



Catonsville Business District Parking Study

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Introduction

Catonsville, Maryland's business district, runs along Frederick Road between the Baltimore Beltway and Beaumont Avenue. It is the commercial centerpiece of an area that is ranked as one of the best places to live in Maryland. The business district contains a variety of office, retail, restaurant, and cultural destinations/attractions, hosting a considerable number of special event activities that tie the community together. Like any commercial district, the ebb and flow of the local, regional, and national economies give rise to changes in commercial land use activity. They also influence increases or decreases in business activity—for example, an underperforming building becomes a destination restaurant, an underutilized parking lot is discussed as a site for new commercial or residential development, and a new shop struggles to be successful during its initial years of business.

In Catonsville, these discussions ultimately involve the provision and management of parking. A new restaurant must piece together agreements with adjacent property owners for the right to share parking. Redevelopment discussions are often constrained due to a lack of knowledge about parking market conditions. If a new business fails, the business owner, County officials, and staff may claim that the lack of available customer and employee parking was, in part, the cause for closure.

Unfortunately, business owners and developers, County staff, and elected officials in Catonsville and Baltimore County have not had the benefit of information on parking supply and utilization to determine the importance of parking when supporting existing businesses or promoting additional development. While the County, in partnership with the Baltimore County Revenue Authority (BCRA), manages 102 on-street metered parking spaces to support business activities, the supply is a small fraction of the total number of parking spaces in the business district. For this reason, the County's influence is relatively small.

Given this backdrop, the BCRA retained through competitive selection, DESMAN Design Management (DESMAN), to analyze the current parking supply, demand, and utilization in Catonsville's business district. The analysis would provide its clients and community stakeholders with a short and long-term direction for addressing real and perceived parking shortages within the district. Objectives of the assignment include but are not necessarily limited to the following:

- Providing a guiding document for improving the parking program in Catonsville
- Helping local developers and business owners understand viable solutions that can and should be available to them to address their parking issues without unnecessary government involvement
- Ensuring that publicly managed on- and off-street parking facilities operate in a manner that maximizes its benefit to the community without negatively impacting adjacent residential neighborhoods
- Identifying County and BCRA roles and responsibilities in managing and, where necessary, expanding public parking capacity

To date, planners, elected officials, developers, and commercial and residential stakeholders have tried to support existing businesses while enticing appropriate new development partners. However, it is difficult to balance the needs of employees, customers, and area residents without any data on parking supply, utilization, or demand. For this reason, the report includes both qualitative and quantitative information that will allow the BCRA, County, and the community to make data-driven decisions and

maximize the efficiency of existing public and private on- and off-street parking assets. The study aims to avoid negatively impacting continued commercial development and the quality of life for the commercial district's residential neighbors. Should the results of the study identify significant parking deficits, the data and accompanying land use-based parking demand model will help various stakeholders with decisions regarding new and additional public parking capacity.

Following these objectives and our methodology for this assignment, the report is subdivided into three chapters:

Chapter One: Existing Parking Supply, Utilization, and Demand Modeling

Chapter Two: Public Engagement

Chapter Three: Operations and Management Recommendations

Study Area

Catonsville is a census-designated place in Baltimore County, Maryland. The City is located ten miles from the City of Baltimore's Inner Harbor and west of the Baltimore Beltway (I-695). Catonsville's business district runs along Frederick Rd (Route 144) and extends two blocks into the residential neighborhoods on either side. The area was divided into sixteen blocks to facilitate data collection and analysis. The data collection efforts were further divided into inventory counts for on-street parking spaces, off-street parking facilities, and occupancy counts, which were necessary to record the quantifiable aspects of the public and private parking system. **Figure 1** presents the study area boundary and block divisions.

The area where inventory and occupancy counts were conducted focused primarily on the commercial business district. However, given the close relationship between commercial and residential activities, the study does include portions of the adjacent residential neighborhoods. This was done in an effort to address concerns that commercial corridor parking would negatively impact the quality of life in residential neighborhoods within reasonable walking distance of Frederick Road. To capture the qualitative data required to develop appropriate parking solutions, DESMAN conducted stakeholder interviews which included residents, local business owners, developers, and elected officials. That information, along with the space inventory and occupancy counts, will be presented further in the report.



Figure 1-Study Area Boundaries

Chapter One – Supply, Utilization, and Demand Analysis

The following section presents an inventory of existing public and private on- and off-street spaces, as well as the results of the Friday and Saturday parking occupancy surveys. An examination of the County's available land use database follows, with estimates of existing parking surplus and deficit figures by block. This analysis does not examine future parking conditions as it does not include the impact of known, proposed, or potential development. However, the results of the field surveys and analysis concludes with the preparation of a spreadsheet-based parking demand model. The BCRA, County, and involved stakeholders can utilize this model to understand parking supply and demand conditions given the impact of new development and shifts in travel behavior.

Surveyed Existing Conditions

Parking Inventory and Peak Friday and Saturday Occupancy Counts

To assess parking inventory and occupancy, each block and block face within the study area boundary were coded *A* through *P*, as were each off-street lot. Block faces are defined as the curb area along one side of the block between adjacent streets/intersections. Both marked and unmarked spaces were included in the off-street totals. For example, the block coded as *Block E* includes Catonsville Square, State Fare restaurant, and the fire station bound by Frederick Road, Ingleside Avenue, Egges Lane, and East Melrose Avenue. *Block E* consists of fifteen metered on-street spaces on Frederick Road and 379 off-street spaces across four different parking lots. Following the inventory surveys, the occupancy counts were performed on a Friday and Saturday in May 2022 between 12:00PM and 8:00PM. This timeframe captured the peak hour parking utilization for a weekday and weekend.

Inventory

As presented in **Appendix Table A** and **Figure 2**, the business district has 2,672 total parking spaces. Just 102 of those spaces are on-street and publicly owned. The remaining 2,570 parking spaces are located in privately-owned off-street lots. This information is key to many of the recommendations developed. Somewhat uniquely, the public sector—the BCRA and County—manages a fraction of parking in Catonsville as less than 4.0% of the total parking spaces are available to the general public regardless of trip purpose. It must be noted that there is no industry standard or best practice that suggest a certain ratio/percentage of publicly owned/operated parking facilities to those that are private/restricted. For example, Arlington County, VA owns and operates very few public off-street parking facilities while its neighbor, Montgomery County, MD, chose to provide and manage a large percentage of spaces found in Bethesda, Silver Spring, and Wheaton. Arlington requires the private sector to share parking through development site condition requirements while Montgomery County created special tax districts to finance large public parking structures. Both communities are successful but they took different approaches to the provision and management of publicly accessible parking.

Catonsville's off-street parking lots are designed to provide parking exclusively for the tenants and patrons of those businesses without explicit compliance with local zoning regulations. **Figure 3** provides an example of the numerous private parking/towing signs that are found throughout the study area. As illustrated in one example, the property owner targeted a specific business out of frustration with the business' customers parking in their lot, hence the warning extended directly to them.

Figure 2 – Existing Public and Private On- and Off-Street Parking



Figure 3 - Representative Private Parking/Towing Signage



While the perception of parking in Catonsville as being limited and unwelcoming is reinforced through restrictive and prohibitive parking signage, many property owners that post these signs do so reluctantly. As addressed in the public engagement section of the report, DESMAN interviewed a selection of commercial business owners along Frederick Road who stated that while they did install the signs, they rarely, if ever, tow vehicles off their property. In some cases, property owners that have parking have informal agreements with their commercial neighbors who lack parking, allowing that business and their employees to park in their lots without issue. In short, while the visuals suggest a combative and unfriendly parking environment, there is an undercurrent of parking cooperation and sharing of resources that illustrates the great potential for shared parking agreements.

To reinforce this point, **Figure 4** illustrates new parking signage that has been introduced in recent months to identify private lots that openly welcome public parkers. A core group of Catonsville stakeholders created the *Catonsville Parkship*, which began working with property owners to share their parking lots when the property or business was not open or busy. While Catonsville's churches are a majority of these new "shared parking" destinations, participants do include other office and commercial properties. These efforts were made without any influence or direction from the BCRA or County, in-line with the area's private sector, "can-do" attitude.

Figure 4 - Representative/Existing "Shared Parking" Signage



Hourly Utilization

Parking occupancy counts were performed on Friday, May 13th and Saturday, May 14th, 2022 for on-street and off-street spaces between 12:00PM-8:00PM. The days and hours were selected in consultation with the BCRA, County, and select community representatives in an effort to capture the system-wide peak hour of parking activity. The occupancy counts help to understand the frequency in parking utilization over the course of a typical weekday and weekend. To understand on-street parking uses which should be limited to two-hour parking durations, the on-street counts were conducted hourly while the off-street counts were conducted every two hours. **Table 2a** and **2b** present the results of the on-street and off-street survey results for a Friday while **Table 3a** and **3b** illustrate the results for a Saturday.

It is important to recognize that any field survey of parking utilization is arguably flawed as the results are based on one point in time with interfering factors such as weather, special events, and other outside

influences. Given that reality, the results of the survey were presented to various stakeholders during the public engagement phase. While there were some comments regarding the accuracy of the surveys, the majority were generally in agreement with the results. Furthermore, and as addressed in the land use-based parking demand model section of the report, the findings from the field surveys are supported by the results from that land use analysis.

Table 2a – On-Street Parking Inventory and Friday Hourly Parking Occupancy by Block

Block Code	Block Face	Parking Inventory	Number of Observed Parked Vehicles							
			12PM	1PM	2PM	3PM	4PM	5PM	6PM	7PM
A	N	3	2	0	2	2	0	0	0	0
B	N	8	2	2	2	2	3	4	8	6
C	N	9	8	6	6	7	6	9	9	9
E	N	15	7	8	8	8	11	13	12	13
G	N	12	5	7	6	4	7	6	3	3
K	S	3	0	2	1	0	0	0	0	0
L	E	4	3	1	0	0	1	3	4	2
L	S	20	13	13	11	16	18	14	15	16
M	E	5	3	3	2	2	0	0	1	1
M	W	6	5	4	1	5	4	4	6	6
M	S	8	6	7	6	5	5	5	7	8
N	S	5	1	2	0	0	0	0	3	4
O	S	4	2	2	4	2	0	0	0	0
Total		102	57	57	49	53	55	58	68	68
			56%	56%	48%	52%	54%	57%	67%	67%

Table 2b – Off-Street Parking Inventory and Friday Off-Street Hourly Parking Occupancy

Block Code	Parking Inventory	12:00 PM-2:00 PM	2:00 PM-4:00 PM	4:00 PM-6:00 PM	6:00 PM-8:00 PM
A	181	56	62	72	61
B	220	122	141	145	133
C	129	48	59	65	59
D	20	9	9	11	8
E	379	194	220	241	221
F	88	39	48	53	45
G	150	95	103	102	94
H	191	81	102	101	91
I	39	16	16	18	15
J	116	53	59	67	56
K	281	182	186	178	165
L	461	293	320	310	287
M	140	92	97	95	80
N	115	66	80	77	65
O	20	12	12	12	8
P	40	22	22	21	18
Total	2,570	1,380	1,536	1,568	1,406
		54%	60%	61%	55%

Table 3a - On-Street Parking Inventory and Saturday Hourly Parking Occupancy

Block Code	Block Face	Parking Inventory	Number of Observed Parked Vehicles							
			12PM	1PM	2PM	3PM	4PM	5PM	6PM	7PM
A	N	3	2	1	3	0	0	0	0	0
B	N	8	6	3	6	2	2	5	6	8
C	N	9	9	9	9	3	5	8	8	8
E	N	15	14	14	13	15	12	14	13	15
G	N	12	7	5	4	4	3	6	7	6
K	S	3	0	0	0	2	2	1	3	2
L	E	4	3	3	4	1	3	4	3	4
L	S	20	18	19	17	17	14	18	18	19
M	E	5	2	2	1	0	2	5	5	5
M	W	6	6	6	5	6	4	6	5	6
M	S	8	8	6	8	6	7	7	7	7
N	S	5	0	2	1	0	0	1	4	5
O	S	4	1	2	4	2	0	0	0	0
Total		102	76	72	75	58	54	75	79	85
			75%	71%	74%	57%	53%	74%	77%	83%

Table 3b-Off-Street Parking Inventory and Saturday Hourly Occupancy Counts

Block Code	Parking Inventory	12:00 PM-2:00 PM	2:00 PM-4:00 PM	4:00 PM-6:00 PM	6:00 PM-8:00 PM
A	181	18	3	3	3
B	220	11	11	9	7
C	129	20	29	28	30
D	20	6	5	3	4
E	379	66	175	180	201
F	88	41	47	50	53
G	150	52	36	18	19
H	191	8	13	16	26
I	39	7	7	11	11
J	116	43	47	57	64
K	281	48	40	38	34
L	461	162	145	155	164
M	140	71	62	62	60
N	115	21	21	25	20
O	20	6	6	0	0
P	40	3	0	0	0
Total	2,570	583	647	655	696
		23%	25%	25%	27%

As presented in Table 2a, only 67% of the 102 on-street spaces were occupied during the peak on Friday. At 2:00PM, occupancy was as low as 48%. As presented in Table 2b, only 61% of the 2,570 off-street spaces were occupied during the peak, with a low of 54%. While the occupancy of on-street spaces increased to 83% on Saturday, only 27% of off-street spaces were occupied during that time, as presented in Table 3a and 3b.

Peak Occupancy and Practical Surplus and Deficit

Parking utilization for the weekday and weekend did vary by time of day and location with some lots exhibiting different periods of peak activity. For this reason, the parking program in Catonsville must be examined in a holistic and systematic manner. As a system, on- and off-street parking within the study area peaked on Friday between 4PM and 6PM when 1,636 (61%) of the total 2,672 spaces were occupied.

On Saturday, the system peaked between 6PM and 8PM when 775 (29%) of spaces were occupied. It is important to recognize that a music festival occurred on that particular Saturday evening. DESMAN had hoped to avoid significant events that close streets to traffic, cause the temporary loss of surface parking, and increase parking demand. However, events such as the music festival that occurred that Saturday evening are almost commonplace in Catonsville given the business district's role as the commercial, cultural, and entertainment center of the area. **Figure 5** and **6** graphically illustrate the results where color coding represents different occupancy percentages. Dark red illustrates lots/streets with 90-100% occupancy, red indicates 80-90%, and so on. While there are particular lots and on-street areas that exhibited parking occupancy levels at 80% or greater suggesting stress and/or deficit conditions, there are considerable surpluses in adjacent lots that could, in practice, be used to mitigate neighboring parking shortages.

Figure 5 - Friday Peak (4-6pm) Parking Occupancy by Lot and Block Face/Street

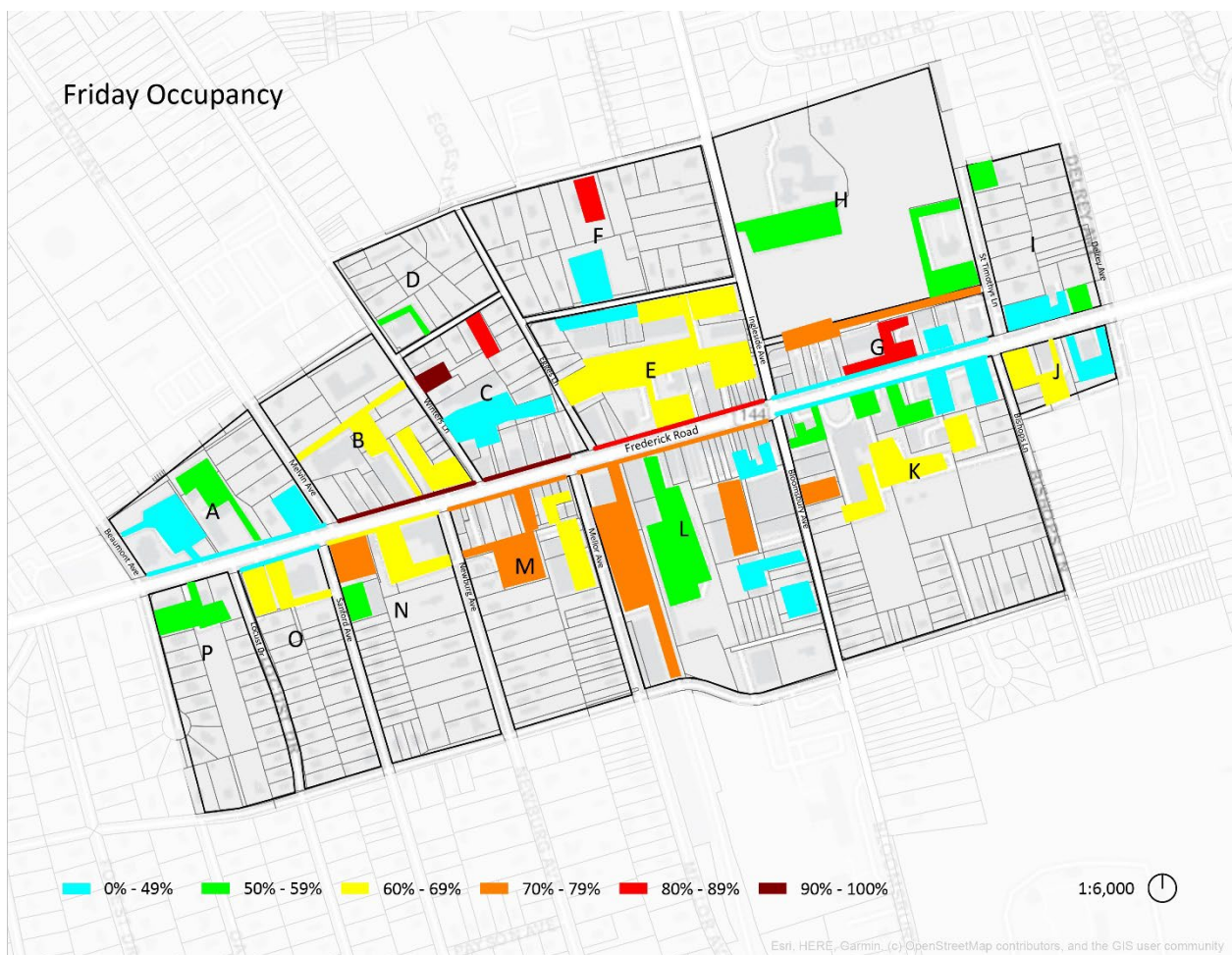
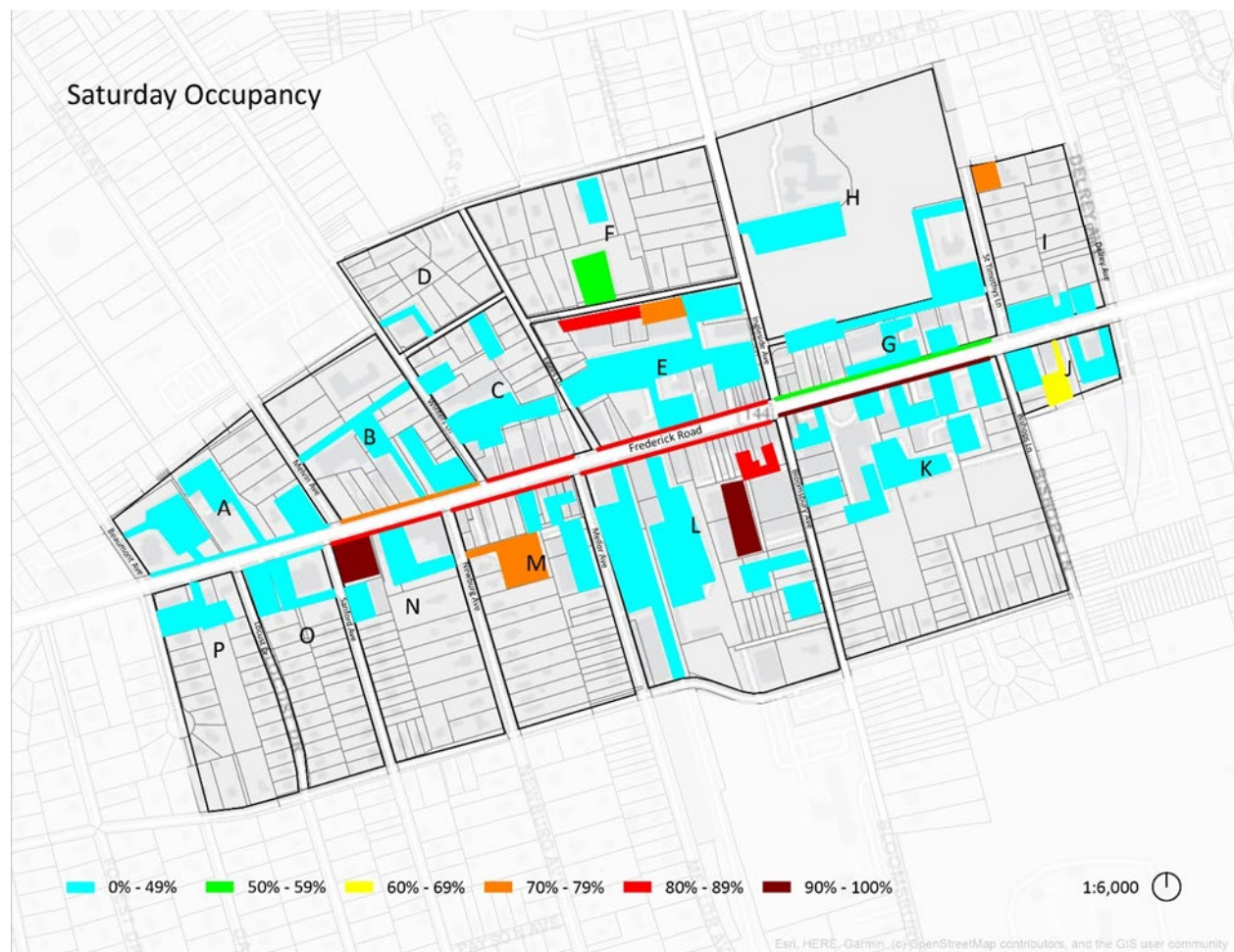


Figure 6 - Saturday Peak (6pm-8pm) Parking Occupancy by Lot and Block Face/Street



As additional perspective on parking stress, the parking industry recognizes that occupancy levels reaching and exceeding 85-90% capacity are approaching an operational or practical deficit of spaces. Once this rate is exceeded, potential parkers find it difficult to locate open spaces and are more likely to continue to search for an available space, creating traffic flow problems, frustrating drivers, and ultimately leading them to park elsewhere.

Even when applying a practical parking capacity limit of 90% of the total supply, Catonsville exhibited significant surplus on both Friday and Saturday. On Friday, there was a surplus of 711 spaces. While that surplus increased to 1,632 on Saturday (the inventory of 2,672 spaces multiplied by a 90% practical capacity is less than Saturday's peak occupancy of 775 spaces). Since the on-street supply is limited and charges a fee, and because most of Catonsville's parking lots are restricted to specific tenants/users, there is a perception that finding parking in Catonsville is difficult. The difficulty in finding an available space is not associated with any numerical supply/demand relationship; it is primarily associated with the restrictive and private nature of lot ownership and management.

Land Use Analysis and Demand Model

To better understand the results of the parking occupancy surveys, DESMAN prepared a land use-based analysis of parking demand. The land-use analysis helps to define the parking relationships between offices, employees, residents, visitors, etc. Parking occupancy counts cannot determine the vehicle's trip purpose, nor can it determine if the parked vehicle is in close proximity to the destination. The land-use analysis attempts to estimate the relationship between existing building activity and observed parking utilization.

Using the Baltimore County land use data, presented in **Table 4**, this theoretical analysis determines each block's parking demand based on the land use type and building density. Presently, the study area includes nearly 860,000 square feet of office, residential, retail, restaurant, and institutional destinations like churches, a post office, and community center/clubhouse. In effect, the study area is representative of a town center and/or lifestyle center where working, shopping, dining, and living merge to form a hub of activity.

Table 4 - Catonsville Business District Land Use and Density (Source: Baltimore County - CoStar Database)

Block Code	Church	Industrial	Institutional	Office	Multi-Family Residential	Restaurant	Retail	Miscellaneous
Size	SQFT	SQFT	SQFT	SQFT	Dwelling Units	SQFT	SQFT	SQFT
A	23,116	0	0	2,321	0	0	0	8,640
B	0	0	0	54,415	1	0	23,494	0
C	0	31,219	0	14,085	0	4,918	28,375	4,438
D	0	0	0	0	29	0	0	0
E	0	0	0	34,185	0	23,479	70,622	0
F	0	0	0	0	11	2,803	0	0
G	0	0	0	20,522	0	2,070	36,153	5,298
H	26,811	0	0	0	0	0	0	0
I	0	0	17,726	0	0	0	7,103	0
J	0	0	0	17,700	0	4,104	9,732	0
K	0	0	0	23,358	0	0	25,870	0
L	0	88,980	0	39,453	0	2,841	75,697	0
M	0	0	0	31,607	0	2,863	31,087	0
N	22,439	0	0	6,800	0	0	4,757	0
O	0	0	8,056	11,316	0	0	0	0
P	0	0	0	4,422	0	0	6,626	0
Total	72,366	120,199	25,782	260,184	40	43,078	319,516	18,376

Total = 859,541 Square Feet

From a parking perspective, blocks within the study area that have large parking demand generators and limited parking capacity would likely result in insufficient parking. Alternatively, the analysis identifies areas where the supply of parking in a particular block must be serving land uses in adjacent blocks that do not have a surplus of spaces. Finally, with an understanding of the relationship of parking demand generators to existing parking supply, future demand and space allocation associated with known, proposed, and potential development information can be modeled.

As presented in **Figure 7**, there is a large parking surplus on most blocks during the weekday. Although blocks C, E, and O have a space deficit, the large surplus on the surrounding blocks should be able to accommodate the demand if those adjacent spaces are available to the general public. For example, Block E which includes Catonsville Square, State Fare, and PNC Bank would appear to experience a 11-space parking deficit on a weekday when the land use demand is compared to the supply of spaces in that

block. However, there is a 59-space land use-based surplus in Block F just north of this area, which includes the Department of Social Services overflow lot. As that lot does not generate much demand, the supply of spaces on Block F are readily available to Catonsville Square and other parking demand generators. Similar to the weekdays, **Figure 8** shows a weekend parking surplus on nearly every block. There are more available parking spaces on the weekend likely due to the absence of office parking demand.

Figure 7 - Friday Peak Hour Land Use-based Parking Surplus/Deficit by Block

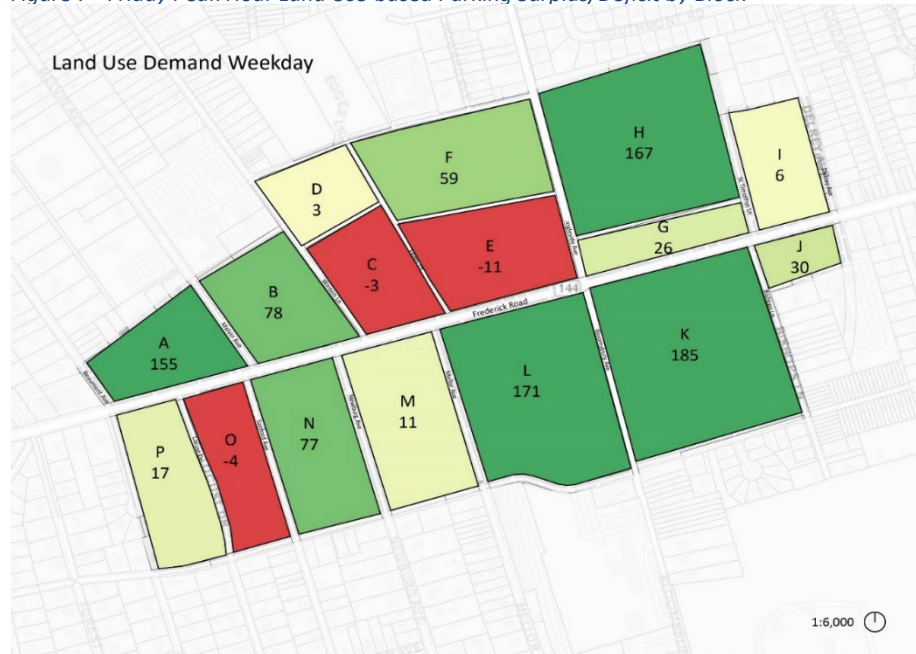
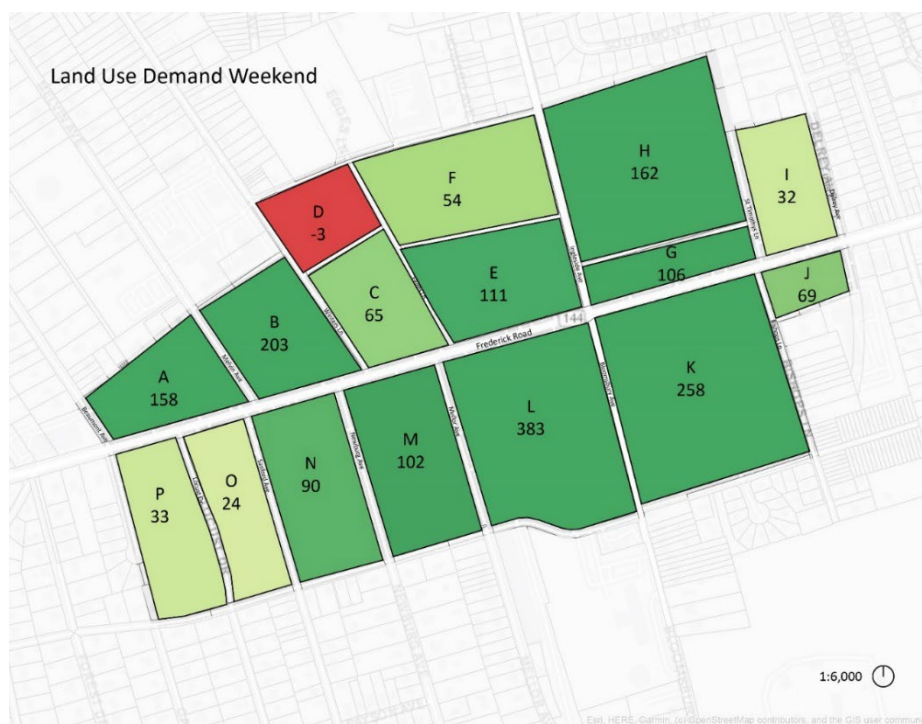


Figure 8 - Saturday Peak Land Use-based Parking Surplus/Deficit by Block



Presuming the accuracy and relevancy of the land use-based parking demand model, it can be used to estimate existing and future parking supply and demand under a variety of conditions. DESMAN used the model with Baltimore County's new development off-street parking requirements to calculate the parking surplus or deficit if the Catonsville business district were rebuilt following County standards. In other words, if a developer wished to build a town center with 860,000 square feet of office, retail, restaurant, and other land use activities similar to Catonsville, the developer would be required by the County to provide 1,902 parking spaces, or 770 fewer spaces than are in the study area today. **Figure 9** illustrates the block-by-block parking surplus or deficit using the County's requirements. For example, Block D which is bound by Fusting Avenue, Winters Lane, Egges Lane, and East Melrose Avenue, and which supports the Sheppard Pratt Rehabilitation Day program, a twenty-nine-unit multifamily residential building, and a number of single-family homes, would require by County Code twenty-three more spaces than what exists today. While land use-based parking deficits are present in several blocks, it appears that Catonsville has more than sufficient parking capacity to meet its current needs. Additionally, if parking in Catonsville operated under a single manager/operator like a mall or town center, the 770-space parking surplus could be used to support future development without the need for additional parking capacity. It must be noted that this analysis presumes that Catonsville's parking system operates in a unified manner where the supply in one block can be used to support the land use activity in another, which is presently not the case.

Figure 9 - Weekday County Off-Street Parking Code-based Parking Surplus/Deficit by Block



Table 5 - Catonsville 2020 American Community Survey

VEHICLES AVAILABLE		
Occupied housing units	15,566	15,566
No vehicles available	1,366	8.8%
1 vehicle available	5,643	36.3%
2 vehicles available	6,021	38.7%
3 or more vehicles available	2,536	16.3%
COMMUTING TO WORK		
Workers 16 years and over	20,044	20,044
Car, truck, or van -- drove alone	15,369	76.7%
Car, truck, or van -- carpooled	1,190	5.9%
Public transportation (excluding cab)	601	3.0%
Walked	438	2.2%
Other means	294	1.5%
Worked from home	2,152	10.7%
Mean travel time to work (minutes)	28.0	(X)

Influences and Trends that Affect Parking Demand

One of the tasks outlined by the BCRA in the request for proposals was capturing influences and trends that affect the parking system now and into the future. This includes an understanding of regional and local demographics, support for environmental sustainability goals, and the strengths and weaknesses of existing transit services and infrastructure that supports alternative travel modes. Furthermore, the creation of an accurate spreadsheet-based land use to parking demand model sparked discussion of how the model and parking demand would increase with additional development or decrease given the potential impacts and influences associated with transportation demand management strategies (TDM). TDM is defined by the Federal Highway Administration as a set of strategies aimed at maximizing traveler choices. In the context of Catonsville's business district, maximizing traveler choices is defined by reductions in single-vehicle travel, increases in non-auto modes of travel, and, ultimately, decreases in parking demand. In short, encouraging existing and future patrons of local shops, restaurants, and cultural destinations to forego using an automobile would maintain the support of these businesses and destinations while also decreasing the demand generated by automobiles. Therefore, effective parking management is part of a community's overall TDM plan. Without unified management strategies to support alternative modes of transportation, the TDM plan becomes much less effective. From a practical standpoint, and specific to the land use-based demand model, the reduction to be permitted in the model will reflect percentage decreasing associated with current land use ratio. For example, if the office parking demand ratio in Catonsville is 2.50 parking spaces per 1,000 square feet, and TDM-related initiatives are likely to decrease single-occupant-vehicle (SOV) auto utilization by 10%, then the ratio in the parking demand ratio would be reduced to 2.25 spaces per 1,000. However, before those adjustments can be considered, some background on Catonsville's current demographics and existing TDM strategies must be completed.

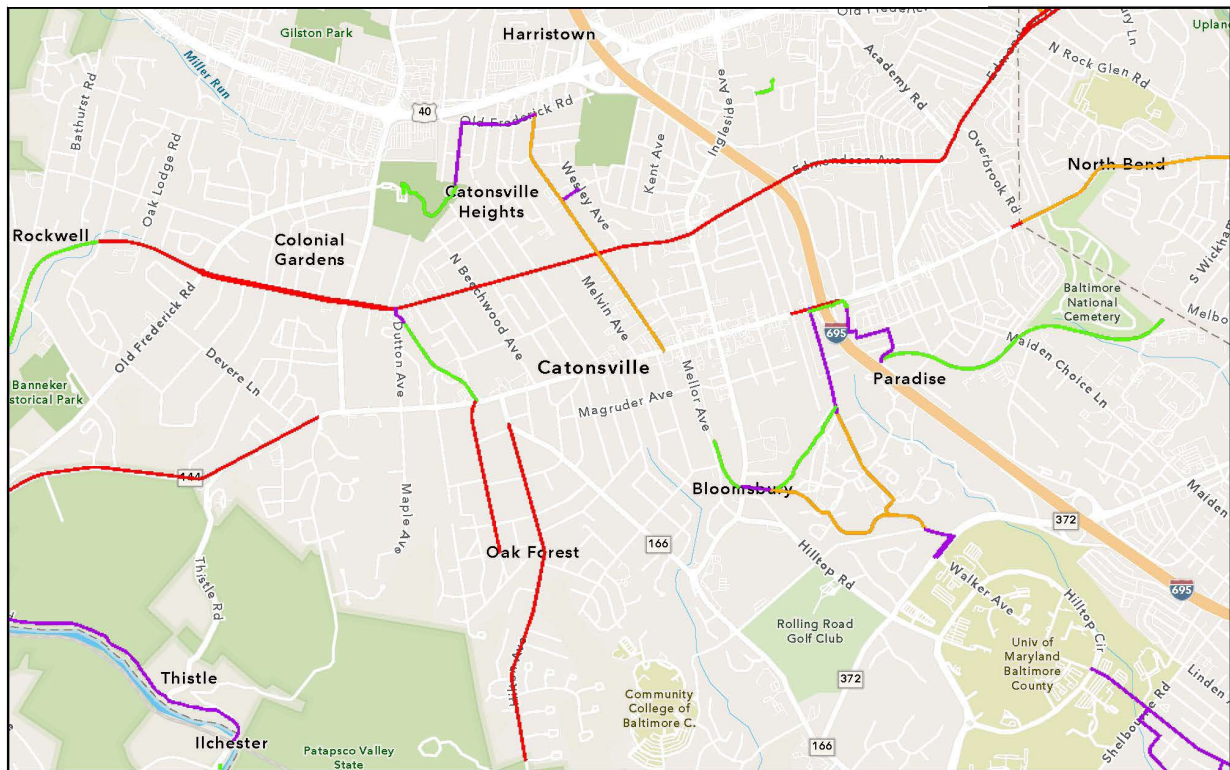
Transportation and Relevant Information

Data from the 2020 American Community Survey (see **Table 5**) suggests that 91% of households in Catonsville own one or more vehicles. Of the working population, and based on the census-driven data, nearly 13% use travel modes other than a personal vehicle to commute to work.

The percentage of people using alternative transportation modes could increase with greater access to public transit and improved biking and pedestrian infrastructure. As will be noted, there is presently a physical gap in bike and pedestrian pathways within the business district. DESMAN’s research on bikes and bicycle planning (see **Figure 10**) does suggest that a number of key bike routes and pathways are disconnected with the business district, with Frederick Road acting as a barrier to those connections.

DESMAN completed similar research on existing public transit infrastructure, namely current bus service routes and stops that are provided by different transit agencies (see **Figure 11**). Given the parameters of this parking study, it is unclear if the existing bus routes, service schedule, and routes are sufficient or insufficient to meet Catonsville business districts’ public transit needs. However, even a modest increase in transit service and service ridership could yield significant reductions in parking demand. Using the previous office parking demand analysis example, if improvement to bicycle infrastructure and transit services achieve a 5% shift from automobile and parking to other modes, then the office parking demand ratio could drop from 2.0 to 1.9 spaces per 1,000 square feet. As Catonsville has approximately 260,000 square feet of office space, this could reduce peak weekday office parking demand by 26 spaces. While that might not appear to be a large figure, when considering it can cost \$30,000 to \$40,000 per space to build a parking structure, any reduction is beneficial.

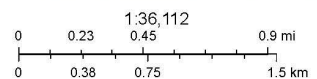
Figure 10 - Catonsville's Existing Bicycle Pathways



6/22/2022

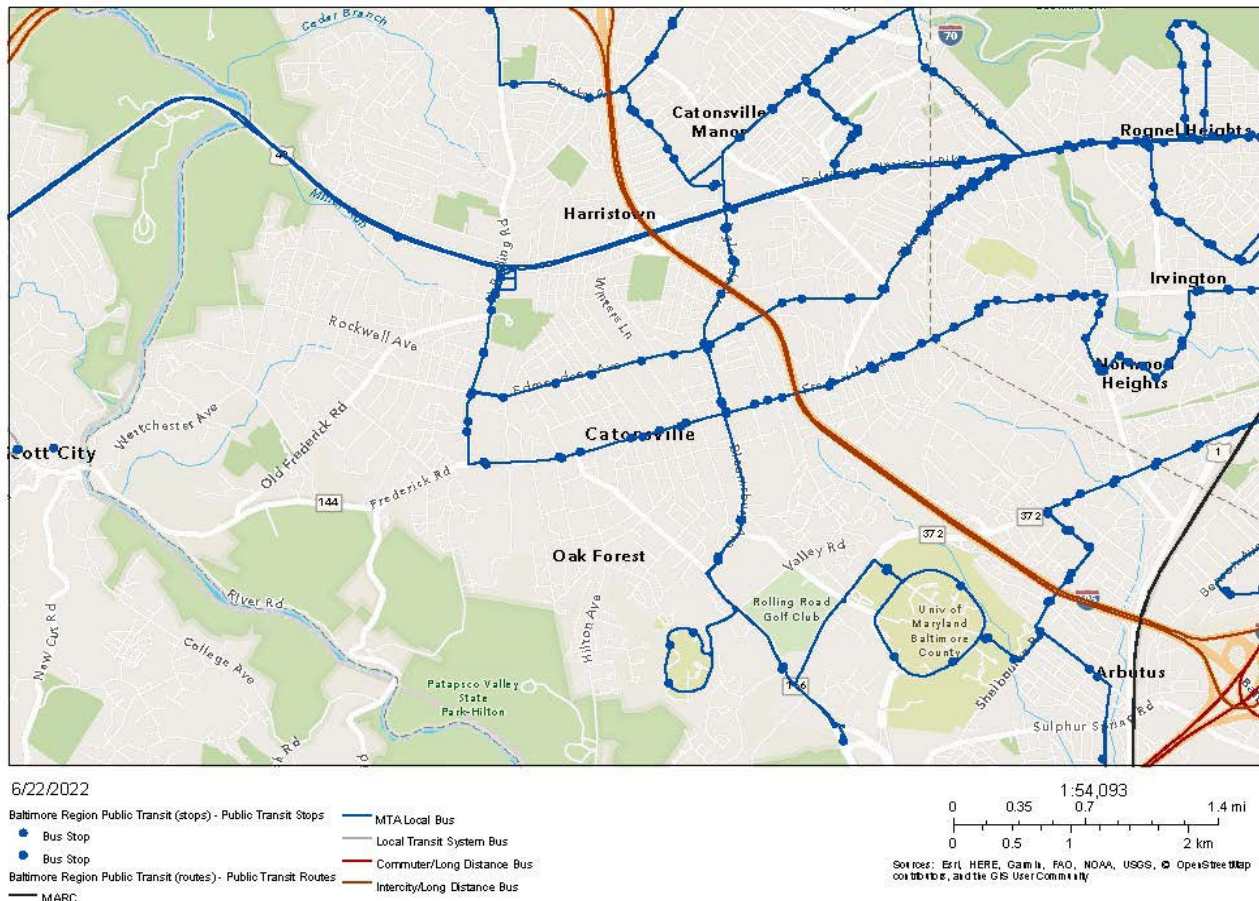
Regional Bicycle Facilities

- Transportation trail or shared use path
- Bike lane
- Sharrows or marked shared lane
- Separated bike lane
- Signed designated bike route



Sources: Esri, HERE, Garmin, FAO, NOAA, USGS, © OpenStreetMap contributors, and the GIS User Community, Baltimore Metropolitan Council.

Figure 11-Catonsville's Existing Public Transit Routes/Stops



Summary of Existing Parking Supply, Utilization, and Demand

Based on the result of the field surveys, the following summation is offered:

- With the exception of a limited number of on-street metered parking spaces, the parking system in Catonsville consists of privately owned and operated surface lots that are restricted to the property's tenants and visitors.
- The majority (but not all) of the surface lots post parking restrictions and threats of towing through signage and pavement markings, but few of the property owners aggressively tow.
- Some lot owners do share their parking spaces with non-tenants/non-visitors but the effort is somewhat disconnected from the larger parking program.
- While specific lots did exhibit parking shortages at different times of the day based on the results of the field surveys, there is excess capacity to support current parking needs.
- As additional evidence to the excess capacity statement, if Catonsville were to be rebuilt following Baltimore County Off-street parking requirements, a surplus of over 770 spaces would be realized.

Chapter Two - Public Engagement

Parking Working Committee and Community Stakeholders

On April 25th, 2022, DESMAN personnel met with the Parking Working Committee that was created to shepherd the consultants throughout the project. The group included representatives from the BCRA, the Catonsville Chamber of Commerce, and several working committee members. Topics covered during the kick-off meeting and subsequent discussions included demographics of the community, parking related codes and ordinances, and parking management/enforcement.

Following the project kick-off meeting, DESMAN personnel met with additional stakeholders and community members on two separate occasions, May 26th, 2022 and July 27th, 2022. The meetings were held in an open-house format to encourage community participation. Participants were either directly or indirectly involved in parking, property management, local businesses, and the local councilman's office.

In addition to the open-house meetings, DESMAN personnel conducted impromptu interviews with local businesses on-site. A range of retail, restaurant, and office owners participated in giving feedback on their parking-related experiences and concerns.

The following summarizes key comments received during those interviews. Note that comments made by the various participants are not reflective of DESMAN's opinion moving forward, but are reprinted here for purposes of context and understanding.

- Parking wayfinding related signage is insufficient.
- Developers and property managers are challenged with parking enforcement responsibilities.
- A new restaurant and event venue will be operational in the coming years, which will add to parking demands in the downtown.
- The new restaurant and event venue will need off-site parking for events.
- Developers and existing property owners do collaborate on a limited basis in an effort to solve their parking problems without significant input from the County.
- The Melrose lot does not currently have curbs, gutters, lighting, or a sidewalk.
- There is a disconnect between parking operations and enforcement.
- Overall, meter compliance is low because there is little incentive to pay for parking when there is not consistent enforcement.
- A public valet program could attract tourists to downtown Catonsville.
- Some business owners prefer to negotiate parking without County's involvement.
- The Fire Department is located in a congested area and feeds into the parking lot that is managed by Booth Properties.
- Some feel there is a resistance to walking.
- Bill's Music locks the gate to their parking lot at 6:00PM.
- Abandoned cars are a concern.
- Some view free parking as a major issue.
- Valuable property needs to be monetized.
- There is a need for public parking lots.
- Formal negotiations could ensure that shared parking is fair and managed properly.
- The parking supply is sufficient, but the private ownership is an issue.

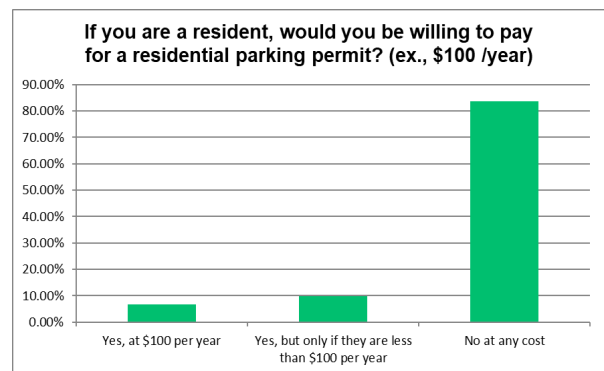
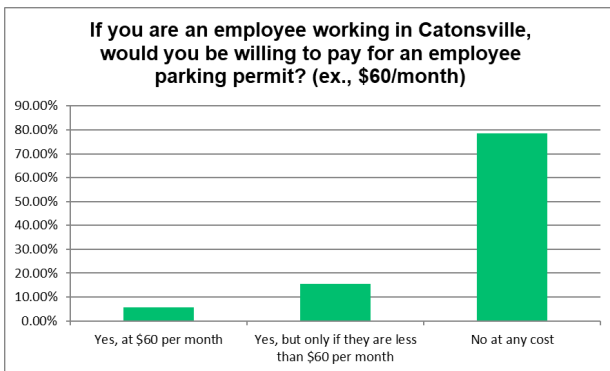
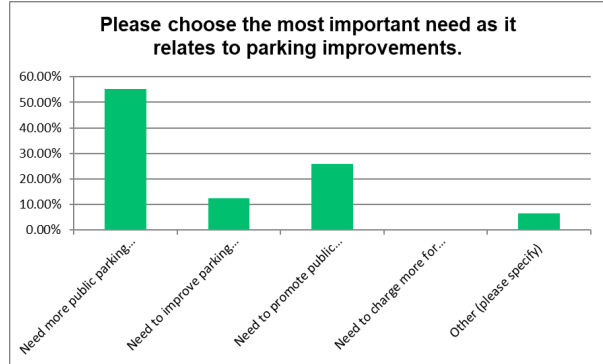
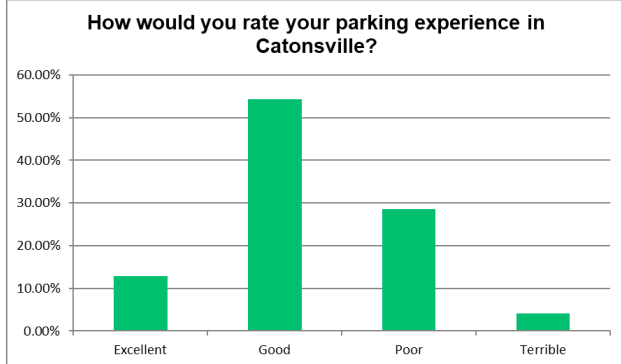
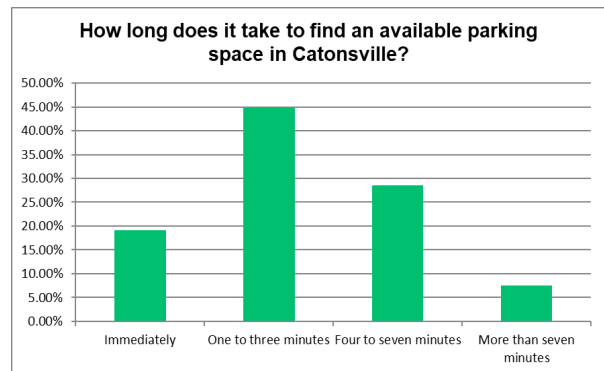
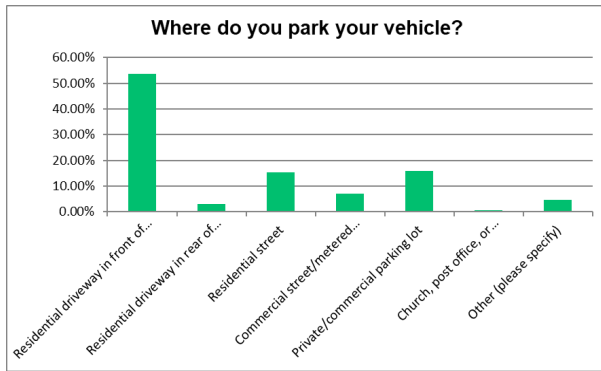
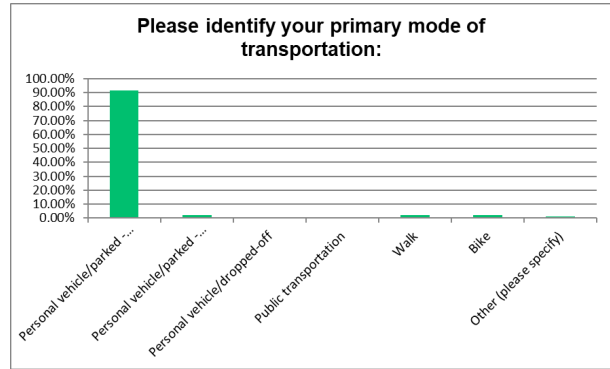
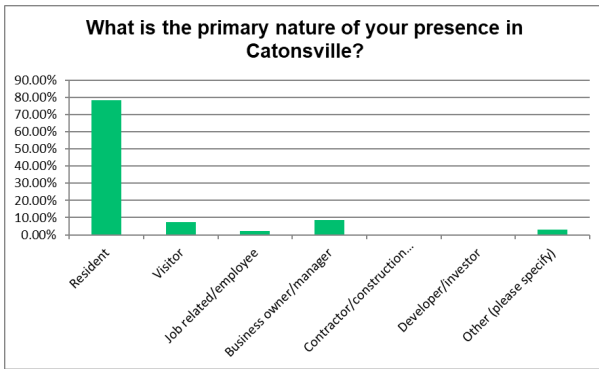
- An immobilizer boot is needed for enforcement.
- To some, parking is a perceived problem rather than an actual problem.
- There needs to be safer pedestrian crossing and access points along Frederick Road.
- The pharmacy shares parking with Bill's Music, which is part of the lease agreement.
- Bill's Music has ample parking and rents to tenants.
- Towing rarely occurs, despite being a constant threat.
- One church lot has a collection box for donations.
- The town is a hostile environment for parking as a newcomer.
- People generally favor ParkMobile.
- There is no public relations campaign.
- The Residential Neighborhood Association would like to minimize traffic, noise, and lighting.
- A residential permit program would stop spillover from the downtown, but there is opposition.
- The area near the Melrose Lot felt residential until the lot was paved.
- It would be favorable to formalize agreements between property owners and the county.
- Walking 3-6 blocks is reasonable, but people are not willing to walk even one block.
- Jennings Café has outdoor seating in their lot during warm weather months, which decreases the number of parking spaces available to them.
- The 818 Market had a change in ownership and is currently not operating but has the potential to increase parking demand when operational.
- Attention needs to be brought to storm water management.
- The county could monetize parking to encourage private lots to participate.

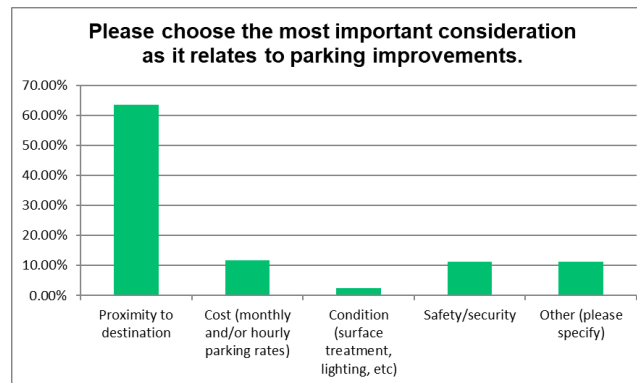
Online Survey

To add statistical significance to the stakeholder interviews and comments received, the BCRA and Catonsville Chamber of Commerce supported an online survey. The following nine (9) questions were posted on the Chambers' website as was an opportunity for general comment. Results are posted below.

- #1: What is the primary nature of your visit/presence in Catonsville?
- #2: Please identify your primary mode of transportation.
- #3: Where do you park your vehicle?
- #4: How long does it take to find an available space in Catonsville?
- #5: How would you rate your parking experience in Catonsville?
- #6: Please choose the most important consideration as it relates to parking improvements.
- #7: Please choose the most important need as it relates to parking improvements.
- #8: If you are an employee working in Catonsville, would you be willing to pay for an employee parking permit (ex., \$60/month)? In this example, the permit holder would not receive a reserved space. Rather, spaces in a less centralized lot would be managed for the employee's benefit.
- #9: If you are a resident, would you be willing to pay for a residential parking permit (ex., \$100/year)? In this example, curbside spaces on a residential street or in a nearby lot would be managed for residents and visitors. Contractors would need to purchase a temporary permit.

It must be acknowledge that of the 172 respondents that completed the survey the vast majority (78%) were residents.





With an understanding that the majority of respondents were residents of Catonsville, the following is DESMAN's interpretation of the results:

- Over 90% of respondents use a vehicle (and parking) as their primary mode of transportation
- 35% of the respondents indicated it takes four or more minutes to find an available space in Catonsville
- 32% rate their parking experience as poor to terrible
- 64% noted that proximity to destination is the primary consideration when choosing a parking space
- 11% indicated that cost/price was the primary factor when considering where to park
- 55% responded that more public parking spaces would be their top improvement to parking in Catonsville
- 26% noted that improvements to public transportation are more prudent, but few would be willing to pay a fee for an employee and/or residential parking permit.

Though there were nearly 800 empty parking spaces during Friday's peak period and over 1,600 empty spaces on Saturday, DESMAN was initially surprised that many survey respondents indicated that it takes four or more minutes to find a parking space. However, given the posting of "No Parking" and "Violators will be Towed" signs, DESMAN cannot dispute these results. Again, this underlines the limitations placed on Catonsville's parking program when only 102 parking spaces are available for the general public and those spaces are located on the street and impose a fee.

Online Survey Comments While the formal responses to the online survey provide quantifiable insight into the thoughts and expectations of the "audience," the comment section offers a more intimate examination. **Figure 11** summarizes those comments in a word jumble.

Figure 11-Word Jumble - Stakeholder Interview Comments



Chapter Three – Parking Operations and Management Recommendations

This final chapter presents DESMAN’s recommended policies and strategies to improve the current system and plan for implementation. Additionally, this chapter prioritizes actions to meet the policy and management goals which include planning, operations, market rates, and parking enforcement. For these policies and strategies to be successful and sustainable, the report must identify the responsibility of each action. It is important to recognize that several of the recommendations support single-source management responsibility and accountability. There are many different entities currently involved in Catonsville’s parking management, including the BCRA, Catonsville Parkship, the Chamber of Commerce, as well as the property owners who operate Catonsville’s 52 private, off-street lots. Residents of adjacent neighborhoods should be represented as well.

Given the comprehensive nature of the assignment, goals, and expectations outlined by the BCRA and County in the request for proposals, the recommendations are general in nature and do not include such items as revised County parking codes/ordinances, legislative changes associated with potential transfers of responsibility, cost estimates for new equipment and material, or lease agreement language to be used when formalizing shared parking strategies. However, the parking management action plan outlines the broad steps and decisions that need to be made by whom, and with whom. It also discusses how on-street and off-street parking management can evolve to meet the changing needs of the community.

Guiding Principles

Prior to a review of parking policy and management recommendations, guiding principles must be defined, and the basis upon which the principles were created must be understood. Based on the work completed, it is DESMAN's opinion that the Catonsville Business District does not have a supply and demand problem, even though certain lots at certain times of the day exhibit parking stress. Alternatively, the business district has a parking management problem. This pronouncement was generally well received during the final public input session. Additionally, there is no unifying presence in Catonsville regarding parking management. The community needs a single-source parking manager to coordinate all of the different components of the parking system, including private lots. DESMAN does not recommend that the County or BCRA build a parking structure in Catonsville; furthermore, the analysis does not warrant it at present. DESMAN does believe through public/private sector lease agreements, the unifying entity could manage private property to the benefit of the land owner, property managers, and district. Given that background, the following outlines the guiding principles:

- Parking solutions will positively impact existing and future commercial interests.
- District parking solutions will not have a negative impact on residential neighborhoods.
- Short-term parkers shall be provided the most convenient and accessible spaces (but not necessarily "free").
- Long-term parkers shall be provided less convenient, but safe and strategically concentrated off-street parking locations, at no/low cost.
- Public parking education campaign to include print and online media and the creation of a parking information website.
- County, BCRA, and local stakeholders to continue discussion through the creation of parking advisory committee to include residents
- BCRA to play a greater role in on-street and off-street parking management and policy development.
- County to work with BCRA and stakeholders to monitor parking performance and modify parking management strategies when necessary
- Parking solutions and overall project to operate at a minimum of a "net zero" operating profit or loss.
- Parking solutions to support, where feasible, bike, walk, and public transit initiatives.

Excluded from this list of guiding principles is the public sector building a parking structure. As noted in the introduction, the purpose of the study is to collect sufficient information to develop an immediate and near-term parking management plan. While many municipalities have built parking structures that support the economic and environmental well-being of a community, the data and interviews with community stakeholders suggests that this strategy is not warranted at this time.

Parking Management Action Plan

The following offers a step-by-step process by which the County, BCRA, and Catonsville's commercial and residential stakeholders, can achieve and sustain the goals of its public parking program. For each step,

DESMAN has identified the lead agency responsible for its implementation, and a description of task requirements. Given the comprehensive nature of this assignment, DESMAN will not be providing applicable equipment or signage designs/specifications, public/private sector lease agreement examples, parking code examples, or cost and revenue estimates. Those far more detailed and demanding products would be developed by the BCRA, County, and others, if and when those actions are implemented.

Step 1: Create a Parking Advisory Committee

Lead Agency: Baltimore County Revenue Authority

Action: Given that the parking system in Catonsville primarily consists of privately owned and operated parking lots, it is important that community leaders support and promote shared parking management strategies as those opportunities arise. Additionally, presuming that the County and/or BCRA will be more involved in day-to-day parking operations than at present, it is important that a community led group help define and prioritize the improvements that the County, BCRA, and private sector may need to explore. This would be an advisory committee that includes business owners, developers, residents, the Chamber of Commerce, County staff, and a representative of the BCRA. The committee could be limited to eight to ten members who meet once a month or as necessary to discuss important issues and draft potential solutions to those challenges. Committee members would informally communicate with their Catonsville friends, family, and associates to gather perspective so that a variety of opinions are presented during these meetings. Topics to be discussed could be minor in nature, such as the placement of a single parking directional/wayfinding sign, or of a larger context, such as the pricing of on-street parking meters.

Step 2: Curbside Enforcement

Lead Agency: Baltimore County/BCRA

Action: BCRA to work with Baltimore County and the County's Budget and Finance Department to transfer/share responsibility for curbside parking enforcement. Presently, the Budget and Finance Department is responsible for curbside enforcement. While DESMAN did not audit that department's parking enforcement program, it was uniformly agreed by all parties that current enforcement efforts are lacking. And though the County could be encouraged/directed to improve upon its current enforcement efforts, the BCRA is far better suited to handle this responsibility. More importantly, and as will be noted later in this management plan, the BCRA is uniquely positioned to manage both on- and off-street parking in a unified and coordinated manner where pricing, signage, and management/enforcement works to maximize the performance of both types of parking assets. This also complies with the desire to create a single-source responsibility center which is a goal of any public parking program and a fair but sustainable parking market rate.

Step 3: Continue/Expand Existing Shared Parking Program

Lead: BCRA

Action: As noted previously, DESMAN applauds the efforts of the Catonsville Parkship to create pockets of publicly accessible parking through its after-business hours shared parking program. However, the BCRA is far better suited to handle this responsibility as one of the charters of the Authority is the acquisition and/or leasing of private property for the development and management of publicly accessible parking. While the BCRA would not be purchasing any property under this step, it would develop contractual lease parking management agreements with the property owner. Under management of the BCRA, these after business hour public lots would operate symbiotically with the on-street program and other public parking partners as part of the larger, more effective parking system. Additionally, the BCRA could include wayfinding and directional signage, rates, periodic maintenance/cleaning services, and enforcement. In return, and separate from any financial remuneration, the property owner would obtain dedicated parking professional services and be relieved of the burden of day-to-day management and maintenance.

Step 4: Public/Private Parking Management

Lead: BCRA

Action: As an extension to Step 3, Step 4 continues to offer additional shared use parking opportunities but through expansion of the after-business hours shared parking management program. As noted above, the BCRA is able to acquire and/or lease public and private property, and enter into management agreements with the property owners. The BCRA has a proven track record of success in this circumstance. Parking revenue sharing needs to occur in order for this to happen, as the BCRA cannot engage in this partnership if they are expected to operate at a financial loss/burden.

Step 5: Increase Meter Parking Rates

Lead: BCRA/Baltimore County

Action: Presently, the BCRA administers 102 curbside parking meters with hourly rates set at \$0.50. Off-street parking in private lots is complementary (free). Posted duration is two hours. Based on information provided by the BCRA, the on-street two-hour meter program is not performing as anticipated, as many vehicles exceed the posted parking duration, while others fail to feed the meter. Both of these behaviors are a violation of the County Code. While less than desirable levels of parking enforcement have the greatest impact on this situation, it is DESMAN's opinion that the current \$0.50 hourly rate is insufficient to encourage appropriate parking behavior with or without improved enforcement. Furthermore, and as will be noted under Step 8, establishing fair and effective off-street parking rates is based primarily on the on-street parking value and rate. Curbside parking is generally considered the most valuable, given its location and visibility to the driving public. Parking rates for off-street parking should be slightly less in cost than on-street parking in an effort to encourage people to park in these less desirable locations.

Under this step, therefore, DESMAN recommends that on-street metered parking rates should increase initially to \$1.00 per hour. Depending on meter performance and their support for area businesses, that rate should increase in increments of \$0.25 where and when appropriate to cover increases in annual operation costs, and to support other aspects of Catonsville’s public parking program.

Step 6: Increase Meter Hours of Operation

Lead: BCRA/Baltimore County

Action: Presently, curbside metered parking restrictions exist between 8AM and 6PM Monday through Saturday. After 6PM, there are no limits on parked duration. However, parking activity was greatest during the early evening hours, which given the number of restaurants, bars, and other evening establishments, is not surprising. Therefore, it is recommended that the County extend parking management strategies/restrictions beyond 6PM to, initially, 8PM. Should future assessments of parking performance reveal that parking demands continue to climb later in the evening, the BCRA, with input from the County and the Catonsville parking advisory committee, would increase meter hours of operation to correspond to periods of significant parking activity. In addition to improving parking management during peak hours, this step would likely result in an increase in meter revenue, which would support other components of the parking management plan.

Figure 12 - Existing Parking Meter



Step 7: Centralized Employee Parking Permit Program

Lead: BCRA

Action: Whether through property acquisition or shared management, a key to the parking management program, and one of the guiding principles referenced earlier, is satisfying employee parking demands in more peripheral locations. This would ensure that new and infrequent short-term visitors (aka, shoppers) can more easily find parking near their destination. Under this program, existing and future employees to those businesses that do not have sufficient parking for both its customers and employees would be directed by the business owner/manager to register their vehicle through the BCRA to obtain a parking permit designated to park in one or more peripheral parking lots.

Figure 13 - Representative Employee Parking Permit Decals, Hangtags, and Signage



Step 8: Melrose Avenue Pedestrian Improvements

- Lead:** Baltimore County/State Highway Administration
- Action:** While the BCRA can be responsible for a significant number of parking management related responsibilities, improvements to the public right-of-way, and along Frederick Rd., falls under the purview of Baltimore County and/or the SHA. Therefore, it is DESMAN's recommendation that the County work with affected property owners to improve vehicular and pedestrian connections to the public parking lot at E. Melrose Ave, previously referred to as the Department of Social Services overflow lot. As noted in Steps 6 and 7, encouraging long-term parkers to park in more remote locations improves parking access for short-term parkers. However, pathways connecting this lot to Frederick Rd. are a challenge as there is no sidewalk along Melrose Ave. Furthermore, there is little to no lighting along this road. Ideally, revenue from public parking operations would be sufficient to support these capital improvements, but given current parking rates (\$0.50/hour for on-street and "complimentary" in surface lots) plus low levels of utilization, make it unlikely that these improvements can be financed in this manner.

Figure 14 - East Melrose Ave. Facing West



Step 9: Parking Directional Signage

- Lead: Baltimore County/State Highway Administration
- Action: Like Step 7, any improvements that relate to the public right-of-way must be the primary responsibility of the County and, where required, SHA. Signage to long-term and short-term lots will need to be installed to direct those parkers to appropriate locations. For purposes of lot identification, orientation, and performance tracking, the lots themselves should be assigned a logical and easy to remember code or reference such as “Lot A”, “The Melrose Lot”, or some other designation. This is suggested for when there will be a public parking program in the future. As noted previously, there are currently no public lots in Catonsville.

Figure 15-Sample Fixed Parking Directional SignageStep 10: Establish Parking Market Rates

- Lead: BCRA/Baltimore County
- Action: Presuming that a single-source responsibility is achieved through BCRA on-street and off-street parking management and that there is a critical mass of publicly managed off-street facilities, the BCRA should use the current metered parking rate on Frederick Rd. to introduce hourly and monthly permit parking rates for the publicly managed lots. Generally speaking, on-street parking is more convenient and therefore more valuable than off-street spaces. In Catonsville, that may not always be the case, given the location of many commercial businesses, but for the purpose of this assignment, it is still a good rule to follow. Therefore, if curbside metered parking is \$0.50/hour with a maximum time limit of two hours, then the equivalent cost in a surface lot could/would be \$0.25/hour and a maximum duration of four hours.

Ideally, a successful BCRA-managed off-street parking program would encourage private sector property owners to also manage their property in a similar manner. The property owner could choose to keep parking for its tenants and their customers complimentary/free through employee permit and customer validation programs, but non-tenants/employees would be required to pay a fee.

Step 11: Pay-by-Cell Merchant Parking Validation Program

Lead: BCRA

Action: Presently, the BCRA and Catonsville employ ParkMobile to offer a pay-by-cell option at its parking meters. Pay-by-cell programs are basically smart phone applications that permit the user to pay for parking through a digital account. The parking transaction includes the fee for parking (which is imposed and collected by the BCRA), and a convenience service fee which is imposed and collected by ParkMobile. This digital payment app provides significant flexibility in operations and management, and could include merchant validation. Merchants who choose to participate in the program would purchase from the BCRA an allotment of pre-paid parking codes. The cost to the merchant could be equal to the current meter rate or be slightly reduced as an incentive for merchants to prepay for their customers' benefit. For example, a customer that purchases \$20 or more of goods and services could receive a pay-by-cell validation code that provides one hour of metered parking, presently \$0.50/hour. The merchant would either pay the full market rate or some lesser value. Without assigning a value for the merchant, they and their employees might be tempted to misuse the program by handing out parking validation codes to their friends and family for free.

However, like any parking meter program, the user prepays for parking before they travel to their destination. Therefore, the merchant validation code that is provided by the business owner would only be good for the next time the customer parks at a meter in Catonsville, in effect giving the customer an incentive to come back to Catonsville as their parking is prepaid.

Step 12: Codify Residential Parking Permit Program

Lead: BCRA/Baltimore County

Action: As noted previously, the study area boundaries did extend somewhat into residential neighborhoods, and the majority of stakeholders that attended the public meetings/responded to the online survey were residents. This was an anticipated outcome given the close relationship between residents and commercial interests. And like a dedicated bike lane on Frederick Rd. (to be presented), stakeholders were not overly enthused about the possibility of having to obtain a residential parking permit to be authorized to park on a residentially zoned street.

Under a residential parking permit program, residents would petition the County and/or BCRA for the creation of a residential parking permit program. Residents would need signatures from the homeowners that want to be part of the program. Next, the County or BCRA would conduct a study to determine if the petition meets the eligibility requirements. If met, the residents would receive/purchase annual or bi-annual permits. Alternatively, the residents and the BCRA could use license plate numbers as credentials. The County/BCRA would

then traverse through the permitted neighborhoods to ensure compliance. Additionally, residents that identify non-compliant vehicles would contact the BCRA/County for spot enforcement.

In all honesty, residential parking programs are not popular with the residents or the public agency responsible for its administration. Residents must obtain passes for themselves and their guests, a permit fee must be charged to fund its operation, the public agency must consistently monitor the area, and residents can be tempted to use the program to “blow the whistle” on a neighbor who may have too many cars. However, residential permit programs are effective at discouraging business district employees and visitors who are looking for free parking from parking on residential streets. Presuming there will be an expansion of fee-based parking services in Catonsville, and given the large number of restaurant employees that serve the area, it is anticipated that some residents will want such a program regardless of its less than desirable elements.

Honorable Mention - Frederick Ave. Dedicated Bike Lane

Lead: Baltimore County/State Highway Administration

Action: As part of the assignment, DESMAN briefly examined the capabilities of existing public transit services, bike, and micro-mobility alternatives, and discovered that there was/is a gap in bicycle trails and related infrastructure. During meetings with community stakeholders, DESMAN presented the relative pros and cons associated with the creation of a dedicated bike lane on a section of Frederick Rd. that conceptually attempts to fill that gap, with one of the cons being potential loss of valuable curbside parking. DESMAN has identified the following strategies for the county to enact.

- Install bike and pedestrian crossing at critical intersections along Frederick Road, namely Stanley Drive which becomes Park Drive and connects into Magruder Avenue. Install a bike lane along Magruder Avenue to run parallel with Frederick Road. These bike lanes would connect the #8 Streetcar Path with the Short Line Trail between the Hillcrest Elementary and Catonsville Elementary via Magruder Avenue.
- Extend the Short Line Trail to connect with the Christian Athletic Association along Ingleside Avenue.
- Extend the existing bike lane along Hilton Avenue to intersect with Frederick Road and Hillcrest Elementary.

It must be noted that there was little support for this program from the stakeholders present during the last of the public meetings. However, DESMAN kept this recommendation as an honorable mention candidate, as it illustrates the types of stress that curbside parking will experience as different uses for the public right-of-way compete for those spaces. Other examples of alternative uses of the public right-of-way include transit stops, parklets, dedicated transit lanes,

Uber, Lyft, bike parking corrals, loading zones, and curbside staging areas for vending/food trucks. Ultimately, the decision to remove curbside parking is made on a case-by-case basis with considerable input from those residents and businesses that may be impacted.

Summary of Findings & Recommendations

Figure 17 on the following pages provides a graphic illustration of how the twelve parking management plan steps would be applied to the business district, and conceptually includes those lots that could be part of the employee permit (red color coding) and new short-term/metered visitor lots (green). Please note that any reference to a particular lot being acquired by the BCRA through lease/management agreement for employee permit and/or additional metered parking is for illustration purposes only as a considerable amount of discussion and negotiation are required for this to happen.

As noted previously, the parking inventory, occupancy counts, and meetings/interviews with Catonsville's commercial and residential stakeholders suggest that parking issues in the business district are not driven by supply and demand challenges, but by the absence of a unifying presence and influence on parking management. If all parking in Catonsville were publicly accessible regardless of the parker's trip purpose, the community would realize a significant surplus of parking spaces. However, given property rights and responsibilities, property owners in Catonsville, like elsewhere in this country, are generally uncomfortable turning their property over to a government agency, either through land acquisition or management/lease agreement. That said, Catonsville, through the efforts of the Catonsville Parkship and a handful of publicly minded property/lot owners, has discovered a number of lots that can and will be part of a shared parking management program.

Organizationally speaking, and combined with the fact that there are very few publicly accessible spaces in Catonsville, solutions revolve around the BCRA and, to a lesser degree, Baltimore County, and their willingness and ability to play a far greater role in on- and off-street parking management regardless of who owns the property. As noted previously, the BCRA is uniquely structured and positioned to handle this responsibility. However, the BCRA and County currently do not control parking decisions in Catonsville, as 96% of the inventory is managed for the exclusive benefit of private property owners. Through the creation of a parking advisory committee to include a variety of stakeholders (private property owners/developers, property managers, and residents), the ultimate goal of unifying Catonsville's parking program should be that much easier to achieve. Presuming the initial success of a small number of well positioned shared parking lots and the parking revenue that they could generate, it is likely that additional parking lot owners will see the benefits and welcome the opportunity to be part of the public parking program. However, should community stakeholders and the County decide sometime in the future that new/additional public parking facilities (like a centrally located lot or a parking structure) are warranted, the information contained in this report and the accompanying spreadsheet-based land use parking demand model, could be referenced to determine how many parking spaces might be required/desired and how those spaces should be managed.

Conceptual Parking Management Improvement Plan



- 1. Create Parking Advisory Committee
- 2. BCRA meter enforcement
- 3. BCRA manage "shared parking" program
- 4. BCRA manage centrally located lot through management agreement
- 5. Increase Meter Parking Rates
- 6. Extend on-street meter hours of operation to 8PM
- 7. BCRA manage long-term parking
- 8. BCRA/County improve lots and pathways to/from peripheral location
- 9. BCRA/County create and install public parking directional signage
- 10. Establish On- and Off-Street Parking Rates
- 11. BCRA introduce a pay-by-cell based merchant parking validation program
- 12. County codify residential parking permit program

APPENDIX EXHIBIT A
EXISTING PARKING INVENTORY & OCCUPANCY DATA

Block and Lot Coding Map



Friday Hourly Off-Street Occupancy by Space Type (Regular vs. ADA)

Lot	Space Type	Parking Inventory	12:00 PM-2:00 PM	2:00 PM-4:00 PM	4:00 PM-6:00 PM	6:00 PM-8:00 PM
LOT-001	Regular	5	3	5	3	3
LOT-002	Regular	72	41	53	50	42
LOT-002	Handicap	4	3	4	2	1
LOT-003	Regular	60	50	46	47	39
LOT-003	Handicap	5	3	2	0	0
LOT-004	Regular	49	26	33	30	31
LOT-004	Handicap	3	0	2	2	0
LOT-005	Regular	281	194	211	209	196
LOT-005	Handicap	6	5	4	4	2
LOT-006	Regular	88	52	56	51	49
LOT-006	Handicap	6	3	3	2	3
LOT-008	Regular	40	24	27	28	22
LOT-009	Regular	15	4	6	5	6
LOT-010	Regular	26	20	21	20	18
LOT-010	Handicap	2	0	0	0	0
LOT-011	Regular	75	56	49	53	50
LOT-011	Handicap	5	3	2	2	1
LOT-012	Regular	41	28	29	26	27
LOT-013	Regular	32	17	21	19	17
LOT-014	Regular	10	4	5	4	3
LOT-015	Regular	15	8	8	7	10
LOT-016	Regular	25	14	14	17	11
LOT-017	Regular	59	27	31	37	32
LOT-017	Handicap	1	0	1	1	0
LOT-018	Regular	29	12	13	11	13
LOT-018	Handicap	2	0	0	1	0
LOT-019	Regular	19	6	7	10	10
LOT-019	Handicap	1	0	0	0	0
LOT-020	Regular	14	6	5	6	3
LOT-020	Handicap	1	0	0	0	0
LOT-021	Regular	92	41	56	52	47
LOT-021	Handicap	2	0	1	0	0
LOT-022	Regular	27	12	11	10	11
LOT-023	Regular	32	21	24	27	22
LOT-023	Handicap	1	0	0	1	1
LOT-024	Regular	90	62	68	64	60
LOT-025	Regular	95	39	44	48	43
LOT-025	Handicap	2	1	1	1	1
LOT-026	Regular	273	139	162	180	173
LOT-026	Handicap	15	8	10	6	6
LOT-027	Regular	80	33	40	46	42
LOT-028	Regular	98	29	41	46	42
LOT-028	Handicap	9	0	2	0	0
LOT-029	Regular	14	11	9	12	10
LOT-029	Handicap	1	1	0	0	0
LOT-030	Regular	19	9	9	11	8
LOT-030	Handicap	1	0	0	0	0
LOT-031	Regular	41	22	26	29	27
LOT-031	Handicap	1	0	0	0	0
LOT-032	Regular	161	94	108	112	101
LOT-032	Handicap	17	6	7	4	5
LOT-033	Regular	42	9	14	17	12
LOT-034	Regular	53	33	29	32	30
LOT-034	Handicap	2	0	0	0	0
LOT-035	Regular	79	13	17	22	19
LOT-035	Handicap	5	1	2	1	0
LOT-036	Regular	17	7	9	9	8
LOT-036	Handicap	1	1	1	1	0
LOT-037	Regular	20	13	11	10	9
LOT-037	Handicap	2	1	1	1	1
LOT-038	Regular	14	9	7	9	5
LOT-038	Handicap	1	0	0	0	0
LOT-039	Regular	24	13	14	14	12
LOT-040	Regular	10	4	4	6	3
LOT-041	Regular	13	9	10	10	7
LOT-042	Regular	12	8	7	6	5
LOT-043	Regular	45	31	36	34	29
LOT-043	Handicap	4	1	1	0	0
LOT-044	Regular	13	6	7	7	4
LOT-044	Handicap	1	0	0	0	1
LOT-045	Unmarked	4	4	4	2	2
LOT-046	Regular	47	28	27	31	28
LOT-046	Handicap	4	2	1	1	0
LOT-047	Regular	15	6	7	7	5
LOT-047	Handicap	2	0	0	0	0
LOT-048	Unmarked	8	6	8	7	3
LOT-049	Unmarked	7	7	7	7	7
LOT-050	Regular	23	11	13	11	9
LOT-050	Handicap	2	0	0	0	0
LOT-051	Regular	15	9	9	11	10
LOT-052	Regular	23	11	13	16	9
Total		2570	1380	1536	1568	1406

Friday On-Street Meter Inventory and Occupancy Data

Block Code	Block Face	Parking Inventory	Number of Observed Parked Vehicles							
			12PM	1PM	2PM	3PM	4PM	5PM	6PM	7PM
A	N	3	2	0	2	2	0	0	0	0
B	N	8	2	2	2	3	4	8	6	6
C	N	9	8	6	6	7	6	9	9	9
E	N	15	7	8	8	8	11	13	12	13
G	N	12	5	7	6	4	7	6	3	3
K	S	3	0	2	1	0	0	0	0	0
L	E	4	3	1	0	0	1	3	4	2
L	S	20	13	13	11	16	18	14	15	16
M	E	5	3	3	2	2	0	0	1	1
M	W	6	5	4	1	5	4	4	6	6
M	S	8	6	7	6	5	5	5	7	8
N	S	5	1	2	0	0	0	0	3	4
O	S	4	2	2	4	2	0	0	0	0
Total		102	57	57	49	53	55	58	68	68



Saturday Hourly Off-Street Occupancy by Space Type (Regular vs. ADA)

Lot	Space Type	Inventory	12:00 PM-2:00 PM	2:00 PM-4:00 PM	4:00 PM-6:00 PM	6:00 PM-8:00 PM
LOT-001	Regular	5	5	2	0	0
LOT-002	Regular	72	6	6	9	5
LOT-002	Handicap	4	0	0	0	0
LOT-003	Regular	60	50	39	46	42
LOT-003	Handicap	5	2	0	1	0
LOT-004	Regular	49	9	12	9	12
LOT-004	Handicap	3	0	0	0	0
LOT-005	Regular	281	62	68	73	81
LOT-005	Handicap	6	0	0	0	0
LOT-006	Regular	88	43	23	24	28
LOT-006	Handicap	6	2	0	1	1
LOT-008	Regular	40	40	40	40	40
LOT-009	Regular	15	15	10	13	12
LOT-010	Regular	26	10	9	9	7
LOT-010	Handicap	2	1	1	0	0
LOT-011	Regular	75	1	1	1	0
LOT-011	Handicap	5	0	0	0	0
LOT-012	Regular	41	12	12	12	12
LOT-013	Regular	32	6	5	5	4
LOT-014	Regular	10	1	0	0	0
LOT-015	Regular	15	1	1	1	0
LOT-016	Regular	25	13	12	12	12
LOT-017	Regular	59	21	28	38	45
LOT-017	Handicap	1	0	0	0	0
LOT-018	Regular	29	9	7	7	6
LOT-018	Handicap	2	0	0	0	1
LOT-019	Regular	19	1	1	2	2
LOT-019	Handicap	1	0	0	0	0
LOT-020	Regular	14	3	4	6	5
LOT-020	Handicap	1	1	0	0	0
LOT-021	Regular	92	4	0	0	0
LOT-021	Handicap	2	0	0	0	0
LOT-022	Regular	27	12	10	6	3
LOT-023	Regular	32	22	10	2	7
LOT-023	Handicap	1	0	0	0	0
LOT-024	Regular	90	18	16	10	9
LOT-025	Regular	95	4	13	16	26
LOT-025	Handicap	2	0	0	0	0
LOT-026	Regular	273	12	119	127	143
LOT-026	Handicap	15	4	4	4	4
LOT-027	Regular	80	38	43	47	50
LOT-028	Regular	98	14	23	24	26
LOT-028	Handicap	9	0	0	0	0
LOT-029	Regular	14	2	2	2	2
LOT-029	Handicap	1	0	0	0	0
LOT-030	Regular	19	5	4	2	3
LOT-030	Handicap	1	1	1	1	1
LOT-031	Regular	41	3	6	2	2
LOT-031	Handicap	1	0	0	0	0
LOT-032	Regular	161	8	5	7	5
LOT-032	Handicap	17	0	0	0	0
LOT-033	Regular	42	9	3	3	3
LOT-034	Regular	53	3	0	0	0
LOT-034	Handicap	2	0	0	0	0
LOT-035	Regular	79	6	0	0	0
LOT-035	Handicap	5	0	0	0	0
LOT-036	Regular	17	0	0	0	0
LOT-036	Handicap	1	0	0	0	0
LOT-037	Regular	20	3	0	0	0
LOT-037	Handicap	2	0	0	0	0
LOT-038	Regular	14	1	4	0	0
LOT-038	Handicap	1	0	0	0	0
LOT-039	Regular	24	0	0	1	0
LOT-040	Regular	10	4	4	2	2
LOT-041	Regular	13	6	7	4	4
LOT-042	Regular	12	8	6	4	5
LOT-043	Regular	45	0	0	0	0
LOT-043	Handicap	4	1	0	0	0
LOT-044	Regular	13	7	5	6	6
LOT-044	Handicap	1	0	0	0	0
LOT-045	Unmarked	4	2	2	3	4
LOT-046	Regular	47	12	14	16	18
LOT-046	Handicap	4	1	1	1	1
LOT-047	Regular	15	15	15	14	15
LOT-047	Handicap	2	0	1	0	0
LOT-048	Unmarked	8	3	4	3	3
LOT-049	Unmarked	7	4	4	2	2
LOT-050	Regular	23	0	4	4	2
LOT-050	Handicap	2	0	0	0	0
LOT-051	Regular	15	15	15	15	15
LOT-052	Regular	23	22	21	18	20
Total		2570	583	647	655	696

Saturday On-Street Meter Inventory and Occupancy Data

Block Code	Block Face	Parking Inventory	Number of Observed Parked Vehicles							
			12PM	1PM	2PM	3PM	4PM	5PM	6PM	7PM
A	N	3	2	1	3	0	0	0	0	0
B	N	8	6	3	6	2	2	5	6	8
C	N	9	9	9	9	3	5	8	8	8
E	N	15	14	14	13	15	12	14	13	15
G	N	12	7	5	4	4	3	6	7	6
K	S	3	0	0	0	2	2	1	3	2
L	E	4	3	3	4	1	3	4	3	4
L	S	20	18	19	17	17	14	18	18	19
M	E	5	2	2	1	0	2	5	5	5
M	W	6	6	6	5	6	4	6	5	6
M	S	8	8	6	8	6	7	7	7	7
N	S	5	0	2	1	0	0	1	4	5
O	S	4	1	2	4	2	0	0	0	0
Total		102	76	72	75	58	54	75	79	85

