users to this program and they purchase an average of \$50.00 per month (10 days) over a year, this program would capture 42 participants in FY2017 and 91 in FY2018, generating \$12,600 in new revenues in just half a year in FY2017. In addition, DESMAN also anticipates a 5% increase in the number of individual lease-holders in FY2017 as some long-term transients convert to pass holders due to the price change.

FY2016-2020 Monthly Lease Revenue Projections

Type	FY2016			FY2017			FY2018		
	Users	Rate	Total	Users	Rate	Total	Users	Rate	Total
No Charge	12	\$ -	\$ -	12	\$ -	\$ -	12	\$ -	\$ -
Rate 1	111	\$ 20.00	\$ 26,640	111	\$ 20.00	\$ 26,640	111	\$ 20.00	\$ 26,640
Rate 2	33	\$ 66.00	\$ 26,136	33	\$ 66.00	\$ 26,136	33	\$ 66.00	\$ 26,136
Rate 3	242	\$ 80.00	\$ 232,320	242	\$ 80.00	\$ 232,320	242	\$ 80.00	\$ 232,320
Rate 4	160	\$ 80.00	\$ 153,600	168	\$ 80.00	\$ 161,280	168	\$ 80.00	\$ 161,280
Rate 5	416	\$ 96.00	\$ 479,232	416	\$ 96.00	\$ 479,232	416	\$ 96.00	\$ 479,232
Hilton Hotel	0	\$ -	\$ 137,184	0	\$ -	\$ 137,184	0	\$ -	\$ 137,184
Special Pass	0	\$ -	\$ -	42	\$ 50.00	\$ 12,600	91	\$ 50.00	\$ 54,600
TOTAL	974		\$ 1,055,112	1,024		\$ 1,075,392	1,073		\$ 1,117,392
<i>Change (Year to Year)</i>						<i>\$ 20,280</i>			<i>\$ 42,000</i>

Type	FY2019			FY2020		
	Users	Rate	Total	Users	Rate	Total
No Charge	12	\$ -	\$ -	12	\$ -	\$ -
Rate 1	111	\$ 30.00	\$ 39,960	111	\$ 30.00	\$ 39,960
Rate 2	33	\$ 66.00	\$ 26,136	33	\$ 70.00	\$ 27,720
Rate 3	242	\$ 80.00	\$ 232,320	242	\$ 85.00	\$ 246,840
Rate 4	168	\$ 85.00	\$ 171,360	168	\$ 85.00	\$ 171,360
Rate 5	416	\$ 96.00	\$ 479,232	416	\$ 100.00	\$ 499,200
Hilton Hotel	0	\$ -	\$ -	0	\$ -	\$ -
Special Pass	91	\$ 50.00	\$ 54,600	91	\$ 50.00	\$ 54,600
TOTAL			\$ 1,003,608			\$ 1,039,680
<i>Change (Year to Year)</i>			<i>\$ (113,784)</i>			<i>\$ 36,072</i>

Table 6-21

In FY2018, the new pass program will generate a total of \$54,600 across a stabilized year, increasing revenues by \$42,000 over the prior year.

Converting the Hilton over the coupon program will cause a one-time loss of \$137,184 in lease revenues, which can be partially offset by strategic rate adjustments for passes issued to City and Burlington Telecom employees (+\$10.00) and individual pass holders (+\$5.00).

In FY2020, the rates associated with the Burlington Free Press (+\$4.00), corporate customers (+\$5.00) and corporate agencies (\$4.00) can all be adjusted in tandem or prior to the proposed 1/1/2020 transient rate increases, generating an additional \$36,000 in revenues.

Garage Operations - Financial Impact

As with the MPG, the three factors will impact operating expenses associated with the Lakeview and College Street Garage over the next five fiscal years including institution of performance



standards, significant reinvestment in the garage's condition, and installation of the recommended PARCS equipment. Between FY2016 and FY2020, DESMAN believes this will allow the City to reduce current staffing levels by a net 4,784 total annual labor hours and just under \$71,000 in expenses, even with cost of living adjustments.

Table 6-22: FY2016-2020 Staffing Estimates

FY2016													
Position	Hours	Days	Annual Hours	Wage Rate	Annual Salary	Overtime	Personal Time	FICA	Unemployment Insurance	Retirement	Worker's Comp Ins.	Private Insurance	GRAND TOTAL
Manager	Variable	Variable	1,144	\$ 26.26	\$ 30,045	\$ 2,554	\$ 2,494	\$ 2,238	\$ 60	\$ 3,789	\$ 451	\$ 3,329	\$ 51,020
Supervisor	4p-12a	Tu-Sa	1,040	\$ 20.64	\$ 21,463	\$ 1,825	\$ 1,782	\$ 1,642	\$ 43	\$ 2,707	\$ 322	\$ 6,666	\$ 36,466
Attendant #1	7a-3p	Tu-Sa	2,080	\$ 15.96	\$ 33,190	\$ 2,821	\$ 2,755	\$ 2,539	\$ 66	\$ 4,385	\$ 498	\$ 10,305	\$ 56,359
Attendant #2	7a-3p	Mo-Fr	2,080	\$ 16.08	\$ 33,454	\$ 2,844	\$ 2,777	\$ 2,559	\$ 67	\$ 4,219	\$ 502	\$ 10,387	\$ 56,809
Attendant #3	12p-8p	Th-Sa	2,080	\$ 12.97	\$ 26,974	\$ 2,293	\$ 2,239	\$ 2,064	\$ 54	\$ 3,401	\$ 405	\$ 8,375	\$ 45,805
Attendant #4	Floater	Floater	1,664	\$ 15.84	\$ 26,354	\$ 2,240	\$ 2,187	\$ 2,016	\$ 53	\$ 3,323	\$ 395	\$ 8,383	\$ 44,751
Attendant #5	Floater	Floater	416	\$ 14.56	\$ 6,053	\$ 515	\$ 503	\$ 464	\$ 12	\$ 764	\$ 91	\$ 1,881	\$ 10,289
Attendant #6	Floater	Floater	832	\$ 16.21	\$ 13,487	\$ 1,146	\$ 1,119	\$ 1,032	\$ 27	\$ 1,701	\$ 202	\$ 4,388	\$ 22,902
Maintenance #1	Unknown	Unknown	2,080	\$ 18.46	\$ 38,391	\$ 3,263	\$ 3,186	\$ 2,937	\$ 77	\$ 4,841	\$ 576	\$ 11,920	\$ 65,191
Maintenance #2	Unknown	Unknown	1,248	\$ 14.94	\$ 18,648	\$ 1,585	\$ 1,548	\$ 1,427	\$ 37	\$ 2,352	\$ 280	\$ 5,790	\$ 31,667
Maintenance #3	Unknown	Unknown	2,080	\$ 18.31	\$ 38,080	\$ 3,237	\$ 3,161	\$ 2,913	\$ 76	\$ 4,802	\$ 571	\$ 11,824	\$ 64,664
Maintenance #4	Unknown	Unknown	1,664	\$ 16.21	\$ 26,974	\$ 2,293	\$ 2,239	\$ 2,064	\$ 54	\$ 3,401	\$ 405	\$ 8,375	\$ 45,805
TOTAL			18,408		\$ 313,125	\$ 26,616	\$ 25,990	\$ 23,955	\$ 606	\$ 39,485	\$ 4,698	\$ 97,223	\$ 591,718
FY2017													
Position	Hours	Days	Annual Hours	Wage Rate	Annual Salary	Overtime	Personal Time	FICA	Unemployment Insurance	Retirement	Worker's Comp Ins.	Private Insurance	GRAND TOTAL
Manager	Variable	Variable	1,144	\$ 27.05	\$ 30,946	\$ 2,630	\$ 2,569	\$ 2,367	\$ 62	\$ 3,902	\$ 464	\$ 3,609	\$ 52,549
Supervisor	4p-12a	Tu-Sa	1,040	\$ 21.26	\$ 22,113	\$ 1,880	\$ 1,835	\$ 1,692	\$ 44	\$ 2,788	\$ 332	\$ 6,866	\$ 37,550
Attendant #1	7a-3p	Mo-Fr	2,080	\$ 16.44	\$ 34,186	\$ 2,906	\$ 2,837	\$ 2,615	\$ 68	\$ 4,311	\$ 513	\$ 10,615	\$ 58,051
Attendant #2	3p-11p	Mo-Fr	2,080	\$ 16.57	\$ 34,498	\$ 2,929	\$ 2,860	\$ 2,636	\$ 69	\$ 4,346	\$ 517	\$ 10,699	\$ 58,513
Attendant #3	10p-6p	Sa	416	\$ 13.36	\$ 5,557	\$ 472	\$ 461	\$ 425	\$ 11	\$ 701	\$ 83	\$ 1,725	\$ 9,435
Attendant #4	6p-12a	Sa	312	\$ 16.32	\$ 5,090	\$ 433	\$ 422	\$ 389	\$ 10	\$ 642	\$ 76	\$ 1,581	\$ 8,643
Attendant #5	Floater	Floater	416	\$ 15.00	\$ 6,241	\$ 530	\$ 518	\$ 477	\$ 12	\$ 787	\$ 94	\$ 1,938	\$ 10,597
Attendant #6	Floater	Floater	416	\$ 16.70	\$ 6,946	\$ 590	\$ 576	\$ 531	\$ 14	\$ 876	\$ 104	\$ 2,157	\$ 11,794
Maintenance #1	Mo-Fr	10p-6a	2,080	\$ 19.01	\$ 39,543	\$ 3,361	\$ 3,282	\$ 3,025	\$ 79	\$ 4,986	\$ 593	\$ 12,278	\$ 67,147
Maintenance #2	Sa-Su	10p-6a	832	\$ 15.39	\$ 12,803	\$ 1,088	\$ 1,063	\$ 979	\$ 26	\$ 1,614	\$ 192	\$ 3,975	\$ 21,740
Maintenance #3	Mo-Fr	10p-6a	2,080	\$ 18.86	\$ 39,222	\$ 3,334	\$ 3,255	\$ 3,001	\$ 78	\$ 4,946	\$ 588	\$ 12,179	\$ 66,603
Maintenance #4	Sa-Su	10p-6a	832	\$ 16.70	\$ 13,891	\$ 1,181	\$ 1,153	\$ 1,063	\$ 28	\$ 1,752	\$ 208	\$ 4,313	\$ 23,939
TOTAL			13,728		\$ 250,996	\$ 21,384	\$ 20,831	\$ 19,200	\$ 501	\$ 31,690	\$ 3,764	\$ 77,935	\$ 426,211
FY2018													
Position	Hours	Days	Annual Hours	Wage Rate	Annual Salary	Overtime	Personal Time	FICA	Unemployment Insurance	Retirement	Worker's Comp Ins.	Private Insurance	GRAND TOTAL
Manager	Variable	Variable	1,144	\$ 27.86	\$ 31,875	\$ 2,703	\$ 2,646	\$ 2,438	\$ 64	\$ 4,019	\$ 478	\$ 3,837	\$ 54,126
Supervisor	4p-12a	Tu-Sa	1,040	\$ 21.90	\$ 22,776	\$ 1,936	\$ 1,890	\$ 1,742	\$ 46	\$ 2,872	\$ 342	\$ 7,072	\$ 38,676
Attendant #1	7a-3p	Mo-Fr	2,080	\$ 16.93	\$ 35,211	\$ 2,993	\$ 2,923	\$ 2,694	\$ 70	\$ 4,440	\$ 528	\$ 10,933	\$ 59,792
Attendant #2	3p-11p	Mo-Fr	2,080	\$ 17.06	\$ 35,491	\$ 3,017	\$ 2,946	\$ 2,715	\$ 71	\$ 4,475	\$ 532	\$ 11,020	\$ 60,267
Attendant #3	10p-6p	Sa	416	\$ 13.76	\$ 5,723	\$ 486	\$ 475	\$ 438	\$ 11	\$ 722	\$ 86	\$ 1,777	\$ 9,788
Attendant #4	6p-12a	Sa	312	\$ 16.80	\$ 5,243	\$ 446	\$ 435	\$ 401	\$ 10	\$ 661	\$ 79	\$ 1,628	\$ 8,903
Attendant #5	Floater	Floater	0	#DIV/0!	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Attendant #6	Floater	Floater	0	#DIV/0!	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Maintenance #1	Mo-Fr	10p-6a	2,080	\$ 19.98	\$ 40,729	\$ 3,462	\$ 3,381	\$ 3,116	\$ 81	\$ 5,136	\$ 611	\$ 12,646	\$ 68,162
Maintenance #2	Sa-Su	10p-6a	832	\$ 15.85	\$ 13,187	\$ 1,121	\$ 1,095	\$ 1,009	\$ 26	\$ 1,663	\$ 198	\$ 4,095	\$ 22,394
Maintenance #3	Mo-Fr	10p-6a	2,080	\$ 19.42	\$ 40,399	\$ 3,434	\$ 3,353	\$ 3,091	\$ 81	\$ 5,094	\$ 606	\$ 12,544	\$ 68,602
Maintenance #4	Sa-Su	10p-6a	832	\$ 17.20	\$ 14,303	\$ 1,216	\$ 1,188	\$ 1,095	\$ 29	\$ 1,804	\$ 215	\$ 4,443	\$ 24,298
TOTAL			12,896		\$ 244,943	\$ 20,820	\$ 20,332	\$ 18,739	\$ 489	\$ 30,886	\$ 3,675	\$ 76,055	\$ 415,939
FY2019													
Position	Hours	Days	Annual Hours	Wage Rate	Annual Salary	Overtime	Personal Time	FICA	Unemployment Insurance	Retirement	Worker's Comp Ins.	Private Insurance	GRAND TOTAL
Manager	Variable	Variable	1,144	\$ 28.70	\$ 32,831	\$ 2,791	\$ 2,725	\$ 2,512	\$ 66	\$ 4,140	\$ 492	\$ 10,194	\$ 55,751
Supervisor	4p-12a	Tu-Sa	1,040	\$ 22.56	\$ 23,460	\$ 1,994	\$ 1,947	\$ 1,795	\$ 47	\$ 2,958	\$ 352	\$ 7,284	\$ 39,837
Attendant #1	7a-3p	Mo-Fr	2,080	\$ 17.44	\$ 36,268	\$ 3,083	\$ 3,010	\$ 2,774	\$ 73	\$ 4,573	\$ 544	\$ 11,261	\$ 61,986
Attendant #2	3p-11p	Mo-Fr	2,080	\$ 17.98	\$ 36,596	\$ 3,107	\$ 3,034	\$ 2,797	\$ 73	\$ 4,610	\$ 548	\$ 11,351	\$ 62,076
Attendant #3	10p-6p	Sa-Su	832	\$ 14.17	\$ 11,790	\$ 1,002	\$ 979	\$ 902	\$ 24	\$ 1,487	\$ 177	\$ 3,661	\$ 20,022
Attendant #4	6p-12a	Sa-Su	624	\$ 17.31	\$ 10,801	\$ 918	\$ 896	\$ 826	\$ 22	\$ 1,362	\$ 162	\$ 3,354	\$ 18,341
Attendant #5	Floater	Floater	0	#DIV/0!	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Attendant #6	Floater	Floater	0	#DIV/0!	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Maintenance #1	Mo-Fr	10p-6a	2,080	\$ 20.17	\$ 41,951	\$ 3,566	\$ 3,482	\$ 3,209	\$ 84	\$ 5,290	\$ 629	\$ 13,026	\$ 71,237
Maintenance #2	Sa-Su	10p-6a	832	\$ 16.33	\$ 13,583	\$ 1,155	\$ 1,127	\$ 1,039	\$ 27	\$ 1,713	\$ 204	\$ 4,217	\$ 23,065
Maintenance #3	Mo-Fr	10p-6a	2,080	\$ 20.01	\$ 41,611	\$ 3,537	\$ 3,454	\$ 3,183	\$ 83	\$ 5,247	\$ 624	\$ 12,920	\$ 70,659
Maintenance #4	Sa-Su	10p-6a	832	\$ 17.71	\$ 14,737	\$ 1,253	\$ 1,223	\$ 1,127	\$ 29	\$ 1,858	\$ 221	\$ 4,576	\$ 25,024
TOTAL			13,624		\$ 263,987	\$ 22,406	\$ 21,877	\$ 20,164	\$ 528	\$ 32,238	\$ 3,958	\$ 81,844	\$ 447,597
FY2020													
Position	Hours	Days	Annual Hours	Wage Rate	Annual Salary	Overtime	Personal Time	FICA	Unemployment Insurance	Retirement	Worker's Comp Ins.	Private Insurance	GRAND TOTAL
Manager	Variable	Variable	1,144	\$ 29.56	\$ 33,816	\$ 2,874	\$ 2,807	\$ 2,587	\$ 68	\$ 4,264	\$ 507	\$ 10,500	\$ 57,423
Supervisor	4p-12a	Tu-Sa	1,040	\$ 23.23	\$ 24,164	\$ 2,054	\$ 2,006	\$ 1,849	\$ 48	\$ 3,047	\$ 362	\$ 7,503	\$ 41,033
Attendant #1	7a-3p	Mo-Fr	2,080	\$ 17.96	\$ 37,356	\$ 3,175	\$ 3,101	\$ 2,858	\$ 75	\$ 4,711	\$ 560	\$ 11,599	\$ 63,435
Attendant #2	3p-11p	Mo-Fr	2,080	\$ 18.10	\$ 37,653	\$ 3,200	\$ 3,125	\$ 2,880	\$ 75	\$ 4,748	\$ 565	\$ 11,631	\$ 63,937
Attendant #3	10p-6p	Sa-Su	832	\$ 14.60	\$ 12,144	\$ 1,032	\$ 1,008	\$ 929	\$ 24	\$ 1,531	\$ 282	\$ 3,771	\$ 20,621
Attendant #4	6p-12a	Sa-Su	624	\$ 17.83	\$ 11,125	\$ 946	\$ 923	\$ 851	\$ 22	\$ 1,403	\$ 167	\$ 3,464	\$ 18,891
Maintenance #1	Mo-Fr	10p-6a	2,080	\$ 20.77	\$ 43,209	\$ 3,673	\$ 3,586	\$ 3,306	\$ 86	\$ 5,449	\$ 648	\$ 13,417	\$ 73,374
Maintenance #2	Sa-Su	10p-6a	832	\$ 16.82	\$ 13,990	\$ 1,189	\$ 1,161	\$ 1,070	\$ 28	\$ 1,764	\$ 210	\$ 4,344	\$ 23,756
Maintenance #3	Mo-Fr	10p-6a	2,080	\$ 20.61	\$ 42,859	\$ 3,643	\$ 3,557	\$ 3,279	\$ 86	\$ 5,405	\$ 643	\$ 13,308	\$ 72,780
Maintenance #4	Sa-Su	10p-6a	832	\$ 18.24	\$ 15,179	\$ 1,290	\$ 1,260	\$ 1,161	\$ 30	\$ 1,914	\$ 228	\$ 4,713	\$ 25,775
TOTAL			19,624		\$ 271,495	\$ 23,076	\$ 22,594	\$ 20,770	\$ 542	\$ 34,236	\$ 4,072	\$ 84,300	\$ 461,025

Table 6-22

LVG&CSG FY2016-2020 Staffing Estimates

Year	Staff Hours	Total Cost
2016	18,048	\$531,718
2017	13,728	\$426,211
2018	12,896	\$415,939
2019	13,624	\$447,597
2020	13,624	\$461,025

6.3.4. Capital Improvements Financial Impact

DPW is scheduled to spend a total of \$4,970,251 in capital improvement projects to restore the LVG and CSG and extend their respective lifecycles an additional 20-25 years. For this analysis, DESMAN assumed the City would spread this investment out over a three-year period, drawing against a line of credit as the outset of each fiscal year to cover the budgeted projections scheduled for that period. DESMAN assumed each loan would be amortized at 4.0% annually over a fifteen year term, with the following issue dates:

7/1/2015	\$2,312,682	Capital Projects spanning FY2015-2016
7/1/2016	\$1,585,419	Capital Projects spanning FY2017
7/1/2017	\$1,072,150	Capital Projects spanning FY2018

This progressive borrowing schedule resulted in ascending debt service obligations that ranged from \$140,726 per year in FY2016 to \$376,618 by FY2020. In addition, the debt service for the new PARCS equipment, initiating at \$81,033 in FY2017, increased to \$162,065 in FY2018 through FY2022.

All fixed line item costs (i.e. supplies, utilities, security, etc.) were assumed to increase at a rate of 3.0% annually from the adopted FY2016 budget figures provided by DPW.

DESMAN prepared a conceptual pro forma statement for the MPG which incorporated all of the conditions and impacts as previously presented with two exceptions:

1. The statement did not include the cost allocation for the Assistant Director of Public Works to the facility. DESMAN included this cost in the Traffic Fund pro forma, but omitted it here as this was perceived as allocation of an indirect overhead expense, not a direct labor cost.
2. The statement includes allocation of \$159,160 in Intergovernmental Revenues, transferred from the DID assessment, for FY2016. It was assumed that these funds would be reallocated to the BBA and/or Go!Burlington at the outset of FY2017 to support their activities under the plan, as the Traffic Fund could bear the loss at that time.

As Table 23 shows, the facility can cover its own operating expense each year, but does not generate adequate net operating income to offset debt service obligations from FY2017 through

FY2019. It is not until FY2020 that the combination of rate increases, rising patronage and reduced labor costs allow the facility to generate positive net cash flow even after debt service.

FY2016-2020 Lakeview/College Street Garage Pro Forma

	FY2016	FY2017	FY2018	FY2109	FY2020
REVENUES					
Transients	278,524	297,032	301,588	331,780	432,816
Monthlies	1,055,112	1,075,392	1,117,392	1,003,608	1,039,680
Intergovernmental	159,160	-	-	-	-
Coupon Sales	173,160	204,548	227,275	393,895	433,285
Subtotal	\$ 1,665,956	\$ 1,576,972	\$ 1,646,255	\$ 1,729,283	\$ 1,905,781
EXPENSES					
Salaries & Wages	313,125	250,996	244,943	263,587	271,495
Overtime	26,616	21,334	20,820	22,406	23,076
Personal Time	25,990	20,831	20,332	21,877	22,534
FICA	23,955	19,200	18,739	20,164	20,770
Unemployment Insurance	626	501	489	33,238	542
Retirement	39,485	31,650	30,886	33,238	34,236
Worker's Compensation	4,698	3,764	3,675	3,953	4,072
Private Insurance	97,223	77,935	76,055	81,844	84,300
Capital Outlay	7,500	-	-	-	-
Supplies	34,000	35,020	36,071	37,153	38,267
Uniforms	4,500	4,635	4,774	4,917	5,065
Repair & Maintenance	56,000	57,680	8,034	8,275	8,523
Utilities	121,600	125,248	85,933	88,511	91,166
Security	68,000	70,040	72,141	74,305	76,535
Professional Services	40,000	41,200	42,436	43,709	45,020
Maintenance Contracts	15,000	15,450	15,914	16,391	16,888
Property Repairs	144,080	199,640	285,200	293,756	302,569
Travel & Training	8,000	8,240	8,487	8,742	9,004
Fees for Services (Street)	30,000	30,900	31,827	32,782	33,765
Fee for Services (CEDO)	20,000	20,600	21,218	21,855	22,510
Insurance	22,577	23,254	23,952	24,670	25,411
Bank Fees	20,000	20,600	21,218	21,855	22,510
Interfund Transfers	131,338	135,278	139,336	143,517	147,822
Subtotal	\$ 1,254,313	\$ 1,213,996	\$ 1,212,480	\$ 1,300,744	\$ 1,306,075
NET OPERATING INCOME	\$ 411,643	\$ 362,975	\$ 433,775	\$ 428,539	\$ 599,706
DEBT SERVICE					
Garage Repairs	140,726	281,452	376,618	376,618	376,618
New PARCS Equipment	81,033	162,065	162,065	162,065	162,065
Subtotal	\$ 221,759	\$ 443,517	\$ 538,684	\$ 538,684	\$ 538,684
NET CASH FLOW	\$ 189,884	\$ (80,542)	\$ (104,909)	\$ (110,145)	\$ 61,022

Table 6-23

6.4. RIGHT OF WAY MODEL

The Right of Way, as defined by the Burlington DPW, includes On-Street Meter operations and surface lots. The following section addresses both these items in turn.

6.4.1. On-Street Meters

The City currently has four types of meters operating across the downtown area. These are:

- 284 “Smart Meters” installed in the downtown core, priced at \$1.50 per hour to promote turnover, but will no prescribed time limit. These meters have distinctive silver heads and are currently subject to enforcement for 8 AM until 10 PM, Monday through Saturday.
- Short-Term or “yellow” meters, currently priced at \$1.00 per hour with prescribed time limits of 15 to 30 minutes. These are commonly located adjacent to businesses whose customers which require high availability of curbside parking, but short durations of stay, such as take-out restaurants and convenience stores. There are roughly 56 of these meters in place currently across the defined study area, which are subject to enforcement from 8 AM until 6 PM, Monday through Saturday, with the exception of those meters located in the core downtown area.
- Mid-Term or “blue” meters, currently priced at \$1.00 per hour with prescribed time limits of 1 to 3 hours. These are commonly in areas of high demand across the downtown. There are roughly 475 of these meters currently in place on city streets across the defined study area, which are subject to enforcement from 8 AM until 6 PM, Monday through Saturday.
- Long-Term or “brown” meters, currently priced at \$0.40 per hour with prescribed time limits of 10 hours. These are commonly in areas of moderate to low demand across the downtown. There are roughly 53 of these meters currently in place on city streets across the defined study area, which are subject to enforcement from 8 AM until 6 PM, Monday through Saturday.

This system organization represents four distinct ‘tiers’ of parking, defined by time limit and/or parking rate. DESMAN advocates for maintaining this four tier structure, with certain adjustments.

In addition to the metered spaces, according to DESMAN’s inventory across the defined study area there are:

- 20 spaces that are subject to 15- to 30- minute time limits, without meters;
- 4 space that are subject to 1-2 hour time limits, without meters; and -
- 149 spaces with no meters or time restrictions regulating their usage.

As outlined in the Existing Conditions Analysis, curbside parking is at a constant premium across the defined study area, with those areas not subject to meters or defined time limits experiencing the highest consistent utilization. These parking spaces, which are consistently utilized at rates of 90% or higher, are to be incorporated in one of the four tiers as defined in the prior section of this report.

Parking management best practices are to manage demand through pricing such that there is consistently 15% of curbside parking available curbside. These practices advocate for reducing pricing when utilization is low (average utilization of 65% or less) and raising them when it is high (average utilization of 85% or more).

For this initial analysis, DESMAN looked at the average rate of utilization as observed on a typical summer and fall weekday between 10 AM and 8 PM and a typical summer and fall Saturday between 12 PM and 8 PM. Where average rates were at 80% or higher, DESMAN advocated for adjusting the meters to the next highest tier in terms of pricing; where average rates ranged from 70% to

79%, DESMAN considered each space relative to surrounding geography and land uses; where average rates were below 70%, DESMAN looked at converting to a lower tier of pricing. In the case of unmetered spaces being converted, DESMAN generally defaulted to Tier 3 meters unless typical utilization was below 70% on both weekdays and weekends.

On the basis of this methodology, DESMAN proposed the following steps to manage parking for metered on-street spaces through differential pricing as follows:

Short-Term Meters (Tier 1)

DESMAN recommends the following actions to organize this tier:

1. Retain 23 existing short-term 'yellow' meters in their current locations with the current 30-minute maximum length of stay prescription.
2. Convert 24 existing short-term 'yellow' meters in their current locations from their current 15-minute maximum length of stay prescription to 30-minutes.
3. Convert 17 existing short-term 'yellow' time-limited spaces in their current locations to metered spaces and adjust those spaces with a current 15-minute maximum length of stay to 30-minutes.
4. Based on field observations of utilization, convert three (3) short-term 'yellow' meters into mid-term 'blue' smart meters with a maximum length of stay of 3 hours.
5. Based on field observations of utilization, extend the hours of enforcement to 8:00 AM to 10:00 PM, Monday through Sunday.
6. Set a fixed rate of \$2.00 per hour (\$0.50/15 minutes) for all Tier 1 meters.

DESMAN estimates the total cost to implement these proposed changes will be roughly \$10,000. This figure includes costs to adjust rates in existing meters, convert meters from 15- to 30-minute maximums, adjust rates, remove three existing meters, and relocate and reprogram some existing meters to formerly free or time-limited parking spaces. Under this proposal, there would be a total of 64 short-term 'yellow' meters operating in the study area as of July 1, 2016. Extending the hours of operations is estimated to generate an additional \$16,000 in annual revenues, based on current and proposed conditions and rates.

Smart Meters (Tier 2)

DESMAN recommends the following actions to organize this tier:

1. Based on field observations of utilization, retain the current hours of enforcement (8:00 AM to 10:00 PM, Monday through Saturday) and extend enforcement to include Sundays between 12:00 PM and 8:00 PM effective July 1, 2016.
2. Retain the existing pricing policy of \$1.50 per hour with no time limits.

Extending the hours of operations is estimated to generate an additional \$121,464 in annual revenues for calendar year 2016 from the 284 meters, based on current rates and conditions.

Mid-Term Meters (Tier 3)

DESMAN recommends the following actions to organize this tier:

1. Retain 389 existing mid-term 'blue' meters in their current locations, with the current 3-hour maximum length of stay prescription, but convert them to 'smart meter' technology to enhance customer service.
2. Based on field observations of utilization, convert three (3) short-term 'yellow' meters into mid-term 'blue' smart meters with a maximum length of stay of 3 hours.
3. Based on field observations of utilization, convert two (2) long-term 'brown' meters into mid-term 'blue' smart meters with a maximum length of stay of 3 hours.
4. Based on field observations of utilization, convert six (6) time-limited spaces into mid-term 'blue' smart meters with a maximum length of stay of 3 hours.
5. Based on field observations of utilization, convert fifteen (15) currently unrestricted spaces into mid-term 'blue' smart meters with a maximum length of stay of 3 hours.
6. Based on field observations of utilization, convert one-hundred and eight (105) mid-term 'blue' meters into long-term 'brown' meters with a maximum length of stay of 10 hours.
7. Based on field observations of utilization, assign hours of enforcement from 8:00 AM to 6:00 PM, Monday through Saturday.
8. Set a fixed rate of \$1.00 per hour (\$0.25/15 minutes) for all Tier 3 meters.

DESMAN estimates the total cost to implement these proposed changes will be roughly \$316,500. This figure includes costs replace 394 existing coin-operated meters with state-of-the-art 'smart' meters, remove 105 existing meters, and relocate and install 21 new 'smart meters' in formerly free or time-limited parking spaces. Under this proposal, there would be a total of 415 mid-term 'blue' meters operating in the study area as of July 1, 2016.

Extending the hours of operations, installing new parking meters which accept debit/credit cards for payment, and introducing 21 meters to formerly free parking spaces will result in new revenues. However, converting 105 'blue' meters to 'brown' meters will result in a loss of roughly \$132,300 in gross revenues. Therefore, it is estimated that this initiative will generate a loss of approximately \$99,540 in annual revenues in the first year of operation, based on current and proposed rates and conditions.

6.4.1.1. Long-Term Meters (Tier 4)

DESMAN recommends the following actions to organize this tier:

1. Retain 61 existing long-term 'brown' meters in their current locations, with the current 10-hour maximum length of stay prescription.
2. Based on field observations of utilization, convert two (2) long-term 'brown' meters into mid-term 'blue' smart meters with a maximum length of stay of 3 hours.
3. Based on field observations of utilization, convert one-hundred and eight (105) mid-term 'blue' meters into long-term 'brown' meters with a maximum length of stay of 10 hours.

4. Based on field observations of utilization, convert seven (7) time-limited spaces into long-term 'brown' meters with a maximum length of stay of 10 hours.
5. Based on field observations of utilization, convert one hundred and thirty four (134) currently unrestricted spaces into long-term 'brown' meters with a maximum length of stay of 10 hours.
6. Based on field observations of utilization, assign hours of enforcement from 8:00 AM to 6:00 PM, Monday through Saturday.
7. Set a fixed rate of \$0.50 per hour for all Tier 4 meters.

DESMAN estimates the total cost to implement these proposed changes will be roughly \$61,200. This figure includes costs to adjust rates in 61 existing meters, remove 2 existing meters, reprogram 105 existing 'blue' meters to 'brown' meters, and relocate and reprogram 134 existing meters to formerly free or time-limited parking spaces. Under this proposal, there would be a total of 307 long-term 'brown' meters operating in the study area as of July 1, 2016.

Installing 134 new parking meters to formerly free parking spaces and converting 105 'blue' meters will result in an estimated \$251,800 in new gross revenues, based on current and proposed rates and conditions.

As shown in the table on the following page, DESMAN estimates these changes will increase annual revenues from on-street metering from roughly \$1.84M annually in FY2016 to approximately \$2.09M in FY2017, an increase of roughly \$247,000 which can be used to offset the improvements to the on-street parking system as well as other proposed improvements to off-street assets.

Changes in FY2018 would include reducing the number of Tier 1 short-term meters (pending market conditions), increasing the number of core Tier 2 meters, and adjusting the number of mid-term Tier 3 meters and long-term Tier 4 meters to reflect market conditions as dictated by scheduled field observations and data collection. These changes would incur another \$80,250 in capital costs, but generate another \$160,716 in new revenues.

After FY2018, DESMAN assumed that the number of meters in each tier would remain relatively stable, pending ongoing study of the market, but that days and hours of operation and rates may be subject to periodic adjustment, depending on occupancy rates in the area and what was happening with pricing in off-street facilities.

In FY2019, DESMAN recommended expanding operations of Tier 3 and Tier 4 meters to include Sundays, which was projected to generate an additional \$22,000 in revenues.

In FY2020, DESMAN anticipates the adjustment of rates for Tier 2 and Tier 4 meters, generating an additional \$139,000 in revenues.

Table 24 illustrates DESMAN assumptions and analysis.

FY2016-2020 On-Street Meter Program Analysis

FY2016								
	Tier1	Tier2	Tier3	Tier4	External Short-TermMeters	External Mid-TermMeters	External Short-TermMeters	TOTALS
Number of Meters:	47	284	484	61	9	52	74	
Typical Occupancy:	50%	85%	70%	65%	55%	50%	75%	
Hourly Rate:								
Turns/Day:	4	4	4	2	4	3	2	
Avg. Rate/User:	\$0.25	\$3.00	\$2.00	\$2.00	\$0.25	\$1.50	\$1.60	
Operating Days/Year:	300	300	300	300	300	300	300	
Est. Rev./Year (Existing):	\$7,050.00	\$88,040.00	\$89,920.00	\$47,500.00	\$1,465.00	\$5,100.00	\$58,280.00	\$1,813,455.00

FY2017								
Designation:	Tier1	Tier2	Tier3	Tier4	External Short-TermMeters	External Mid-TermMeters	External Short-TermMeters	TOTALS
Application:	All 15 and 30 minute meters and time limited spaces	"Smart" Meter pilot area	Selected time limited and 3-hour meters spaces	Selected unlimited, time limited 3- and 10-hour meters spaces	15- and 30-minute meters outside the defined study area	3-hour meters outside the defined study area	10-hour meters outside the defined study area	
Impact:	64 spaces	284 spaces	415 spaces	307 spaces	9 spaces	52 spaces	74 spaces	1,215 spaces
Converting to:	Yellow 60-minute meters @ \$2.00/hour (\$0.50/15 minutes)	Pink "Smart" meters @ \$1.50/hour	Blue "Smart" meters @ \$1.00/hour w/ 3-hour minimum	Brown long-term meters @ \$0.50/hour w/ 10-hour minimum	Yellow meters @ \$1.00/hour (\$0.50/30 minutes)	Blue coin-operated meters @ \$1.00/hour w/ 8-hour minimum	Brown long-term meters @ \$0.40/hour w/ 10-hour minimum	
Est. Cost to Convert:	\$10,000.00	\$213,000.00	\$16,500.00	\$61,200.00	n/a	n/a	n/a	\$600,700.00
Equipment:	Existing or converted coin-operated meters	Single-space meters with credit/debit card acceptance	Single-space meters with credit/debit card acceptance	Existing or converted coin-operated meters	Existing coin-operated meters	Existing coin-operated meters	Existing coin-operated meters	
Hours of Enforcement:	8 AM - 10 PM Monday through Sunday	8 AM - 10 AM Mon - Sat, 12 PM - 8 PM Sundays	8 AM - 8 PM Monday through Saturday	8 AM - 6 PM Monday through Saturday	8 AM - 6 PM Monday through Saturday	8 AM - 6 PM Monday through Saturday	8 AM - 6 PM Monday through Saturday	
Typical Occupancy:	50%	80%	70%	65%	55%	50%	75%	
Turns/Day:	4	4	4	2	4	3	2	
Avg. Rate/User:	\$0.50	\$3.00	\$2.00	\$2.50	\$0.25	\$1.50	\$1.60	
Operating Days/Year:	360	360	300	300	300	300	300	
Est. Rev./Year (Proposed):	\$28,040.00	\$881,504.00	\$897,200.00	\$99,325.00	\$1,465.00	\$5,100.00	\$58,280.00	\$2,091,934.00

Est. Revenue Change:	\$15,990.00	\$112,464.00	(\$132,720.00)	\$51,745.00	\$0.00	\$0.00	\$0.00	\$247,475.00
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FY2018								
Designation:	Tier1	Tier2	Tier3	Tier4	External Short-TermMeters	External Mid-TermMeters	External Short-TermMeters	TOTALS
Application:	All 15 and 30 minute meters and time limited spaces	"Smart" Meter pilot area	Selected time limited and 3-hour meters spaces	Selected unlimited, time limited 3- and 10-hour meters spaces	15- and 30-minute meters outside the defined study area	3-hour meters outside the defined study area	10-hour meters outside the defined study area	
Number of Meters:	57	355	387	271	9	52	74	1,215
Converting to:	Yellow 60-minute meters @ \$2.00/hour (\$0.50/15 minutes)	Pink "Smart" meters @ \$1.50/hour	Blue "Smart" meters @ \$1.00/hour w/ 3-hour minimum	Brown long-term meters @ \$0.50/hour w/ 10-hour minimum	Yellow meters @ \$1.00/hour (\$0.50/30 minutes)	Blue coin-operated meters @ \$1.00/hour w/ 8-hour minimum	Brown long-term meters @ \$0.40/hour w/ 10-hour minimum	
Est. Cost to Convert:	\$0.00	\$53,250.00	\$27,000.00	\$0.00	n/a	n/a	n/a	\$80,250.00
Equipment:	Existing or converted coin-operated meters	Single-space meters with credit/debit card acceptance	Single-space meters with credit/debit card acceptance	Existing or converted coin-operated meters	Existing coin-operated meters	Existing coin-operated meters	Existing coin-operated meters	
Hours of Enforcement:	8 AM - 10 PM Monday through Sunday	8 AM - 10 AM Mon - Sat, 12 PM - 8 PM Sundays	8 AM - 8 PM Monday through Saturday	8 AM - 6 PM Monday through Saturday	8 AM - 6 PM Monday through Saturday	8 AM - 6 PM Monday through Saturday	8 AM - 6 PM Monday through Saturday	
Typical Occupancy:	50%	80%	70%	65%	55%	50%	75%	
Turns/Day:	4	4	4	2	4	3	2	
Avg. Rate/User:	\$0.50	\$3.00	\$2.00	\$2.50	\$0.25	\$1.50	\$1.60	
Operating Days/Year:	360	360	300	300	300	300	300	
Est. Rev./Year (Proposed):	\$20,520.00	\$1,226,880.00	\$860,160.00	\$684,225.00	\$1,465.00	\$5,100.00	\$58,280.00	\$2,551,650.00

Est. Revenue Change:	(\$2,520.00)	\$245,375.00	(\$47,040.00)	(\$35,100.00)	\$0.00	\$0.00	\$0.00	\$160,715.00
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Table 6-24

FY2016-2020 On-Street Meter Program Analysis (continued)

FY2019								
Designation:	Tier 1	Tier 2	Tier 3	Tier 4	External Short-Term Meters	External Mid-Term Meters	External Short-Term Meters	TOTALS
Application:	All 15 and 30 minute meters and time limited spaces	*Smart* Meter pilot area	Selected time limited and 3-hour metered spaces	Selected unlimited, time limited, 3- and 10-hour metered spaces	15- and 30-minute meters outside the defined study area	3-hour meters outside the defined study area	10-hour meters outside the defined study area	
Number of Meters	57	355	387	271	9	52	74	1,205
Converting to:	Yellow 30-minute meters @ \$2.00/hour (\$0.50/15 minutes)	Pink *Smart* meters @ \$1.50/hour	Blue *Smart* meters @ \$1.00/hour w 3-hour maximum	Brown long-term meters @ \$0.50/hour w 10-hour maximum	Yellow meters @ \$1.00/hour (\$0.50/30 minutes)	Blue coin-operated meters @ \$1.00/hour w 3-hour maximum	Brown long-term meters @ \$0.40/hour w 10-hour maximum	
Est. Cost to Convert:	\$0.00	\$0.00	\$0.00	\$0.00	n/a	n/a	n/a	\$0.00
Equipment:	Existing or converted coin-op meters	Single-space meters with credit/debit card acceptance	Single-space meters with credit/debit card acceptance	Existing or converted coin-op meters	Existing coin-op meters	Existing coin-op meters	Existing coin-op meters	
Hours of Enforcement:	8AM - 10 PM, Monday through Sunday	8A- 10A Mon - Sat, 12P- 8P Sundays	8AM - 8 PM, Monday through Sunday	8AM - 6 PM, Monday through Sunday	8AM - 6 PM, Monday through Saturday	8AM - 6 PM, Monday through Saturday	8AM - 6 PM, Monday through Saturday	
Typical Occupancy:	50%	80%	60%	55%	55%	50%	75%	
Turns/Day:	4	4	4	2	4	3	2	
Avg. Rate/User:	\$0.50	\$3.00	\$2.00	\$2.50	\$0.25	\$1.50	\$1.60	
Operating Days/Year:	360	360	360	360	300	300	300	
Est. Rev/Year (Proposed):	\$20,520.00	\$1,226,880.00	\$668,736.00	\$268,290.00	\$1,485.00	\$35,100.00	\$53,280.00	\$2,294,291.00
Est. Revenue Change:	\$0.00	\$0.00	\$18,576.00	\$4,065.00	\$0.00	\$0.00	\$0.00	\$22,641.00

FY2020								
Designation:	Tier 1	Tier 2	Tier 3	Tier 4	External Short-Term Meters	External Mid-Term Meters	External Short-Term Meters	TOTALS
Application:	All 15 and 30 minute meters and time limited spaces	*Smart* Meter pilot area	Selected time limited and 3-hour metered spaces	Selected unlimited, time limited, 3- and 10-hour metered spaces	15- and 30-minute meters outside the defined study area	3-hour meters outside the defined study area	10-hour meters outside the defined study area	
Number of Meters	57	355	387	271	9	52	74	1,205
Converting to:	Yellow 30-minute meters @ \$2.00/hour (\$0.50/15 minutes)	Pink *Smart* meters @ \$1.75/hour	Blue *Smart* meters @ \$1.00/hour w 3-hour maximum	Brown long-term meters @ \$0.60/hour w 10-hour maximum	Yellow meters @ \$1.00/hour (\$0.50/30 minutes)	Blue coin-operated meters @ \$1.00/hour w 3-hour maximum	Brown long-term meters @ \$0.40/hour w 10-hour maximum	
Est. Cost to Convert:	\$0.00	\$0.00	\$0.00	\$0.00	n/a	n/a	n/a	\$0.00
Equipment:	Existing or converted coin-op meters	Single-space meters with credit/debit card acceptance	Single-space meters with credit/debit card acceptance	Existing or converted coin-op meters	Existing coin-op meters	Existing coin-op meters	Existing coin-op meters	
Hours of Enforcement:	8AM - 10 PM, Monday through Sunday	8A- 10A Mon - Sat, 12P- 8P Sundays	8AM - 8 PM, Monday through Sunday	8AM - 6 PM, Monday through Sunday	8AM - 6 PM, Monday through Saturday	8AM - 6 PM, Monday through Saturday	8AM - 6 PM, Monday through Saturday	
Typical Occupancy:	50%	75%	60%	50%	55%	50%	75%	
Turns/Day:	4	4	4	2	4	3	2	
Avg. Rate/User:	\$0.50	\$3.50	\$2.00	\$3.00	\$0.25	\$1.50	\$1.60	
Operating Days/Year:	360	360	360	360	300	300	300	
Est. Rev/Year (Proposed):	\$20,520.00	\$1,341,900.00	\$668,736.00	\$292,680.00	\$1,485.00	\$35,100.00	\$53,280.00	\$2,413,701.00
Est. Revenue Change:	\$0.00	\$115,020.00	\$0.00	\$24,390.00	\$0.00	\$0.00	\$0.00	\$139,410.00

6.4.2. Surface Lots

The City has already initiated a pilot to replace the 43 meters in the Main Street lot with two multi-space parking meters. It is DESMAN's understanding that the Browns Court Lot has only been partially active in the current fiscal year due to construction activities and is scheduled to close permanently in short order to make way for new development on the site.

DESMAN advocates for elimination of the 98 remaining single-head meters in the Pearl Street, City Market, and Fletcher Library Lots, to be replaced by two multi-space meters in each facility, operating on a pay-by-plate format. Assuming meters units featuring solar-cells for supplementing internal batteries and wireless modems for processing real time transactions, DESMAN has conservatively

budgeted \$9,000 per unit, for a total cost of \$54,000 across the three lots. For these surface lots, Desman recommends the following rates, time limits, and time of enforcement:

- o Make surface lots spaces time unlimited - parkers can stay as long as they want with payment
- o Price spaces just below cost of nearby on-street meters
 - Main Street and City Market Lots = \$1.25/hr.
 - Pearl Street and Fletcher Library Lot = \$0.75/hr.
- o Match time of enforcement to nearby on-street meters
 - Main Street Lot = Tier 1
 - City Market Lot = Tier 3
 - Pearl Street and Fletcher Library Lots = Tier 4

DESMAN projects that adoption of these recommends will generate an additional ~ \$64,000 annually over FY2016 conditions, as illustrated on the table included on the next page. This additional revenue could be used to offset the improvements to the surface lots as well as other proposed improvements to other on- and off-street assets.

After FY2017, DESMAN assumed that conditions would remain relatively stable, pending ongoing study of the market, but that days and hours of operation and rates may be subject to periodic adjustment, depending on occupancy rates in the area and what was happening with pricing in off-street facilities.

In FY2019, DESMAN recommended expanding operations in the Pearl Street, City Market and Fletcher Library Lots to include Sundays, which was projected to generate an additional \$13,000 in revenues.

In FY2020, DESMAN anticipates the adjustment of rates, generating an additional \$60,000 in revenues.

FY2016-2020 Surface Lot Program Analysis

Year	Program Recommendation	Total Revenue
2016	None	\$232,467
2017	Install Multi-space meters, adjust rates and times per above	\$297,293
2018	None	\$298,517
2019	Sunday Enforcement	\$313,625
2020	Rate Change	\$375,410

Table 6-25

DESMAN did not anticipate any changes in staffing associated with ROW operations, other than customary adjustments for cost-of-living increases. All hours are as outlined in the FY2016 budget.

DESMAN assumed total debt service associated with the on-street meter replacement and off-street kiosk installation of \$734,950, amortized over 5 years at 4.0%, with the first segment (\$654,700) being assessed in FY2016 and the second (\$80,250) assessed in FY2018.

All other revenue and line items shown in ROW pro forma are taken from FY2016 budget documents and adjusted for growth (revenues at 2%) or inflation (expenses at 3%).

The pro forma includes revenue and expense allocations for institution of a pay-by-phone service in mid FY2016. Revenues from this service were anticipated to equal 5% of all other metered revenues.

As Table 26 on the following page shows, the ROW generates more than adequate revenue to offset operating expenses and debt service obligations. This is the source of much of the subsidies that support other programs covered under the Traffic Fund.

FY2016-2020 ROW Pro Forma Projections

	FY2016	FY2017	FY2018	FY2109	FY2020
REVENUES					
On-Street Meters	1,843,455	2,090,984	2,251,650	2,274,291	2,413,701
Main Street Lot	82,560	116,100	116,100	116,100	151,704
Metered Lots	89,907	119,993	119,998	133,853	158,760
PayByCell Revenues	50,398	139,622	174,142	201,989	245,175
Elmwood Lot	60,000	61,200	62,424	63,672	64,946
Meter Hood Fees	90,000	106,220	108,344	110,511	112,722
Fees for Service	3,000	3,060	3,121	3,184	3,247
Interest on Cash Pool	1,200	1,224	1,248	1,273	1,299
Subtotal	\$ 2,220,520	\$ 2,638,352	\$ 2,837,023	\$ 2,904,824	\$ 3,151,554
EXPENSES					
Salaries & Wages	237,399	244,521	251,857	259,412	267,195
Overtime	20,180	20,785	21,407	22,050	22,712
Personal Time	19,708	20,295	20,904	21,531	22,177
FICA	18,161	18,704	19,267	19,845	20,441
Unemployment Insurance	476	489	503	32,711	535
Retirement	29,937	30,835	31,758	32,711	33,692
Worker's Compensation	3,562	3,667	3,777	3,891	4,008
Private Insurance	73,713	75,924	78,201	80,548	82,964
Capital Outlay	115,000	118,450	122,004	125,664	129,434
Supplies	23,500	24,205	24,931	25,679	26,449
Uniforms	4,000	4,120	4,244	4,371	4,502
Other Charges	15,600	16,068	16,550	17,047	17,558
Repair & Maintenance	152,500	157,075	161,787	166,641	171,640
Utilities	14,750	15,193	15,648	16,118	16,601
Professional Services	42,000	43,260	44,558	45,895	47,271
Maintenance Contracts	-	23,860	24,576	25,313	26,072
Property Repairs	-	42,300	43,569	44,876	46,222
Travel & Training	4,500	4,635	4,774	4,917	5,065
Fees for Services (Engineering)	68,460	70,514	72,629	74,808	77,052
Fees for Services (Street)	100,000	103,000	106,090	109,273	112,551
Fees for Services (Police)	145,000	145,045	149,396	153,878	158,494
Rent/Lease Equipment	575	592	610	628	647
Insurance	12,631	13,010	13,400	13,802	14,216
Bank Fees	32,000	32,960	33,949	34,967	36,016
Gateway Fees	77,500	79,825	82,220	84,686	87,227
Software Purchases/Support	9,500	1,545	1,591	1,639	1,688
PayByPhone Licensing	7,520	6,981	8,707	10,097	12,259
Interfund Transfers	169,545	174,631	179,870	185,266	190,824
Subtotal	\$ 1,397,712	\$ 1,492,488	\$ 1,538,777	\$ 1,618,264	\$ 1,635,514
NET OPERATING INCOME	\$ 822,808	\$ 1,145,864	\$ 1,298,246	\$ 1,286,560	\$ 1,516,039
DEBT SERVICE					
New PARCS Equipment	144,688	144,688	162,423	162,423	162,423
Subtotal	\$ 144,688	\$ 144,688	\$ 162,423	\$ 162,423	\$ 162,423
NET CASH FLOW	\$ 678,121	\$ 1,001,176	\$ 1,135,823	\$ 1,124,137	\$ 1,353,616

Table 6-26

6.5. Traffic Fund Pro Forma

The Traffic Fund Pro Forma consolidates the projections outlined in each of the modelling exercises along with all costs associated with the fund in the FY2016 budget.

Revenue calculations include the following assumptions:

1. Airport Parking revenues will increase by 2% annually through FY2020.
2. Transfer of DID assessment funds will cease in FY2017, as those monies are allocated to Go!Burlington to support their activities.
3. Signal Impact Fees will increase by 10% annually through FY2020.

Expense projections were based on the following assumptions:

1. All expenses are projected to increase by 3% annual inflation, unless otherwise noted in prior sections.

As is illustrated in the statement on the following page, the Traffic Fund cannot meet debt service in FY2016 without subsidy, but should be able to support all costs and generate a positive net cash flow from FY2017 to FY2020.

TRAFFIC FUND PRO-FORMA

REVENUES		FY2016	FY2017	FY2018	FY2109	FY2020
19-200-450	Right of Way					
	On-Street Meters	\$1,843,455	\$2,090,934	\$2,251,650	\$2,274,291	\$2,413,701
	Main Street Lot	\$82,560	\$116,100	\$116,100	\$116,100	\$151,704
	Metered Lots	\$89,907	\$119,993	\$119,993	\$133,853	\$158,760
	PayByCell Revenues	\$50,398	\$139,622	\$174,142	\$201,939	\$245,175
	Elmwood Lot	\$60,000	\$61,200	\$62,424	\$63,672	\$64,946
	Meter Hood Fees	\$90,000	\$106,220	\$108,344	\$110,511	\$112,722
	Fees for Service	\$3,000	\$3,060	\$3,121	\$3,184	\$3,247
	Interest on Cash Pool	\$1,200	\$1,224	\$1,248	\$1,273	\$1,299
19-200-451	Marketplace Garage					
	Transients	\$714,270	\$918,929	\$1,091,622	\$1,200,784	\$1,258,311
	Monthlies	\$55,296	\$55,608	\$73,200	\$94,800	\$113,760
	Intergovernmental	\$146,840	-	\$0	\$0	\$0
	Validations	\$0	\$28,567	\$59,461	\$65,407	\$77,831
19-200-452	Airport Parking					
	Interdepartmental Transfer	\$674,225	\$687,710	\$701,464	\$715,493	\$729,803
19-200-453	School Crossing Guards					
	Fees for Services	\$0	\$0	\$0	\$0	\$0
19-200-454	Signals					
	Insurance Reimbursements	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000
	Fees for Services	\$0	\$0	\$0	\$0	\$0
	Impact Fees	\$180,000	\$198,000	\$217,800	\$239,580	\$263,538
19-200-455	College Street Garage					
19-200-456	Lakeview Garage					
	Transients	\$278,524	\$297,032	\$301,588	\$331,780	\$432,816
	Monthlies	\$1,055,112	\$1,075,392	\$1,117,392	\$1,003,608	\$1,039,680
	Intergovernmental	\$159,160	\$0	\$0	\$0	\$0
	Coupon Sales	\$173,160	\$204,548	\$227,275	\$393,895	\$433,285
	GRAND TOTAL	\$5,662,107	\$6,109,137	\$6,631,823	\$6,955,170	\$7,505,577
EXPENSES		FY2016	FY2017	FY2018	FY2109	FY2020
19-200-450	Right of Way					
	APD	\$130,932	\$23,612	\$24,320	\$25,050	\$25,802
	Seasonal Paint Crews	\$110,377	\$113,688	\$117,098	\$120,611	\$124,230
	Salaries & Wages	\$237,399	\$244,521	\$251,857	\$259,412	\$267,195
	Overtime	\$20,180	\$20,785	\$21,407	\$22,050	\$22,712
	Personal Time	\$19,703	\$20,295	\$20,904	\$21,531	\$22,177
	FICA	\$18,161	\$18,704	\$19,267	\$19,845	\$20,441
	Unemployment Insurance	\$476	\$489	\$503	\$32,711	\$535
	Retirement	\$29,937	\$30,835	\$31,758	\$32,711	\$33,692
	Worker's Compensation	\$3,562	\$3,667	\$3,777	\$3,891	\$4,008
	Private Insurance	\$73,713	\$75,924	\$78,201	\$80,548	\$82,964

	Capital Outlay	\$115,000	\$118,450	\$122,004	\$125,664	\$129,434
	Supplies	\$23,500	\$24,205	\$24,931	\$25,679	\$26,449
	Uniforms	\$4,000	\$4,120	\$4,244	\$4,371	\$4,502
	Other Charges	\$15,600	\$16,068	\$16,550	\$17,047	\$17,558
	Repair & Maintenance	\$152,500	\$157,075	\$161,787	\$166,641	\$171,640
	Utilities	\$14,750	\$15,193	\$15,648	\$16,118	\$16,601
	Professional Services	\$42,000	\$43,260	\$44,558	\$45,895	\$47,271
	Maintenance Contracts	\$0	\$23,860	\$24,576	\$25,313	\$26,072
	Property Repairs	\$0	\$42,300	\$43,569	\$44,876	\$46,222
	Travel & Training	\$4,500	\$4,635	\$4,774	\$4,917	\$5,065
	Fees for Services (Engineering)	\$68,460	\$70,514	\$72,629	\$74,808	\$77,052
	Fees for Services (Street)	\$100,000	\$103,000	\$106,090	\$109,273	\$112,551
	Fees for Services (Police)	\$145,000	\$145,045	\$149,396	\$153,878	\$158,494
	Rent/Lease Equipment	\$575	\$592	\$610	\$628	\$647
	Insurance	\$12,631	\$13,010	\$13,400	\$13,802	\$14,216
	Bank Fees	\$32,000	\$32,960	\$33,949	\$34,967	\$36,016
	Gateway Fees	\$77,500	\$79,825	\$82,220	\$84,686	\$87,227
	Software Purchases/Support	\$9,500	\$1,545	\$1,591	\$1,639	\$1,688
	PayByPhone Licensing	\$7,520	\$6,981	\$8,707	\$10,097	\$12,259
	Interfund Transfers	\$169,545	\$174,631	\$179,870	\$185,266	\$190,824
19-200-451	Marketplace Garage					
	APD	\$20,556	\$23,612	\$24,320	\$25,050	\$25,802
	Salaries & Wages	\$207,749	\$154,057	\$150,226	\$169,097	\$174,171
	Overtime	\$17,659	\$13,094	\$12,770	\$14,373	\$14,803
	Personal Time	\$17,243	\$12,788	\$12,469	\$14,036	\$14,455
	FICA	\$15,893	\$11,786	\$11,492	\$12,935	\$13,324
	Unemployment Insurance	\$414	\$308	\$301	\$21,323	\$348
	Retirement	\$26,197	\$19,426	\$18,943	\$21,323	\$21,964
	Worker's Compensation	\$3,115	\$2,310	\$2,252	\$2,537	\$2,613
	Private Insurance	\$64,506	\$47,834	\$46,645	\$52,505	\$54,081
	Capital Outlay	\$7,500	\$0	\$0	\$0	\$0
	Supplies	\$35,300	\$36,359	\$37,450	\$38,573	\$39,730
	Uniforms	\$3,000	\$3,090	\$3,183	\$3,278	\$3,377
	Repair & Maintenance	\$24,000	\$24,720	\$25,462	\$26,225	\$27,012
	Utilities	\$59,100	\$60,873	\$62,699	\$64,580	\$66,518
	Security	\$85,680	\$88,250	\$90,898	\$93,625	\$96,434
	Professional Services	\$17,600	\$18,128	\$18,672	\$19,232	\$19,809
	Maintenance Contracts	\$18,375	\$18,926	\$19,494	\$20,079	\$20,681
	Property Repairs	\$61,640	\$81,620	\$116,600	\$120,098	\$123,701
	Travel & Training	\$7,500	\$7,725	\$7,957	\$8,195	\$8,441
	Fees for Services (Street)	\$20,000	\$20,600	\$21,218	\$21,855	\$22,510
	Insurance	\$14,392	\$14,824	\$15,268	\$15,727	\$16,198
	Bank Fees	\$12,000	\$12,360	\$12,731	\$13,113	\$13,506
	Validation Program	\$0	\$7,099	\$11,081	\$9,751	\$10,044
	Interfund Transfers	\$32,629	\$33,608	\$34,616	\$35,654	\$36,724

19-200-452	Airport Parking					
	Salaries & Wages	\$295,322	\$304,182	\$313,307	\$322,706	\$332,388
	Overtime	\$40,000	\$41,200	\$42,436	\$43,709	\$45,020
	Personal Time	\$41,020	\$42,251	\$43,518	\$44,824	\$46,168
	Taxes & Benefits	\$174,468	\$179,702	\$185,093	\$190,646	\$196,365
	Supplies	\$18,750	\$19,313	\$19,892	\$20,489	\$21,103
	Uniforms	\$3,500	\$3,605	\$3,713	\$3,825	\$3,939
	Utilities	\$4,300	\$4,429	\$4,562	\$4,699	\$4,840
	Equipment Maintenance/Repairs	\$1,000	\$1,030	\$1,061	\$1,093	\$1,126
	Travel & Training	\$3,000	\$3,090	\$3,183	\$3,278	\$3,377
	Interfund Transfers	\$42,765	\$44,048	\$45,369	\$46,730	\$48,132
19-200-453	School Crossing Guards					
	Salaries & Wages	\$217,845	\$224,380	\$231,112	\$238,045	\$245,186
	Personal Time	\$4,946	\$5,094	\$5,247	\$5,405	\$5,567
	Taxes & Benefits	\$31,403	\$32,345	\$33,315	\$34,315	\$35,344
	Supplies	\$4,800	\$4,944	\$5,092	\$5,245	\$5,402
	Uniforms	\$2,800	\$2,884	\$2,971	\$3,060	\$3,151
	Utilities	\$600	\$618	\$637	\$656	\$675
	Professional Services	\$900	\$927	\$955	\$983	\$1,013
	Travel & Training	\$500	\$515	\$530	\$546	\$563
	Interfund Transfers	\$24,310	\$25,039	\$25,790	\$26,564	\$27,361
19-200-454	Signals					
	Salaries & Wages	\$114,590	\$118,028	\$121,569	\$125,216	\$128,972
	Overtime	\$7,500	\$7,725	\$7,957	\$8,195	\$8,441
	Personal Time	\$14,500	\$14,935	\$15,383	\$15,845	\$16,320
	Taxes & Benefits	\$63,018	\$64,909	\$66,856	\$68,861	\$70,927
	Capital Outlay	\$180,000	\$185,400	\$190,962	\$196,691	\$202,592
	Supplies	\$5,700	\$5,871	\$6,047	\$6,229	\$6,415
	Uniforms	\$2,275	\$2,343	\$2,414	\$2,486	\$2,561
	Repair & Maintenance	\$16,750	\$17,253	\$17,770	\$18,303	\$18,852
	Utilities	\$61,700	\$63,551	\$65,458	\$67,421	\$69,444
	Professional Services	\$1,300	\$1,339	\$1,379	\$1,421	\$1,463
	Travel & Training	\$4,000	\$4,120	\$4,244	\$4,371	\$4,502
	Insurance	\$2,830	\$2,915	\$3,002	\$3,092	\$3,185
	Interfund Transfers	\$19,907	\$20,504	\$21,119	\$21,753	\$22,406
19-200-455	College Street Garage					
19-200-456	Lakeview Garage					
	APD	\$41,111	\$47,224	\$48,641	\$50,100	\$51,603
	Salaries & Wages	\$313,125	\$250,996	\$244,943	\$263,587	\$271,495
	Overtime	\$26,616	\$21,334	\$20,820	\$22,406	\$23,076
	Personal Time	\$25,990	\$20,831	\$20,332	\$21,877	\$22,534
	FICA	\$23,955	\$19,200	\$18,739	\$20,164	\$20,770
	Unemployment Insurance	\$626	\$501	\$489	\$33,238	\$542
	Retirement	\$39,485	\$31,650	\$30,886	\$33,238	\$34,236
	Worker's Compensation	\$4,698	\$3,764	\$3,675	\$3,953	\$4,072

	Private Insurance	\$97,223	\$77,935	\$76,055	\$81,844	\$84,300
	Capital Outlay	\$7,500	\$0	\$0	\$0	\$0
	Supplies	\$34,000	\$35,020	\$36,071	\$37,153	\$38,267
	Uniforms	\$4,500	\$4,635	\$4,774	\$4,917	\$5,065
	Repair & Maintenance	\$56,000	\$57,680	\$8,034	\$8,275	\$8,523
	Utilities	\$121,600	\$125,248	\$85,933	\$88,511	\$91,166
	Security	\$68,000	\$70,040	\$72,141	\$74,305	\$76,535
	Professional Services	\$40,000	\$41,200	\$42,436	\$43,709	\$45,020
	Maintenance Contracts	\$15,000	\$15,450	\$15,914	\$16,391	\$16,883
	Property Repairs	\$144,080	\$199,640	\$285,200	\$293,756	\$302,569
	Travel & Training	\$8,000	\$8,240	\$8,487	\$8,742	\$9,004
	Fees for Services (Street)	\$30,000	\$30,900	\$31,827	\$32,782	\$33,765
	Fee for Services (CEDO)	\$20,000	\$20,600	\$21,218	\$21,855	\$22,510
	Insurance	\$22,577	\$23,254	\$23,952	\$24,670	\$25,411
	Bank Fees	\$20,000	\$20,600	\$21,218	\$21,855	\$22,510
	Interfund Transfers	\$131,338	\$135,278	\$139,336	\$143,517	\$147,822
	GRAND TOTAL	\$5,112,791	\$5,052,894	\$5,190,006	\$5,474,635	\$5,552,271
NET OPERATING INCOME		FY2016	FY2017	FY2018	FY2109	FY2020
19-200-450	Right of Way	\$581,500	\$1,008,564	\$1,156,827	\$1,140,898	\$1,366,008
19-200-451	Marketplace Garage	\$144,359	\$289,707	\$467,536	\$537,826	\$623,656
19-200-452	Airport Parking	\$50,100	\$44,861	\$39,329	\$33,495	\$27,345
19-200-453	School Crossing Guards	(\$288,104)	(\$296,747)	(\$305,650)	(\$314,819)	(\$324,264)
19-200-454	Signals	(\$309,070)	(\$305,892)	(\$301,359)	(\$295,304)	(\$287,542)
19-200-455/456 CSG/LVG		\$370,532	\$315,751	\$385,134	\$378,439	\$548,102
	GRAND TOTAL	\$549,316	\$1,056,243	\$1,441,818	\$1,480,535	\$1,953,305
DEBT SERVICE		FY2016	FY2017	FY2018	FY2109	FY2020
19-200-450	Right of Way	(\$144,688)	(\$144,688)	(\$162,423)	(\$162,423)	(\$162,423)
19-200-451	Marketplace Garage	(\$271,738)	(\$433,126)	(\$504,420)	(\$504,420)	(\$504,420)
19-200-454	Signals	(\$24,986)	(\$24,986)	(\$24,986)	(\$24,986)	(\$24,986)
19-200-455/456 CSG/LVG		(\$221,759)	(\$443,517)	(\$538,684)	(\$538,684)	(\$538,684)
	GRAND TOTAL	(\$663,170)	(\$1,046,317)	(\$1,230,513)	(\$1,230,513)	(\$1,230,513)
NET CASH FLOW		(\$113,854)	\$9,927	\$211,305	\$250,022	\$722,793

7. CONCLUSIONS

The City of Burlington is poised to grow and change dynamically in the coming years as PlanBTV advances and downtown welcomes new businesses, residents and visitors. Continuing to simply build more parking to keep pace with these changes - without regard to cost, environmental impact or urban design influences - has proven to be an unsustainable practice. The preceding analysis has shown that there are large pools of untapped resources which could be better used to support growth and commerce downtown, but these resources must first be made known and available to the general public, and then presented in such a way as to make them not just accessible, but inviting.

Field work has indicated there are over 8,000 parking spaces in downtown Burlington, of which at least one-third are empty at even the busiest times. However, poor wayfinding and communications has made it difficult for the average visitor to 'discover' these facilities. The City has already initiated steps to improve wayfinding and has committed to working with private entities to provide better information, in more universally accessible formats, to make the general public aware of the many options they have for parking downtown. The City has also initiated an aggressive campaign of capital improvements to ensure these facilities are clean, well-lit and welcoming when these users arrive, guaranteeing many returns in the future. Finally, the City has agreed to develop and implement standards of operation, which improve service delivery to visitors, residents and workers parking in city garages and lots.

Field work has also indicated there is a substantial reservoir of private parking in downtown which could also be used to correct perceived shortages of available parking which occur on various blocks during different times of the day or year. These resources could be 'unlocked' and made accessible to the general public with a few simple changes in current municipal policy and a concerted effort to incorporate private property owners into plans or programs to support downtown in the future. The preceding plan includes a number of initiatives, which will allow the private sector to participate on a larger scale to address downtown's current and future parking challenges.

In order to continue to gain efficiency from existing parking assets, Burlington will also need to develop a better understanding of how assets are used on a daily basis. This understanding will assist both the City and private property owners in assessing the effectiveness of various policies and initiatives. To ensure all parties have good data to inform decision making, DESMAN has recommended several actions which will improve understanding of how parking assets are used, by whom and when through direct observation and improved automation.

In addition to addressing issues regarding parking supply, Burlington must also focus on managing parking demand in the future. In the short term, changes in pricing for different facilities will serve to 'balance' parking demand across the system and fund much needed capital improvements. But in the longer term, investments in improving facilities and expanding programs to support bicycling, carpooling, transit and other alternative transportation modes will serve to mitigate parking demand and limit the necessity to build more parking to those occasions when it is absolutely required to support new land uses that will enrich and invigorate downtown Burlington.

These changes will be supported by periodic rate adjustments and process improvements, which will ensure the fund supporting the system is solvent and strong. Increases in the cost of parking



will be implemented in such a way that the general public can see the direct benefits in the improved structures, programs and options available to all. However, within this system, the City will continue to maintain options, which are low- or no-cost to maintain accessibility to downtown for all citizens. Ultimately, execution of the proposed plan will results in a parking and transportation system which is environmentally responsible, fiscally sustainable and socially equitable to Burlington's citizens and visitors.

Appendices can be found at www.parkburlington.com