Final Report
Downtown Frederick Needs Assessment, Recommendations and Implementation Plan

Submitted to:

The City of Frederick, Maryland

Submitted by:

DESMAN
ASSOCIATES

March 12, 2003

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SECTION 1 – ASSESSMENT OF EXISTING PARKING CONDITIONS

Introduction

DESMAN Associates was contacted by the City of Frederick, Maryland to perform a study of existing and future parking need, assess the operational efficiency of the public parking system, evaluate opportunities to develop additional parking facilities, and estimate the financial strengths and weaknesses of the Parking Department's fund balance as a tool to support parking related development. This section of the report presents the existing parking inventory (on vs. off street), peak weekday parking utilization, and public vs. private/restricted facility ownership and operations. The inventory and utilization information will be summarized to identify relative parking surplus and deficit conditions. This information represents the foundation upon which future needs will be projected and the operational, developmental, and fiscal review and recommendations will be based.

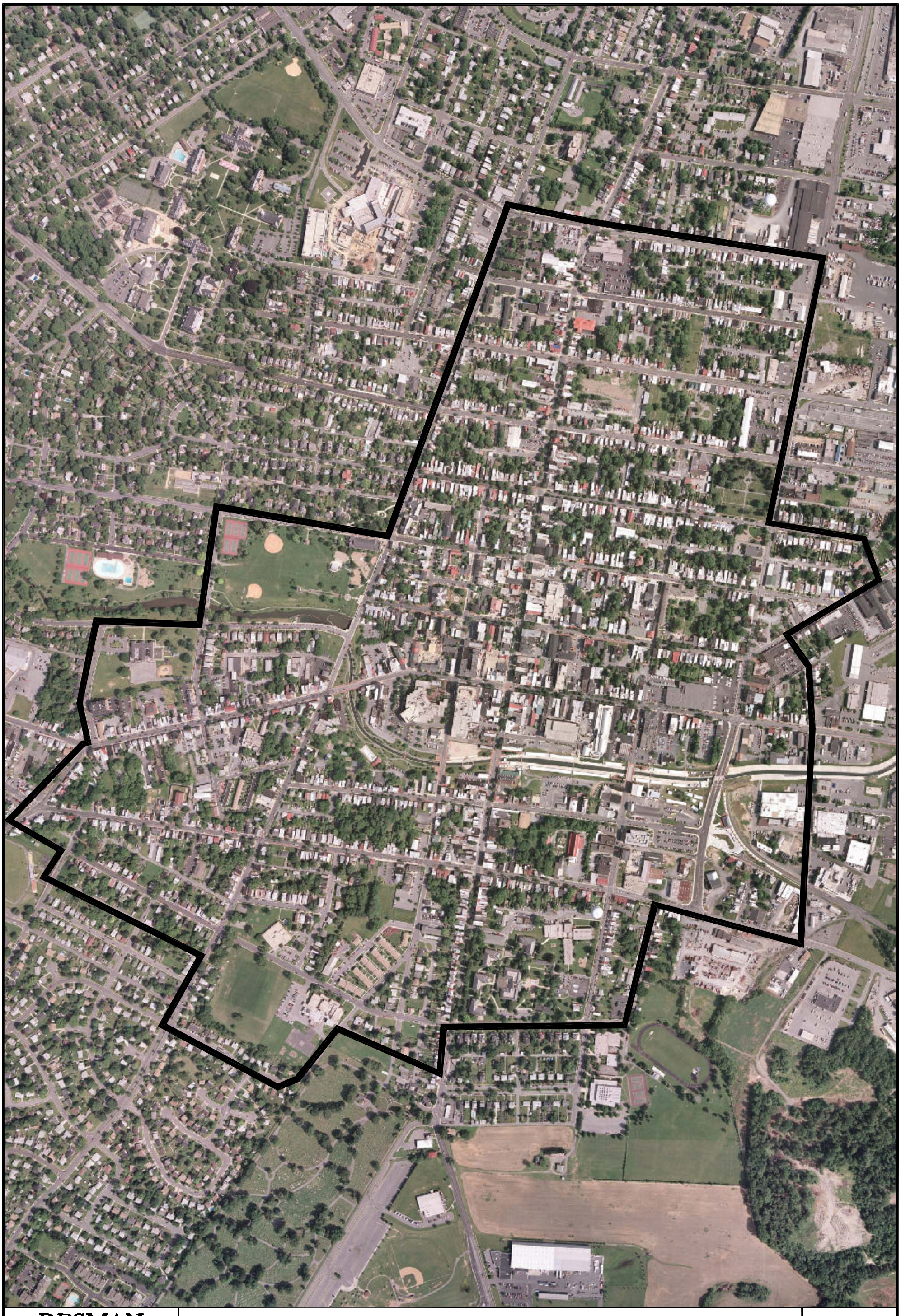
Study Area Boundaries

The primary study area is bounded by Seventh Street to the North, Clarke Place and Madison Street to the South, Wisner and East Street to the East, and Bentz and Jefferson Street to the West. Along with studying the primary area as a whole, a core area was more intensely studied. The boundary for the core area is Fourth Street to the North, All Saints Street to the South, East Street to the East and Bentz Street to the West. The aerial photo on Exhibit 1a and the map on Exhibit 1b illustrate the primary and core study area boundaries along with block coding that was used to collect the data.

Off-Street Parking

A detailed inventory of public and private lots and garages was performed for all off-street parking within the study area.

The parking supply in any municipality consists of publicly available off-street parking (structures and lots), private/restricted off-street parking, and on-street parking. Publicly available parking is defined as those spaces available to the general public regardless of



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Study Boundary-Aerial Photo

EXHIBIT:

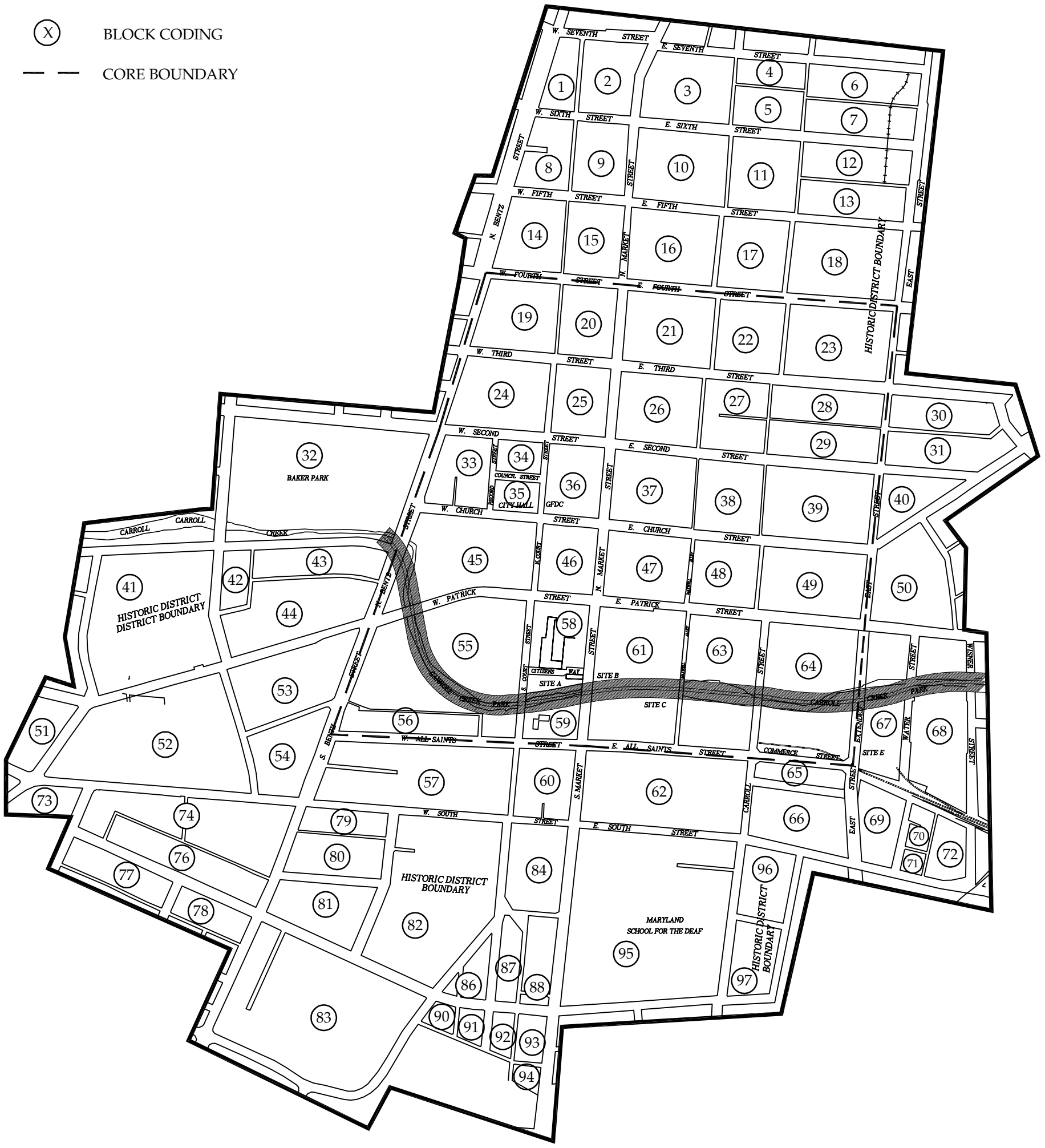
1a

LEGEND:

STUDY BOUNDARY

(X) BLOCK CODING

CORE BOUNDARY



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Study and Core Boundary and Block Coding

EXHIBIT:
1b

trip purpose. Thus, a publicly available lot or structure could be publicly or privately owned and operated. In contrast, private/restricted parking is only available to specific users. An example would include the parking lot for the post office as that lot is reserved specifically for post office patrons and its employees. All other users are prohibited. On-street parking is obviously available to anyone regardless of trip purpose. However, Frederick has established restrictions on on-street parking in order to encourage turnover and maximize utilization along retail corridors or to restrict parking to specific users along residential corridors. On-street parking along commercial corridors is best suited to serving short-term parking (2 hours or less) given its convenience and access. Therefore, long-term parking (employees) is discouraged through meter rates, time limits, and enforcement.

These definitions are important when determining a downtown's available parking supply and therefore, peak period surplus or deficit conditions. Parking which is restricted to specific users cannot be counted on to satisfy the larger needs of the general public.

Background on Parking Inventory and Utilization Surveys

To give a clear understanding of the value and findings associated with parking inventory and utilization data, a description of how DESMAN collected the parking data is needed.

In all studies, DESMAN attempts to inventory all parking within a study area; public, private, on-street and off-street. During that process DESMAN identifies publicly owned and publicly available parking as well as those facilities that are private/restricted. For this assignment, DESMAN used CADD drawings of downtown Frederick along with aerial photographs to code the study area and identify all the lots and garages. DESMAN personnel then collected parking inventory and utilization data by physically accessing lots and structures where permitted.

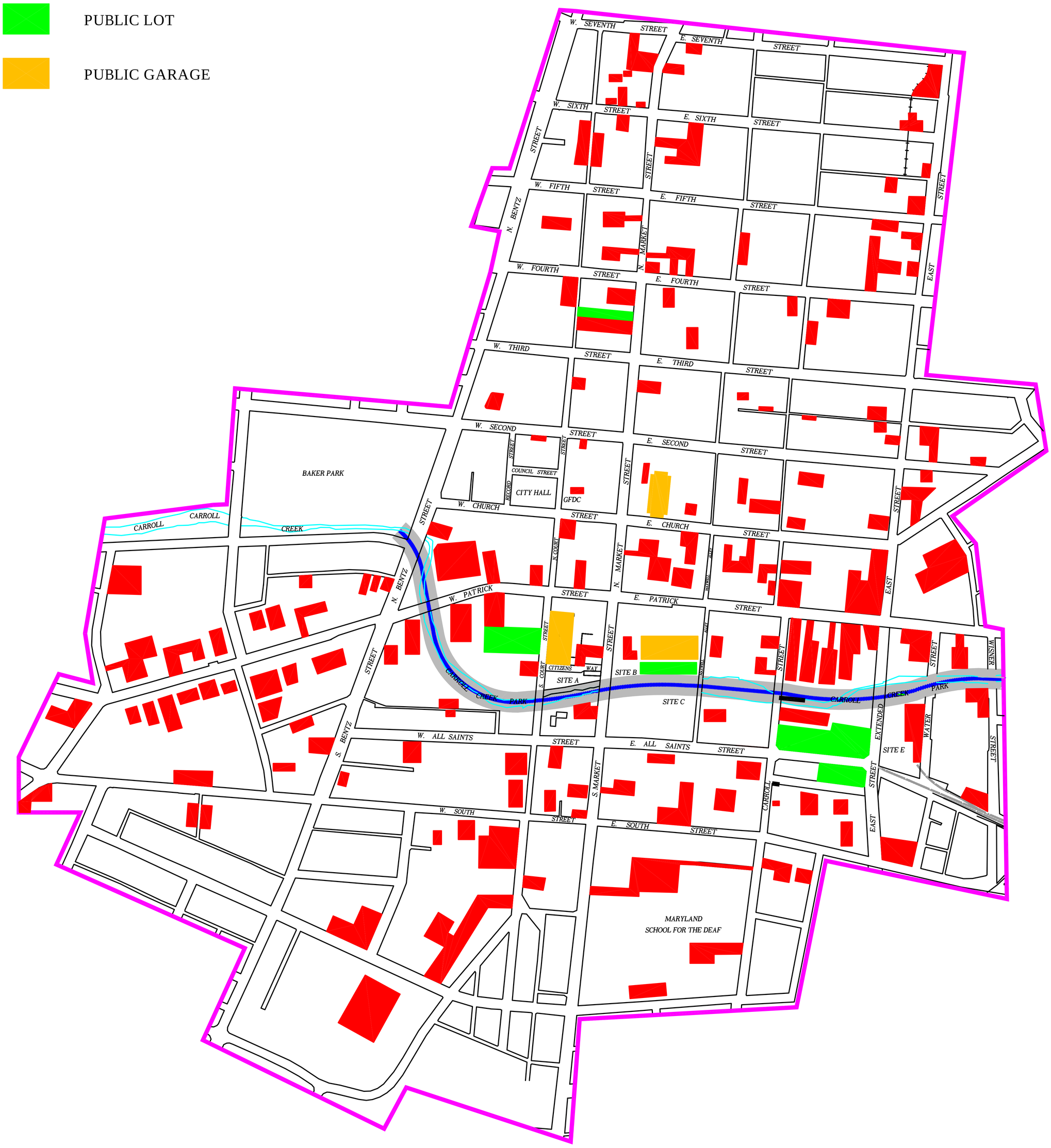
Exhibit 2 identifies the location of all surface lots and parking structures within the study area boundaries. The private parking lots are coded red, public parking lots are coded green, and the public parking structures are coded yellow.

LEGEND:

PRIVATE LOT

PUBLIC LOT

PUBLIC GARAGE



DESMAN ASSOCIATES 8614 WESTWOOD CENTER DRIVE, SUITE 300 VIENNA, VIRGINIA 22182 Tel: (703) 448-1190 Fax: (703) 893-4067 A DIVISION OF DESMAN, INC. NEW YORK CHICAGO WASHINGTON, D.C. LOS ANGELES BOSTON CLEVELAND HARTFORD BALTIMORE	Location of Publicly Available and Private/Restricted Parking Lots and Garages (Structures)	EXHIBIT: 2

Table 1 presents the actual number of publicly available and private/restricted off-street parking within the study area. Detailed block by block data that noted the location, type (lot or garage), capacity, operation (public vs. private), and restriction was also collected and is included in the appendix section of this report (Appendix Exhibit A). Based on this survey, a total of 1,551 publicly available and 3,912 private/restricted off-street spaces exist within the study area, for a total of 5,463 off-street spaces.

Table 1 - Supply of Off-Street Publicly Available and Private/Restricted Parking

	Publicly Available	Private/Restricted	Total Off-Street Supply
Downtown Frederick	**1,551**	**3,912**	**5,463**

As is typical of most urban areas, the number of private/restricted parking spaces is greater than the number of publicly available spaces. This is simply the result of a developer's or property owner's requirements for on-site parking because of zoning requirements or market pressures for a project's "vehicular accessibility". For example, leasing agents will have much greater success renting a property to a prospective commercial or residential tenant if that property has sufficient on-site parking. As such, the developer hopes to maximize parking on-site at the lowest cost possible. However, as Frederick represents a historic downtown, formed long before the dominance of the single occupancy automobile culture, on-site parking is limited if not physically impossible to provide. As a result, property owners and developers pressure the municipality to provide the required parking "infrastructure". Nonetheless, nearly all commercial properties that can have on-site parking do provide those spaces (3,912), albeit in a private/restricted format.

Peak Period Utilization

A two hour interval on-street/garage parking occupancy survey was conducted on Thursday, May 30, 2002 between 8AM and 6PM in an effort to capture the typical weekday morning, peak, and afternoon core parking data. Using the aerials taking during the day of data collection between the hours of 11AM and Noon, peak period parking

occupancy data was collected for the off-street parking lots and on-street parking outside of the core area.

Appendix Exhibit B present the results of the peak period parking occupancy survey of off-street spaces on a block by block basis, while Table 2 presents a summary of off-street peak period utilization for both public and private parking facilities. In total, 3,436 of the 5,463 off-street spaces were occupied during the peak period of utilization, or only 63%. This would initially indicate that a large surplus of parking spaces presently exists. However, the majority of those spaces are restricted to specific user groups (private/restricted). An analysis of the public vs. private spaces illustrates a much different situation. Of the 1,551 publicly available spaces, 77% were occupied during the peak period, while only 57% of the 3,912 privately available spaces were occupied.

Table 2 - Summary of Off-Street Peak Period Utilization (Surplus or Deficit)

	Parking Supply	Peak Occupancy	%	Surplus/ Deficit	Operational Capacity (90%)	Surplus/ Deficit
Public	1,551	1,198	77%	353	1,396	198
Private	3,912	2,238	57%	1,674	3,521	1,283
Total	**5,463**	**3,436**	**63%**	**2,027**	**4,917**	**1,481**

A more in depth analysis of parking utilization and relative space surplus or deficit must consider a lot, garage or parking system's practical capacity. Practical capacity relates to the operational efficiency of a parking facility. A parking facility is perceived by its users to be at full operational capacity when occupancy levels reach 85-90%. Once this level is exceeded, potential parkers find difficulty in locating an available space. As a result, those individuals must continue to search, creating traffic flow problems and increasing the potential for vehicle/vehicle and vehicle/pedestrian conflicts. The effective and efficient turnover of convenient parking spaces is most successful when the supply of spaces exceeds the peak demand for those spaces by 10-15%. Note that for this study's purposes, DESMAN will use a more conservative practical capacity of 90%.

With that introduction, a more critical analysis of the public parking system would indicate that, at present, a surplus of only 198 spaces exists. While that surplus appears

sufficient within a city-wide public system of over 1,500 spaces, the fact is that public surplus exists within one single facility, the Carroll Creek Garage (only 351 of 545 spaces were occupied during the 11am-Noon period). Apart from the Carroll Creek Garage, the off-street public parking system is being pressed to its maximum practical capacity. Of the 1,006 remaining spaces, 847, or 84%, were occupied, representing a practical capacity surplus of only 58 spaces (1,006 * 90% - 947 spaces).

Additionally, the relatively low occupancy level (57%) associated with private/restricted lots is indicative of the protective nature of such facilities and their relationship to one owner/operator. For example, a parking lot that is owned by a restaurant that has a high demand in the evening and low demand during the daytime will exhibit low daytime occupancy figures. As that lot is reserved for restaurant patrons and employees, the law office next door, for example, that has high daytime demand will be unable to use that lot. As such, a significant supply of private/restricted spaces are unutilized even during the peak daytime period.

On-Street Parking

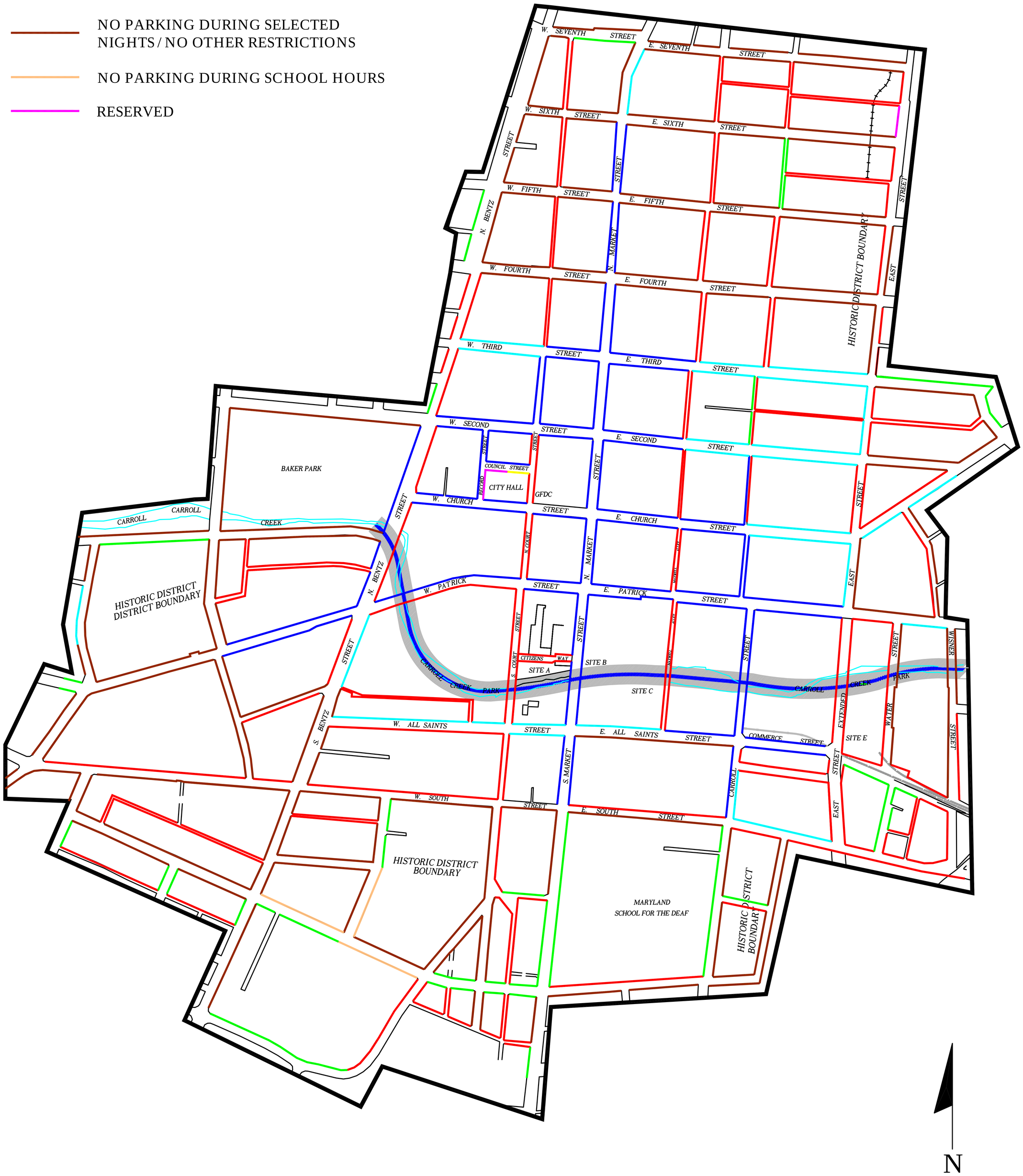
Like off-street parking, on-street parking spaces were inventoried and surveyed to determine their locations, restrictions, and peak weekday utilization. (Appendix Exhibit C) Typically, on-street parking is provided to expand upon the supply of spaces available to the general public and to serve those patrons who require high turnover, easy accessible locations. Traditionally, these spaces are intended to serve patrons of shops and restaurants. As such, restrictions (through meters and/or enforcement) are placed on the duration of stay a vehicle is allowed to remain parked.

Parking Inventory

Exhibit 3 presents a graphic illustration of the location and types of on-street parking restrictions in downtown Frederick. In addition to the parking restrictions noted on the graphic, there are other minor restrictions, including no parking on specified weekdays from Midnight – 7AM. It appears that the parking inventory is dominated by 2-hour metered and 2-hour non-metered spaces. A 2-hour duration is desirable given the above

LEGEND:

- NO PARKING
- 2 HOUR METER PARKING
- 2 HOUR PARKING
- NO RESTRICTIONS
- 1 HOUR METER PARKING
- NO PARKING DURING SELECTED NIGHTS / NO OTHER RESTRICTIONS
- NO PARKING DURING SCHOOL HOURS
- RESERVED



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On-Street Parking Restrictions and locations

EXHIBIT: 3

referenced intent of on-street parking, to encourage high turnover to maximize availability to shoppers, diners, and short-term visitors. It is interesting to note that there is a section of Council Street in front of City Hall and along Second Street in front of Baker Park that has 1-hour parking meters. Based on number of parking enforcement personnel currently on staff the 1-hour parking meters can not be effectively enforced.

Table 3 shows the surveyed number of on-street spaces by restriction. Of the total 3,355 on-street spaces in the study area, 661 (19.7%) are 2 hour metered spaces, 462 (13.8%) are 2 hour restriction spaces, and 1,785 (53.2%) have no restriction other then the above mentioned night restrictions. The spaces that have no restriction placed on them can be found outside the core study area on residential streets.

Table 3 - Summary of On-Street Parking Inventory and Parking Restrictions

2 Hour Meter Parking	2 Hour Parking	1 Hour Meter Parking	No Parking During School Hours	No Restrictions	No Parking Selected nights/no other restrictions	Reserved	**Total**
661	462	18	51	360	1785	18	**3355**
19.7%	13.8%	0.5%	1.5%	10.7%	53.2%	0.5%	100.0%

Peak Period Utilization

Appendix Exhibit D presents the peak period utilization figures by block for all on-street spaces while Table 4 summarizes those findings by parking restriction (1-hour, 2-hour, etc.). Overall, only 1,795 (54%) of the 3,355 on-street spaces were occupied. However, this total includes peripheral parking areas where the demand for parking is low. It also includes core parking areas where restrictions (residential only, no parking during school hours, etc.) exist. Therefore, a more focused analysis examines the utilization of parking by parking restriction (Table 4).

Table 4 - Summary of On-Street Parking Utilization by Parking Restrictions

	2 Hour Meter Parking	2 Hour Parking	1 Hour Meter Parking	No Parking During School Hours	No Restrictions	No Parking Selected nights/no other restrictions	Reserved	**Total**
Capacity	661	462	13	51	360	1785	23	**3355**
Peak Utilization	488	319	8	13	172	791	4	**1795**
	73.8%	**69.0%**	**61.5%**	**25.5%**	**47.8%**	**44.3%**	**17.4%**	**53.5%**

Of the 661 2-hour metered spaces, 488 (or 74%) were occupied during the peak period. Note, however, that this includes the metered spaces north and west of the core commercial area, where parking utilization was low (Market Street north of Fourth Street and Patrick Street west of Bentz Street for example). Along the core retail areas along Market, Church and Second Street, on-street parking occupancy figures were routinely in the 85-100% range.

Metered Space Turnover and Duration

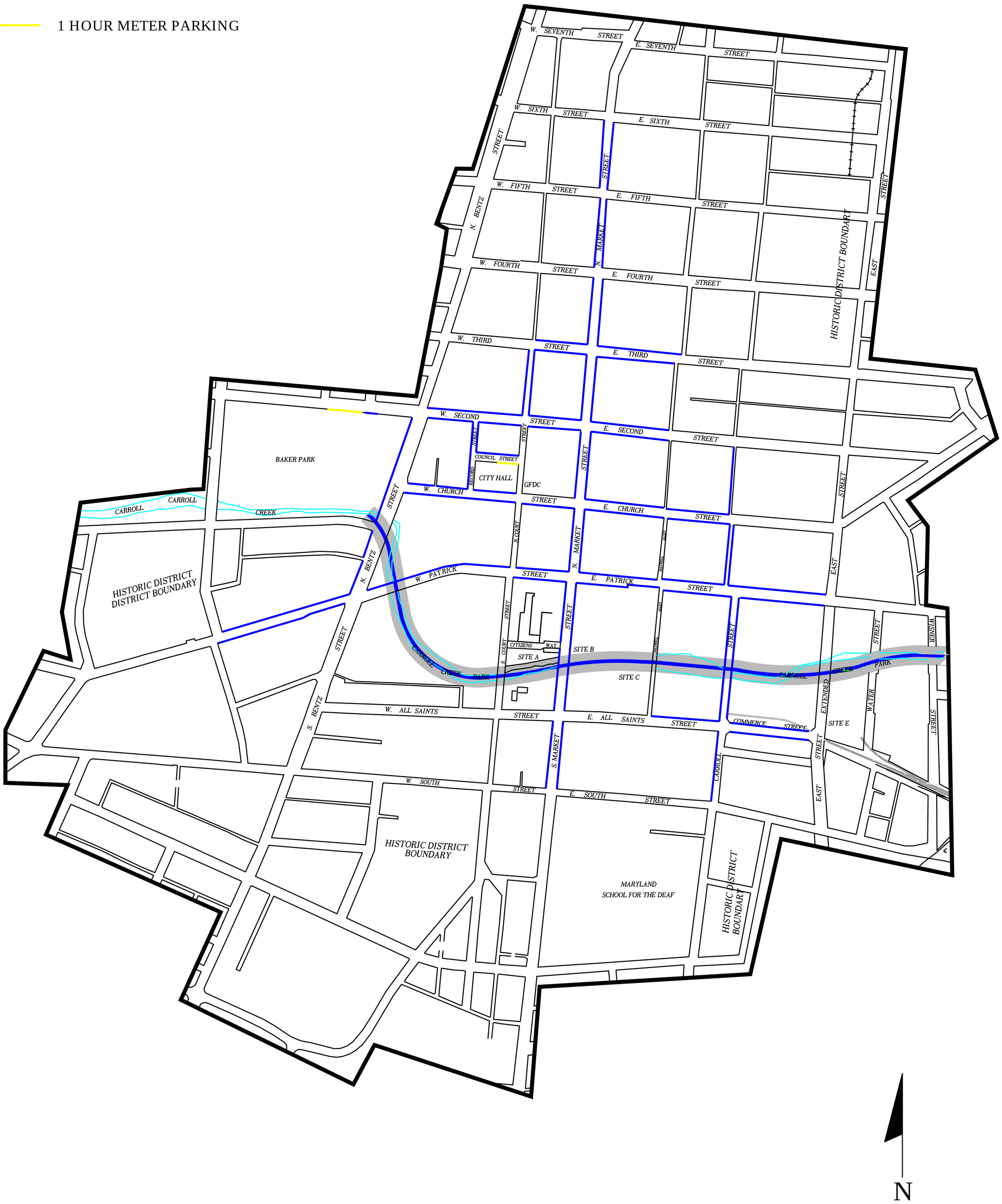
Exhibit 4 illustrates the downtown meter locations (1 and 2 hour) only. Also on May 30, 2002 between the hours of 8AM and 6PM a duration of stay survey along the high demand, high turnover streets where meters are located was conducted. Table 5 and Graph 1 shows that of the 1,693 vehicles that parked within the specific survey area, 1,431, or 84.5%, parked for less than 2-hours and 262, or 15.5%, parked for more than 2 hours. This means that 15.5% of the cars parking where in violation of the 2 hour restriction. While violations are bound to occur even in the most well managed on-street systems, DESMAN would suggest that a 5-10% violation rate in a 2-hour system is acceptable. A more in depth evaluation finds that the 70 surveyed spaces along Second Street have an even higher rate of violation as 59, or 23.2%, of the 254 total vehicles parked for longer than 2 hours.

Additionally, this analysis yields information on the overall turnover of spaces as indicated by the number of different vehicles that utilized a single space on average during the 10 hour (8am-6pm) survey. Overall, each of the surveyed on-street metered spaces served 4.7 vehicles on average. For perspective, a 2-hour space could serve 5 or more different vehicles during a 10 hour survey (10 hour survey divided by 2 hour durations). An evaluation of the street by street findings indicates that Second Street has the lowest turnover per space ratio compared with the other streets. This is indicative of the above mentioned duration of stay findings where a greater percentage of Second Street parkers exceed posted durations.

LEGEND:

2 HOUR METER PARKING

1 HOUR METER PARKING



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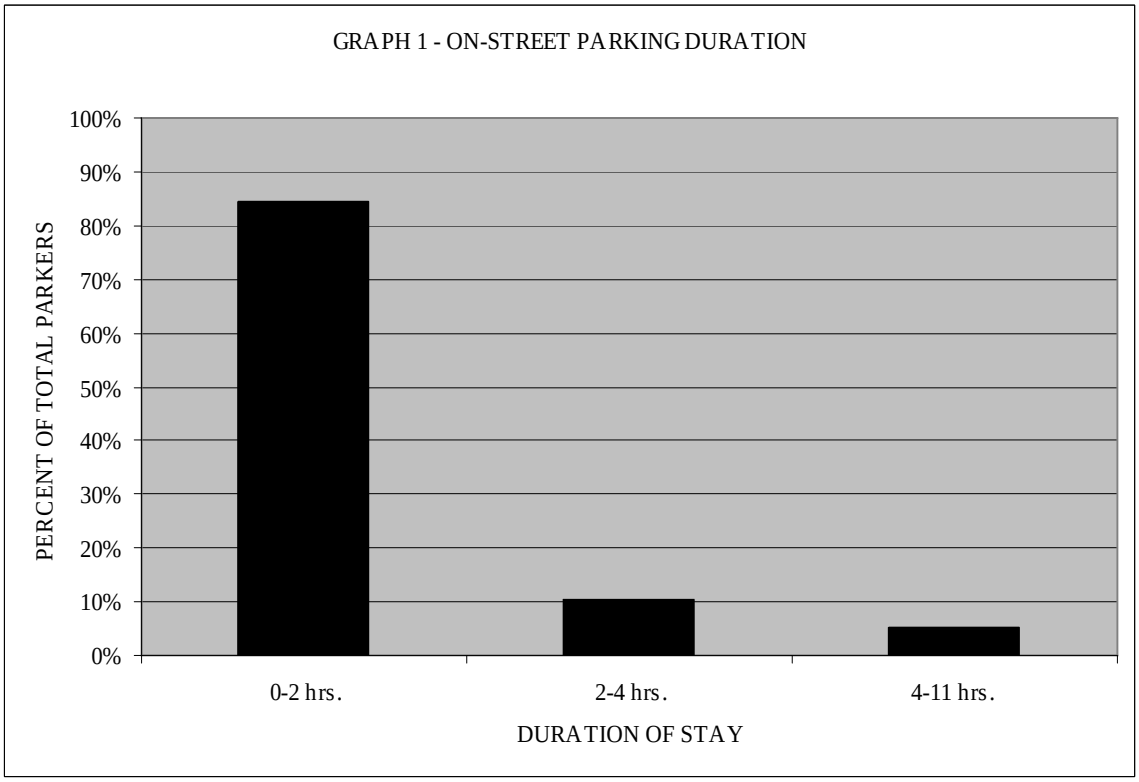
On-Street Metered Parking Locations

EXHIBIT:
4

TABLE 5 -ON-STREET DURATION OF STAY SURVEYS

	Capacity	0-2 hrs.	2-4 hrs.	4-11 hrs.	Total	Space Utilization
Market St.	109	487	52	17	556	5.1
Second St.	70	195	31	28	254	3.6
Church St.	83	293	42	25	360	4.3
Patrick St.	97	456	51	16	523	5.4
Total	359	1,431	176	86	1,693	4.7
		84.5%	10.4%	5.1%	100.0%	

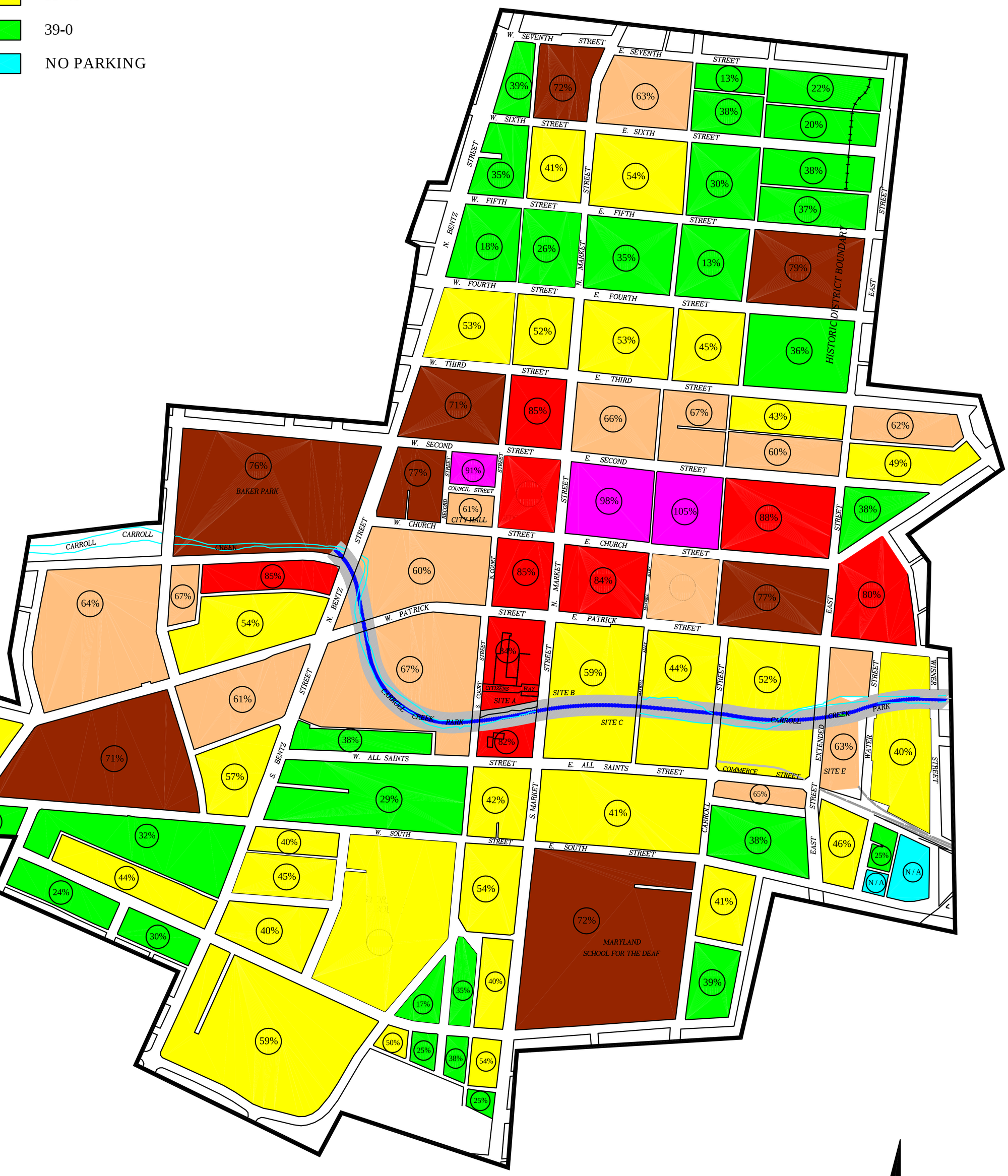


Summary of Existing Conditions (Supply & Peak Utilization)

Appendix Exhibit E shows both the on and off street supply and peak utilization. There is a total of 8,818 parking spaces and during the peak period 5,231 (59%) are utilized. Exhibit 5 illustrates the on and off-street parking occupancy per block. Note that the highest utilization occurs in the downtown area in and around the blocks along Market and Church Street. The current parking surplus/deficit conditions are based simply on the peak utilization of parking and the practical capacity of the lots, garages and on-street spaces within the parking system. A more realistic determination of surplus/deficit

LEGEND:

- 100-90
- 89-80
- 79-70
- 69-60
- 59-40
- 39-0
- NO PARKING



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On and Off-Street Parking Occupancy Percentages

EXHIBIT:

5

conditions would require an analysis of where people work, live and shop compared to where they would prefer to park.

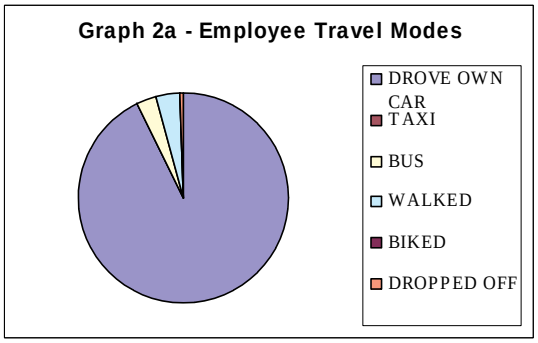
Findings from Pedestrian Questionnaires

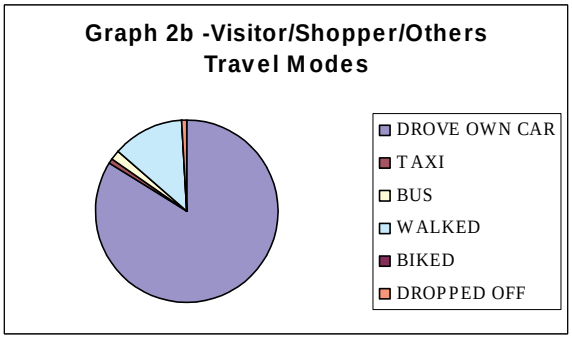
A pedestrian questionnaire was conducted at numerous locations through out Frederick's downtown area, including City Hall, the County Courts, the Library, and along Market Street and Church Street. The intent was to survey representative employees, shoppers, City/County visitors, and other business visitors and determine their auto use and parking patterns and their opinion of the City's parking system. A total of 365 people were surveyed (167 employees, 75 residents, and 123 visitors/shoppers & others). Table 6 and Graph 2a-d, on the next page, are the findings from these interviews. Each user group had varying duration of stay from 6.1 hours for employees down to 1.8 hours for visitor/shoppers & others. The vast majority of the persons in each user group drove their own car to the downtown area. When it comes to the parker's opinion of the convenience of parking, more then half of all user groups did not find the parking convenient.

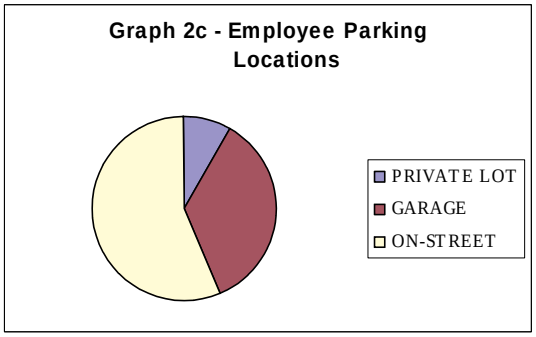
The questionnaire data was further defined in an attempt to analyze satisfaction with parking location. For example, do shoppers and visitors find on-street parking more convenient than off-street parking? DESMAN was surprised to find that, in general, shoppers find off-street parking (a.k.a. garage) more convenient than on-street while employees find on-street parking more convenient. Based on conversations and observations it could be assumed that the competition for on-street parking in the retail core makes parking in the Church Street garage, for example, more convenient. Conversely, employees may find parking on-street, along Bentz Park for example, more convenient (and less expensive) than parking in their designated parking facilities (Carroll Creek and Court Street).

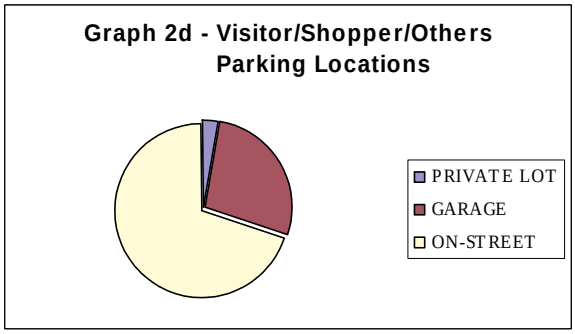
TABLE 6 - SUMMARY OF QUESTIONNAIRES BY USER GROUP

	EMPLOYEES		RESIDENTS		VISITORS/SHOPPERS & OTHERS	
TOTAL SURVEYED	167		75		123	
ESTIMATE HOW LONG WILL YOU STAY? (Hours)	6.1		3.8		1.8	
HOW DID YOU ARRIVE?						
DROVE OWN CAR	154	92.8%	55	75.3%	104	83.9%
TAXI	0	0.0%	0	0.0%	1	0.8%
BUS	5	3.0%	0	0.0%	2	1.6%
WALKED	6	3.6%	17	23.3%	16	12.9%
BIKED	0	0.0%	0	0.0%	0	0.0%
DROPPED OFF	1	0.6%	1	1.4%	1	0.8%
WHERE DID YOU PARK?						
PRIVATE LOT	13	8.4%	2	3.6%	3	2.8%
GARAGE	54	35.1%	12	21.8%	30	27.5%
ON-STREET	87	56.5%	41	74.5%	76	69.7%
IF SELF PARKED, IS PARKING CONVENIENT						
YES	76	47.5%	21	29.6%	48	42.9%
NO	79	49.4%	44	62.0%	59	52.7%
NO OPINION	5	3.1%	6	8.5%	5	4.5%









Summary

The parking supply in downtown Frederick is presently dominated by numerous small private/restricted parking lots and the on-street parking system (metered and non-metered

spaces). While an overall surplus of spaces exists, that surplus is either reserved to specific private lots and properties or, in the case of the public supply, is located on the periphery of the downtown. With the exception of the Carroll Creek Garage, all public off-street lots and garages have reached or exceeded their operational capacity. As such, any additional demand for public parking will create immediate and real parking deficits, requiring severe management and employee space reassignment decisions.

Surveys of individual's auto utilization, preferred parking locations, and satisfaction with the parking system is mixed, with an interesting juxtaposition of opinions regarding convenience. However, there appears to be great willingness on the part of short-term parkers (shoppers, visitors, etc.) to park in the public off-street lots and garages. This is significant as it would permit the parking system to explore opportunities to increase the share of short-term parking in the City's parking garages, thereby improving the distribution of demand and the revenue generated by parking activity.

The information regarding existing conditions will serve as the base upon which an analysis of future conditions is developed. Development information to be provided by the City and the Parking Task Force, which would include planned, programmed and potential new development and the absorption of presently vacant yet viable commercial space, will be evaluated and its parking impact will be layered onto the existing situation (to be presented in Section 4 of this report).

SECTION 2 – PARKING OPERATIONS/MANAGEMENT REVIEW & RECOMMENDATIONS

Introduction

In this section of the report, the current delivery of parking services will be contrasted to a defined mission and its related goals. The parking system's strengths and areas that need improvement will be identified. The culmination of the assessment is a recommended management and administrative framework that can naturally and intuitively meet the goals and objectives of the parking system by using the most direct line of management.

This section of the report will also address the City's optimal role in delivering parking services and identify and define the elements that are required to have parking play an integral role in the City's economic development. A mission statement, goals, and actions for the parking system will be recommended to create a roadmap to lead the City's parking system into the foreseeable future.

Defining the Parking Mission for the Parking System

The creation of a commendable mission statement is the single most important step in the reengineering process. It is often said that a well crafted mission statement which is supported by worthy goals depicts the most accurate picture of the final product. Based on the excellent quality of the ***Downtown Parking Plan*** and the level of thought and analysis that the document portrays, it is evident that the City shares this belief.

The Mission Statement prepared by the ***City's Parking Taskforce*** is a good one; however it incorporates both a mission and goals together. By unbundling the mission from its goals, more goals can be added while maintaining the intent of the Taskforce's work product. Itemizing additional goals adds clarity and specificity to the overall vision.

Interviews with parking stakeholders and City representatives, on-site observations, and DESMAN"S experience in other cities throughout the nation provided the basis for the development of the coactive goals.

It is suggested that the Parking System's ***Mission Statement*** should read as follows:

> ***The City of Frederick's on and off-street parking system shall support existing land uses, assist the City's economic development initiatives, and preserve parking for its residents, by providing adequate and high quality parking resources and related services for all user groups that need to park within the City.***

Coactive Goals to Support the Mission Statement

Parking management is an interrelated web of strategies and tactics that are formulated to meet certain goals for the parking system. The logical starting point is to set coactive goals to support the Mission Statement and to clarify the vision of the parking system. The recommended goals are as follows:

- Providing sufficient parking to service existing land uses
- Providing safe, clean, well-lit and attractive parking facilities
- Promoting turnover of on-street downtown parking spaces
- Promoting easy access to parking destinations
- Employing the least offensive and most understandable parking management strategies
- Recognizing that parking is a business and a service, and as such, must follow a business model
- Viewing parking as infrastructure to spur economic development
- Delivering on and off-street parking services from a single source responsibility center

- Recognizing that on and off-street parking needs to be managed by an experienced public sector parking professional
- Recognizing that outside contractual services should be actively monitored and directed
- Preserving the most convenient and proximate parking spaces for short-term parking patrons
- Encouraging long-term parking patrons, presumably office and retail employees, to park in spaces that are less proximate to their destinations
- Promoting a consistent look so that public parking could be easily identifiable through efficient design, effective operations, professional management, and creative promotions
- Maintaining a responsible level of structural maintenance for public parking facilities
- Encouraging the construction of parking lots and structures that aesthetically integrate and functionally serve the environment in which they exist

The City has met some of the aforementioned goals, some goals require additional attention, and some goals simply need to be addressed.

Organizational Review

The organizational review involves an evaluation of the management structure or hierarchy, including staffing, position roles/responsibilities, overall responsibilities (rate setting, enforcement, adjudication, etc.) and general decision making procedures. In effect, the structure of the parking organization is evaluated to assess its strengths and weaknesses.

The City's Parking Division

This analysis discusses the evolution of the City's Parking Division from the early 1980's through the present. It will focus on the strengths that have manifested themselves

through the evolution of the system and identify changes that need to be made to create a more contemporary and responsive approach to the City's delivery of parking services.

Historical Perspective

Based on the interviews with City representatives, in the 1980's the Parking Division managed 2 parking garages and the parking meters including maintenance and collection under the Public Works Department. At that time, the Parking Division did not perform parking enforcement. Also, little decision making resided with the parking manager that was in charge since the Director of Public Works directly ran the Parking Division. The City's electrical staff maintained the access and revenue control system and other elements associated with the electrical maintenance of the City's parking structures. Because the City was seeking a more professional approach and wished to improve the delivery of parking services, over the next decade, the 1990's, certain changes in the delivery of those services manifested themselves.

Also during the 1980's the Police Department was solely in charge of enforcement of parking regulations. The Police Department hired/fired/assigned parking enforcement officers and supervised them. The Police Department was also charged with the responsibility of sending out notices for the collection of parking violations income. As is common in most cities, because the prime directive of the Police Department was to promote public safety, parking management was passive. According to City representatives, this was evidenced during those years by a poor ticket collection rate with poor tracking, passive supervision of enforcement staff, and limited knowledge of parking management strategies.

Today's Parking Division

In the early 1990's certain changes were instituted to improve the delivery of parking services and are as follows:

- A new parking manger was hired
- A new Division was revised from the ground up
- Parking enforcement was moved from the Police Department to the Parking Division
- New fiscal, operational and personnel management procedures were implemented
- Outside contracts were used to process notices and collect and track and collect outstanding parking violations income
- New parking hardware was introduced such as new parking meters, hand-held ticket writers, and parking revenue and access control equipment
- New parking rates were implemented

These changes reflected a new attitude and approach as to how parking was to be managed. According to City representatives, by comparison to the 1980's today's parking system is much improved. The parking system had successfully undergone a *"first generation"* reengineering process. Despite the positive changes, there is still more that needs to be accomplished and reengineered to maintain the momentum for a continuous improvement process. Addressing the balance of the system's needs should be the beginning of a "*second generation"* reengineering process – equally as aggressive as the past reengineering effort.

However, for this second generation process to be successful, the reengineering of the parking system should be more sophisticated than aggressive as the needs of the users and the goals of the system have become more complex in recent years. The required level of operational/managerial complexity and sophistication will require the City to consider a new paradigm. The following section regarding reengineering the delivery of parking services is presented simply as an effort to expand on the "reader's" definition of reengineering and, therefore, expand the reader's perspective regarding change. It is not presented as a criticism of the City's current system or of the people who work within that system.

Reengineering the Delivery of Parking Services

According to Michael Hammer and James Champy, co-authors of *Reengineering the Corporation*, reengineering is looking at things not as they are, but as they should be. This does not mean merely fixing or improving existing procedures. It means starting fresh with little reliance on past practices, procedures, and approaches. For reengineering to succeed, a top-down process must occur which encourages former job descriptions, titles, and organizational structures to change. Systems must be developed which empower people and groups to unleash their ingenuity. To reengineer, one must ask the fundamental question; why do we do what we do at all? Reengineering is a proposition that must produce dramatic results, and thus requires equally dramatic changes.

It is easily said that reengineering is required to create a new parking paradigm, yet it is intimidating because it calls upon our intellect to create a vision of the perfect parking system. Even while we're in the process of forming that theoretical vision, we can easily taint the reengineering process by falling into the past traps of preconceived notions and political realities. For the reengineering of the parking system to succeed, we must shelve those elements that taint creativity and perhaps even revisit some approaches that may have previously been dismissed.

In this section of the report the nature and design of the City's parking organization will be discussed in an attempt to paint a picture of a more ideal future parking system. The discussion will include an evaluation of the existing parking system from both an organizational and functional standpoint. Practices and procedures, and programs will be evaluated as well as the tools available to the Parking Division to perform the delivery of parking services.

Organizational Evaluation and Alternatives

The current Parking Division is often called a "Parking Department". It is also believed, because it is treated that way, that the Parking Division is organized as an enterprise fund.

Frankly, the parking entity is neither a parking department nor is it an enterprise fund. First, parking services are organized under the Department of Public Works and not as an independent department of the City. Second, the Parking Manager is a subordinate employee of the Director of Public Works. Third, the parking entity's budget is part of the Public Works budget. Therefore, by definition the City's parking management entity is not a parking department, but a division organized under the Department of Public Works. With respect to the Parking Division's identity as an enterprise fund, according the City representatives there is no enabling legislation that supports the Parking Division's claim to be an enterprise fund despite the fact that a sizable "Parking Fund" exists.

Before further comments are rendered concerning the organizational structure, it is important to define the alternatives and understand the pros and cons associated with the alternatives.

Parking Departments

Not unlike other city departments, a parking department can manage its special charge from a single consolidated base. Although parking departments can succeed in managing on and off-street parking facilities, there are certain inherent problems that prevent parking departments from delivering the high level of service that is befitting a Class "A" city.

The primary problem is that parking departments cannot control most/all of the variables associated with the delivery of parking services which is the precise reason that parking departments cannot follow a business model. Unlike other departments that spend dollars from the City's Budget, parking is on the income side of the equation and requires a freer environment to succeed in its attempt to deliver quality services.

Parking departments are inherently reliant on other departments that have parking responsibilities as a secondary or tertiary responsibility. A meter poll is broken - call the

Public Works Department. Parking income is suspect - call the Finance Department. Have a problem with a parking contract – call the Law Department. Parking departments find it difficult to divest themselves of reliance on other departments, thus maintaining the fatal parking flaws –fragmentation of services, reliance on other departments that do not have parking as a top priority, and the inability to follow a business model.

Another problem is that parking departments must compete for funding in the municipal budget environment and cannot operate as a business. It is difficult to explain to a city's elected officials why a parking structure's restoration needs are more important than other competing interests. Unfortunately, a frequent byproduct of parking department managed facilities is poor structural maintenance and a Class "B" look, much like office buildings are classified A, B and C.

A Parking Division Organized Under an Existing Department

Parking divisions organized under other departments are most often used in situations where a city charter limits and defines the number and nature of departments. That is our understanding of the current situation in Frederick. Parking divisions have similar, but diminished, powers and abilities that are associated with parking departments. However, divisions have two more liabilities. They must seek permission to perform actions from a subordinate position within the department in which they reside. And, they must not only compete for funds with other departments, but also within the department that they reside as the subordinate entity. Parking divisions are generally weak and find it difficult, if not impossible, to bring about significant change.

Since the City currently uses this division within a department approach; a few words should be said about the existing system. There are some less than ideal organizational situations where parking works well. The City enjoys such a system. The Director of Public Works is an advocate of parking and interested in the parking program's success. There is also an excellent relationship between the Director of Public Works and the Parking Manager. The program works because of a personal commitment by the Director

of Public Works and the Parking Manager not because the system in inherently a good one. Stated in other words, it can be said that the system works despite an non-autonomous organizational structure.

The concern is that organizational structures should not be built around people because personnel ultimately changes. It should be built around processes that need to be addressed in a streamlined fashion with the freedoms associated with the private sector, yet tempered with a municipal benefit mindset – not a pure profit mindset. This mindset is best embodied in a parking authority environment which is described as follows.

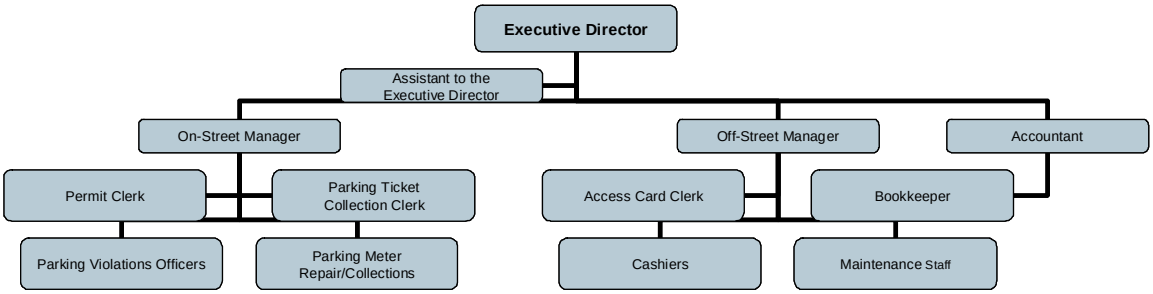
A Parking Authority

A parking authority is defined as an independent body politic of a municipality enabled under state legislation, and created by a municipal ordinance or resolution. Although our preliminary research indicated that the State may have limited enabling parking authority legislation for counties, like Montgomery County and Prince Georges County, the recent creation of the Baltimore Parking Authority makes us confident that municipal parking authorities can be created in Maryland. Because it is believed that a strong parking management entity will be required to guide the parking system through the next decade and beyond, it is important to embody as many of the powers of a parking authority as possible. In most states, parking authorities have the following powers and characteristics.

- The ability to acquire real property either through negation or its vested powers of eminent domain.
- A parking authority has a five member board of directors (some states permit more). The board is appointed by the mayor with the consent of the city council/alderman.
- The board is empowered to hire a director and any and all other employees that it deems necessary to manage and operate parking facilities, processes, and functions under its jurisdiction.

- It is empowered to operate all public off-street parking within its city limit (some can manage on-street parking as well).
- It has the power to set rates for on and off-street parking, thus removing the rate setting process from the political arena.
- It has the power to create and approve its own budget. The budgets are generally intended to be revenue neutral.
- It may keep excess revenues from operation. This permits a parking authority to create reserves for future expansion and renewal/replacement.
- It has the power to issue bonds. Although theoretically possible, because of much more favorable interest rates, parking authorities almost always work with the City in which they reside and seek its backing. This economic fact keeps the City in the decision loop for parking projects.

The Organizational Chart pictured below depicts a full service parking authority that is self-operated. The executive director would answer to a five member board that is appointed by the Mayor with the consent of the City Council.



- Streamlined administrative authority
- Outside political environment
- Powered to set rates and regulations
- Powered to establish operating budgets
- Ability to maintain budget surplus
- Ability to issue bonds

- Ability to incur debt without impacting General Fund

Parking Director

- Formulate, advise, recommend and set policies on all matters pertaining to City supported parking programs, properties and projects.
- Serve as the City Manager's liaisons to City Council, local business and community organizations and independent local authorities regarding parking matters.
- Development and implement a comprehensive program strategy design to address the current problems and projected parking needs of Frederick's downtown and neighborhoods.
- Adopt and implement a sound financial plan for the parking department that will lower department expenses, and enhance revenue to a level that enable the department to develop future parking facilities on a self–supported basis.
- Assume a principle role in any City negotiations involving the development, purchase, sale, or lease of parking facilities or other land and buildings to be used for a parking purpose.

On-Street Parking Program Manager

- Act as the City's administrator for contract service providers selected to enforce parking regulation, maintain and repair parking meters, collect parking meter revenue and operate a comprehensive data for parking violations.
- Monitor parking enforcement, meter maintenance and meter collection activities of private contractor on a daily basis.
- Develop and execute plans that improve the capacity and performance of the parking meter system.
- Represent the Parking Department at meetings of the City departments.
- Serve as an information resource to the court on parking violation appeals based upon claims of malfunctioning parking meters.
- Coordinate the temporary bagging or removal of parking meters for during roadway repairs, construction and for major special events.

- Prepare or coordinate an official response to request for information and program complaints.

Off-Street Parking Program Manager

- Act as the City's administrator for all parking facility management contracts let by the City of Frederick.
- Serve as the parking department liaison to other City departments.
- Conduct physical inspections and periodic operational audit of privately managed City parking facilities.
- Conduct bi-annual parking market surveys in order to maintain an awareness of changes in demand, rates, and inventory.
- Review and approve facility operating budgets, repair projects, staffing plans and operating schedules,
- Coordinate parking facility operating plans and participate traffic management initiatives for major special events.
- Manage the City employee parking permit program.
- Maintain records and documents pertaining to property and facility ownership, leases, parking agreement etc.

Accountant

- Prepare the annual financial report and operating budget for the department.
- Track all the parking system income, expenses and debt obligations.
- Formulate cash management and security practices and procedures.
- Serve as the parking department liaison to the City finance department.

Bookkeeper

- Download, review and audit daily on-street citations reports and off-street parking transaction and revenue reports.
- Document incidence of parking equipment malfunctions and field operation problems and complaints.
- Manage the employee parking permit database and permit issuance.

Clerical Support

- General clerical support to the Director and program supervisors.
- Radio and telephone communications.

There are many hybrids of the structure shown. A variety of outside contracts can replace and/or alter many of the functions such as the Complus system contract. Also, with smaller authorities, some of the positions and functions can be consolidated to reduce staff. Basic staffing for the delivery of parking services, be it an Authority or Department include the following positions and their respective job descriptions.

The benefits of the parking authority form are significant, reflecting its more business like model of streamlined powers and decision making abilities. A summary list of operational, managerial, and fiscal benefits are listed below.

However advantagous the benefits of a Parking Authority are, there is considerable concern regarding an Authority's separation and independence, though partial, from the political environment. Furthermore, many Parking Departments and Enterprise Fund Departments can and do function quite effectively in a business like manner without the flexibility afforded to Parking Authorities. As such, the report will continue to evaluate all organizational alternatives and functions.

<u>A Parking Enterprise Fund</u>

Unlike a parking authority, a parking enterprise fund is a unit of city government. It is an accounting construct of city government that follows a businesslike model and intended to generate adequate income to be self-sustaining. Others define an enterprise fund as a separate fund used to account for operations that are financed and operated in a manner similar to private business enterprises and where it is the intent that costs (expenses, including depreciation) of providing goods or services to the general public would be financed or recovered through user charges.

The goal in creating an enterprise fund is generally to create a pool of resources for future parking projects with minimal or no support from the City's General Fund. Using all City owned garages, the objective is to segregate the revenues of the facilities into a fund that can leverage bond issues. This organizational model does not have a board of directors and relinquishes two extremely important powers that are embodied into most parking authorities. These powers include the ability to approve its own budget and the ability to set its own rates.

Additional Formalization Recommended

Because it is believed that benefit would result from additional formalization of the City's parking management entity, a range of alternatives and first steps should be considered. Essentially, it is equally important to make a quantum leap into the future today as it was during the 1990's – the era that replaced the 1980's parking management approach.

These following recommended steps would further centralize and create more focus on the delivery of parking services. These approaches most often result in a higher level of service to the customer base and greater ease in meeting the defined mission and its related goals.

1. At minimum, if no other action is taken, formalize the Parking Division into a parking enterprise fund. This would prevent any future attempt to use the existing parking fund for other non-parking purposes. It would also allow the delivery of parking services to be directly tied to market rates. New parking facilities would need to be funded based on their own financial performance, the performance of existing facilities, and on-street parking income.

2. Although not the best step, but an improvement, elevate the Parking Division to a City Department financially organized as a parking enterprise fund. In addition to the benefits inherent in a parking enterprise fund, the major benefit of this approach

would be to allow the Parking Department to operate as a business model because it would be reliant on user fees that would be stipulated in future bond issues. It would set rates that are adequate to cover anticipated expenses. This approach may require a City Charter change because it adds a new department that was not contemplated by the *City's Founders.*

3. As the best step, it is recommended that the City should consider the opportunity for fundamental change through the creation of a parking authority. Remembering that reengineering is a proposition that can produce dramatic results, and requires equally dramatic changes, the most ambitious attempt at improving the parking system would be to create a parking authority. This would require strong buy-in from the City's leaders, particularly from the Mayor, Board of Alderman, City parking stakeholders, and department heads. Unlike a parking department, the creation of a parking authority seldom, if ever, requires a change in the City Charter. Parking authorities are most able to meet the parking mission and its related goals because, once created, authorities are most akin to a business model and least reliant on the support of other City services. They rely on user fees at market rates that are adequate to meet projected expenses.

Organizational Summary

It is believed that the parking system requires greater centralization to fulfill its mission and achieve its stated goals. The above recommendations fall into a spectrum of possible improvements to the organizational structure. Merely formalizing the Parking Division's status to an enterprise fund can provide some comfort, however, it does not posture the Division as a broker of significant change. The parking system's anticipated growth and complexity may require a more sophisticated department. Creating a freestanding Parking Department organized under an enterprise fund does offer the possibility for improvement because it continues to rely on other departments that have parking responsibilities are their second or third priority. If substantial and fundamental change is the goal, the establishment of a parking authority is the strongest remedy because of its

inherent powers and businesslike approach. It is believed that this organizational form can best achieve the mission and meets the goals for Frederick's parking system.

For perspective, Appendix F of this report includes a management and operational survey of other mid-sized to large cities, including Rochester, New York, Indianapolis, Indiana, and Portland, Oregon. Questions include how is public parking managed, who makes price and policy decisions, and what is the responsibility of different City departments in managing public parking? Though these cities are clearly not representative of Frederick in size, politics, or history, the responses to the questions are nonetheless interesting and illustrate the range of organizational and management forms that exist.

Improvements Required by Organizational Centralization

Because it is believed that the delivery of parking services should be more centralized, there is a need for different policies and better tools to be placed at the disposal of the City to manage a more centralized parking system. These items will be discussed in this section.

New Policies

Centralization of a parking system requires the ability to have information and systems designed to be performed within the parking management entity's main office. A prime example of a function that should be centralized is the issuance of and payment for monthly parking privileges. Currently parking patrons pay for monthly parking within the facility that they park to a cashier. The cashier is then entrusted to notify the office of payments received, notifications of lost or stolen cards, and terminated parking arrangements. This places a major fiscal responsibility in the hands of a cashier. Contemporary parking systems have this function performed in the parking entity's administrative offices – much like parking ticket payments are made.

The payment for monthly parking is currently decentralized and difficult to audit. It requires the parking manager to go directly to the parking facility and printout an active card list. It also requires the correlation of that list with the active cards that have been paid for and deleting the active cards that are not paid for. What happens to reported lost cards? Who deletes the lost card from the system? What happens if a cashier is given an access card by a patron that is canceling their parking privileges? Is it reported to the office or substituted for cash payments? These are just some of the unanswered questions that are raised from decentralized access card payment systems. The concern is fiscal exposure. The technological solution to this exposure will be addressed later in this section under revenue and access control systems.

Electronic Parking Payments

Currently, the City's Parking Division does not accept electronic parking payments such as credit cards. It is suggested that the reengineering process should introduce E-payment options. The reason that credit cards should be accepted is to provide a convenience for parking patrons and reduce the use of cash and checks as a payment options. Acceptance of credit cards, particularly with on-line verification, guarantees that payments are received and posted. Another benefit is that the host of manual chores associated with other payment options is reduced. The end result of accepting payment by credit card, despite the cost of credit card processing fees, is a leaner, cleaner, easier to audit, and more customer-friendly payment system. One could also argue that the ultimate cost benefit weighs to the side of credit card acceptance because the fiscal exposure is significantly reduced and payments are received and posted more promptly.

Reduction of Fiscal Exposure

Because cash transactions can represent a potential loss of between 10-12% of income (industry standard figure), particularly cash payments to a cashier, it should be a goal of the Parking Division to reduce the handling of cash and the number of individuals that handle cash throughout the parking system. In a municipal parking environment, for that

matter in any parking environment, it is not reasonable to assume that cash transactions can be totally removed from the repertoire of payment options. For example, it would not be reasonable to expect every patron that parks for a few hours to use a credit card and therefore cash payments need to remain an option. However for longer transactions such as all day or multi-day parking, payment by credit card would be a great convenience.

Integrating Credit Card Acceptance

There are a number of ways to integrate credit card acceptance into a parking system. Although the discussion in the previous paragraph implies using credit cards in a cashiered parking lane for hourly parking, there are other more important uses for credit card acceptance that do not take place in cashiered exit lanes that the Parking Division should consider. The primary use would be to pay for monthly parking privileges. This can be accomplished through credit-card-on-file, payment on-line through the City's website (or Parking Division's website), payment by credit card in the Parking Division's office, and self-payment by using an automated pay station within a parking structure.

Because the Parking Division would have the most control over payments, credit-card-on-file is considered to be the best payment method. Using this technique, the parking patron allows the Parking Division to draw down a predetermined dollar amount on a predetermined date each month to pay for monthly parking privileges. This can be a monthly software routine. For those that are not inclined to relinquish their credit card number to the Parking Division and are computer savvy, a payment routine can be set up on a website. This allows desktop payment with minimal effort. For those that wish to have direct contact with Parking Division personnel, and are willing to visit the Parking Division's office, acceptance of credit card payments can merely be added as an additional service. The final option would be to install an automated pay station at each parking structure. Automated pay stations allow patrons to render payment for monthly parking with a credit card within the facility that they park and without a cashier's intervention.

Since monthly parking patrons are repeat customers and available daily, bad credit card payments seldom occur. In an era that is characterized by the exponential growth of the computer literate population and the increasingly popular *"forget-free"* payment systems that are linked to credit cards (like highway toll transponders and the *Mobile Speed Pass*), it is difficult to rationalize the avoidance of electronic payment options. It is recommended that at least one but preferably more of the credit card payment options presented above should be offered to customers for their convenience, for the ease associated with collecting and posting payments, and for improved fiscal integrity. If any single application is selected, it is recommended that the focus should be on monthly access card payments by credit card followed by cashiered exit lane transactions by credit card. In priority order the following use for E-payments are recommended:

- Payment for monthly parking with credit-card-on-file
- Payment for monthly parking with credit cards on-line to a website
- Payment for monthly parking with credit cards at automated pay stations
- Payment for monthly parking with credit cards in the Parking Division's office
- Payment for daily parking with credit cards in cashiered lanes

Technological Improvements that Support Centralization

The City's future parking entity should have the proper tools to move toward the centralization of parking services. These tools fall into two primary technologies that will be addressed in this section. They include the City's parking meters and the revenue and access control systems that are used in the parking decks. Note that the Complus system including the hand-held ticket writers for the issuance, collection and tracking of parking violations is not included. This is because it is believed that this system is adequately centralized and technologically up-to-date.

Parking Meters

The City's parking meter system employs Duncan mechanical parking meters. This is one of the leading brands of parking meters sold in the United States. Although these parking meters are a quality product, the level of technology of the parking meters has significantly changed over the last decade, making the existing parking meters technologically obsolescent.

Today's parking meters are all electronic. So why would one suggest replacement of the existing parking meters? - For one fundamental reason. With mechanical parking meters only the income removed is known. Therefore, when a collection takes place, only the amount gathered is known. Electronic parking meters permit management representatives to audit the amount of money that was deposited into parking meters prior to collection. Therefore, there can be a real audit process that allows one to compare the amount deposited by district to the amount collected in the same district.

There is a belief that the money collected is safe. In fact, the use of a police officer to accompany the meter collection person is an excellent safeguard. However, on other days, the parking meter keys are used by the collection/repair person. Although we are not suggesting that it is the case, nor do we have any evidence that such is taking place, it is possible for a collection person to simply insert a Styrofoam cup in the place of a meter coin vault and empty its contents and replace the meter's coin canister a day or two prior to collection. With mechanical meters this would not be detected. With electronic parking meters this would be detected because the amount deposited would be higher than the amount collected. When one considers that $370,000± was collected during the last fiscal year, protecting parking meter income is an important consideration.

It is recommended that the existing parking meters should be replaced with state-of-the-art electronic parking meters. If this cannot be accomplished in a single year, it can occur over a period of 2 or 4 years, retiring ½ or ¼ of the parking meter inventory each year. A lease/purchase option should be considered as an alternate means to acquire new parking

meters. This can be accomplished by the purchase of entirely new parking meters at $360 each or often by replacement of the internal mechanism of existing meter housings at $150 each (this should be checked with the manufacturer). The parking meter housings that were observed were in good condition and did not necessarily need their housings replaced.

Revenue and Access Control Technology

The access and revenue control system that the City uses in its parking structures is not state-of-the-art. Today's state-of-the-art systems have much stronger fiscal controls.

The new revenue and access control systems are on-line, real-time, machine-readable systems that report to a single administrative office. The nature of the new system influences the way business is conducted. For example, the activation and deactivation of access cards is no longer performed in the individual parking garage, it is performed in the Parking Division's administrative office. It allows reports that currently are required to be run at each parking facility to take place in a central office, away from those that may attempt to compromise the system.

The existing parking revenue and access control system has reached the end of its technological and chronological life. Such systems are intended to be cost effectively operated for approximately 10 years – generally considered the useful system life. This technology should definitely be installed in any new parking structure and be extended to include other existing parking facilities. The rough cost of this state-of-the-art technology is generally $36,000 per cashiered exit lane and about $22,000 per entry lane installed. A local facility computer within each facility that talks via modem, or other similar communication means, and other related hardware and software would generally cost approximately $9,000 per facility installed. The host computer (server) in the main parking office and its related hardware and software would cost about $18,000 installed.

Because machine readable tickets are part of new generation revenue and access control systems, cashiers are no longer required to manually enter time into the cashier terminal. With machine readable tickets, the cashier terminal now reads the time of entry, compares it to the current time and computes the fee based on a preprogrammed rate structure. This new generation of equipment increases transaction speed, reduces auditing time, and guarantees accuracy. It also translates into better customer service because of the increase in transaction speed.

State-of-the-art versions of the revenue and access control systems produce central reports that are tied by modems (or other technologies) to the parking facilities that they operate. This allows the parking manager to view the activity within one or more parking structures remotely and electronically. The existing manual system in its current configuration does not allow adequate time to perform a full audit of activity. For example, just the introduction of machine readable tickets can avoid hours of auditing. With machine readable tickets, no time entry errors occur, and therefore, only exception transactions need to be audited. This literally removes the needles from the haystack and begs the auditor to detect the cause of an anomaly.

It is recommended that the City should procure a new on-line, real-time, machine-readable access and revenue control system for its proposed new parking facility and related offices. It is further recommended that the equipment located in other parking facilities should be replaced with the same type of equipment so that the system operates all parking facilities from a single consolidated location.

The Parking Division's Offices

During the interview process it was questioned why a more comprehensive parking office is necessary. This is a legitimate question. If it is a goal to elevate and centralize the delivery of parking services and decentralize the activity in parking structures, there needs to be room for management staff, related technological systems and processes, and visiting parking patrons. For example, access cards would be able to be sold from and

returned to the parking office. New parking patrons could be invited in to have a discussion concerning the advantages/disadvantages of a particular parking destination or counseled concerning the rules and regulations for each parking facility or meet concerning a parking ticket that they feel was improperly issued. Much like all other departments, there needs to be room to perform required functions and room to accommodate public access. This includes a lobby area, a counter where payments can be received, two work stations for one clerical position and one bookkeeper, a money counting room, a unisex restroom, and a directors office suitable for the position's responsibilities (meetings, interviews, employee reprimands, etc.).

Management Policies and Procedures

In this section basic functions of the Parking Division, including revenue collection and control, staff training and supervision, enforcement (ticketing/towing) procedures, adjudication, and management of service contracts. Additionally, DESMAN will evaluate the goals, format and effectiveness of the various special parking programs/incentives that the City has, including park and shop, courtesy tickets, and the marketing of those programs.

Parking Rates

Table 7 (on the following page) illustrates the difference between rates compared by the ***Parking Taskforce*** in their analysis of Fees and Fines. For the purpose of this discussion the spreadsheet was reproduced without the parking fines. That will be a subject of further analysis in this section. When one looks at Table 7, the proverbial "*What's wrong with this picture?*" comes to mind. By no measure does any Frederick, MD rate match up with the other municipal jurisdictions presented.

Table 7 – Parking Rates

	Montgomery Co.	Baltimore Co.	Anapolis, MD	Hagerstown, MD	Lancaster, PA	York, PA	Average	Frederick, MD	Difference	% Difference
Meter Rates										
Hourly	$0.50	$1.00	$1.00	$0.25	$1.00	$0.60	$0.73	$0.50	(0.23)	-31%
Deck Rates										
Hourly	$1.00	$2.50	$1.00	$0.50	$1.00		$1.20	$1.00	(0.20)	-17%
Maximum per day	$5.60		$8.00	$3.00	$10.00	$7.00	$6.72	$5.00	(1.72)	-26%
Monthly	$75.00	$40-$225	$80-$100	$32.00	$50-$60	$44-$52	$72	$40-$50	(27.00)	-37%
Night			$2.00		$2.00		$2.00	1	(1.00)	-50%

City of Frederick Parking Fee Benchmarking

Compared to the *Average* of the other communities Frederick ranges between 26% and 50% lower than the communities that it was benchmarked against. Some would say that the lower rates are beneficial to the City's economic welfare and part of the success of the central business district. Others might surmise that the City is below market rates and is giving away too much in potential parking income. When one looks at the FY 2000 *Parking Fund* and sees that $1.7m has been amassed, it is tempting to believe that current parking rates are adequate.

Certain facts should be considered. If a new parking deck project started today, the Parking Fund could be used to construct about 142 parking spaces @ $12,000 per space. However, when one considers the potential of property acquisition expenses, professional fees, site preparation expenses, relocation expenses, bonding expenses, etc, the entire Parking Fund can be eroded before a single parking space is constructed. Once the Fund is depleted, and assuming that the City's General Fund is off limits, with current rates a new parking deck, depending on its size, may not be able to sustain the debt unless surpluses from other facilities and parking meter income were added as income sources. Even then, would the Parking Division be able to sustain new facility expenses and the expenses associated with the other facilities that it operates without rate increases?

Rate increases are never popular. Generally, a 5% increase in parking rates draws the same indignation as a 25% increase. Therefore, if a 25% increase is required either to maintain the departments fund balance or to improve the balance between on-street and off-street utilization, one 25% increase is easier than five 5% increases. The reality is, no one wants to votes for higher parking rates – they simply recognize that it a requirement of an effective and efficient parking system. The real questions are what does the increase in parking rates offer in return, which parking rates will be raised and is the increase defensible?

Which Rates Should Be Raised?

When the existing parking rates were evaluated the disparity between on and off-street parking rates were immediately noted. This was also noted by the *City's Parking Taskforce*. On page 14 of the report the reverse disparity of low on-street prices and high off-street prices is discussed. It specifically states: *"Meter parking is priced at $.50 cents per hour, which is half of the daily hourly cost of parking in the decks. [NOTE: 10% of the deck spaces are for daily parking, including short-term parkers]. The Institute of Transportation Engineers states, "Generally, on-street parking fees should be higher than off-street fees. This generally encourages the use of off-street areas (decks) for long-term parking and helps preserve the on-street spaces for short-term parkers." However, higher meter rates are not perceived as "parking friendly" and are more difficult to implement."*

This report agrees with *The Institute of Transportation Engineers* in their assessment of on and off-street parking fees. It is agreed that raising on-street parking rates is not "*parking friendly*". One must get over that comment and recognize that raising on-street parking fees is "*downtown vitality friendly*" because it promotes the turnover of on-street parking spaces. To illustrate the impact that no or low turnover has on a parking system, the following example is presented.

For each on-street parking space that does not turnover as many as 5 short-term parking patrons may be required to seek other less proximate and less convenient parking accommodations. Since duration and turnover surveys found that 15.5% of parkers at 2-hour metered spaces exceeded the two-hour duration, it could be presumed that 100 (15%) of the 661 metered parking spaces did not turnover due to meter feeding. If those 100 spaces were occupied by all-day parkers, as many as 500 short-term parking patrons (100 spaces times 5) would be unable to park at an on-street parking meter each day. It is believed that the patron's parking decision to meter feed is encouraged by the current pricing structure and a relaxed enforcement policy toward meter feeders.

It is recommended that on-street meter rates should be raised as soon as possible to $1 per hour. Some will say that raising rate to that level is unfair because it will drive business out to the suburbs; some will say that it is not fair because there is insufficient parking, and ask where long term patrons will park. *The response to the issue of moving to the suburbs because on-street parking rates are elevated has not been substantiated in any major community since the first parking meter was installed in Oklahoma City in 1938.* The real result has generally been a more vibrant central business district that promotes turnover parking; and yes, angry and vocal opponents of rate increases - some former meter feeders. The response to where will the meter feeders go is to an off-street facility. If it is true, and it is, that parking is a scarce resource, the worst thing that will happen is that meter feeders and short-term parking patrons will change places. That would make things as they should be. It would also meet two goals for the parking system and satisfy part of the parking mission.

Could Off-Street Parking Rates Be Raised?

Yes they can be raised but not by much. This is because the balance created by parking rates between on and off-street parking needs to be maintained. Monthly parking rates should be raised to about $70. In those facilities that are most popular and continue to have a waiting list, the rates could be higher, say $75, and the less popular parking facilities could be a bit lower at $65. Waiting lists should determine the popularity of a

facility, particularly since Frederick's parking structures are quite proximate to each other. It is suggested that the hourly all day rate should not exceed $7 per day. If additional income is required, the 3-5 hour rates could be elevated to $5 or $6.

At $1 per hour at an on street parking meter, meter feeders would pay $8 per day, or times 20 working days, $160 per month. For monthly parking patrons, the cost would be no higher than $75 per month. As a pseudo monthly parking patron (defined as someone that was not eligible for monthly parking but parks there anyway as a daily parker) one would pay $140 per month. This rate should be high to discourage pseudo monthly parking patrons who defeat the monthly quota system by occupying spaces intended to meet the 10% short-term parking goal. It is believed that actions of this magnitude, coupled with good enforcement of meter feeding will produce a fundamental change in parking behavior. Remembering the shopper, it is contended that little change in their view of the downtown would be noticed except for an easier to find parking space and a nominal additional charge because of their brief stays. This belief is based on experiences in other municipal jurisdictions and illustrated in the following case study. The aforementioned rate concepts are recommended for implementation.

On-Street Case Study

In New Brunswick, NJ during the mid 1980's, turnover of on-street metered parking spaces was not occurring. Long-term parking patrons simply fed the parking meters and ignored the 2 hour limits. Since employees (long-term parking patrons) arrived first, they were able to corner the on-street parking supply. By the time retail customers arrived, almost all proximate parking spaces were occupied. Initially the rates were $.05 cents per hour that was a remnant of the 1950's. Rates were then raised to $.25 per hour. Only a slight increase in parking turnover was noted. However, in two small off street parking lots parking meter rates were raised to $.50 per hour. The president of the merchant's association, who severely criticized the rate increase from $.05 per hour to $.25 per hour, and contended that the increase would drive retail patrons out of town to shop in suburban malls, strongly opposed the rate increase to $.50 per hour.

One week after that rate increase, the merchant's association representative called the local parking authority and surprisingly praised the rate increase. He remarked that for the first time in his remembrance there were available parking spaces for his patrons and the other retail establishments that the lot served. He also noted that his patrons were so pleased to have a proximate parking space that few complained about the new rate. This confirmed what parking experts have been contending for decades. Economically founded parking management strategies are the easiest to understand and least obtrusive means of redistributing parking populations.

The Parking Fine Structure

Not unlike parking fees, the City of Frederick's fine structure is significantly lower than the cities that they were benchmarked against. The Parking Taskforce selected Montgomery County, MD, Baltimore County, MD, Annapolis, MD, Hagerstown, MD, Lancaster, PA and York, PA to benchmark against. To provide some additional diversity to the benchmarking process, Charlotte, NC, Raleigh, NC, Columbia, SC, Charlottesville, VA and Columbus, OH were used in Table 8. These other cities produced similar benchmarking results to the cities selected by the Parking Taskforce. The results are depicted in Table 8 on page 40.

Only 3 of the 23 parking violation fees that were benchmarked (Loading Zone Violations, Over 12" from curb violations and Double Parking Violations) were higher in Frederick. The other 20 parking violation categories were significantly higher in the benchmarked communities. If one compares the 20 higher violation categories to Frederick's current charges, the other cities that were benchmarked against Frederick average 60% higher parking violations. Since the cost of parking violations is one of the primary strategies used to bring about compliance with on-street parking violations, it is important to communicate the importance of compliance by attaching an appropriate penalty. It is suggested that the City should revamp the cost of parking violations to better fit the act of noncompliance with parking regulations. Our recommended modifications to the parking fine structure are contained in Table 9 on page 41.

Table 8 –Fine Structure in Other Municipal Jurisdictions

Parking Violation	Montgomery Co., MD	Charlotte, NC	Annapolis, MD	Raleigh, NC	Hagerstown, MD	Columbia, SD	Richmond, VA	Charlottesville, NC	Columbus, OH	Baltimore County, MD	Lancaster, PA	York, PA	Average	Frederick, MD	Difference	% Difference
Obstructing Traffic (9a- 4p & 6p-7p)		$30		$15			$40	$30					$28.75			
Obstructing Traffic (7a-9a & 4p-6p)		$50		$15			$40	$30					$33.75			
Parking within 15 feet of fire hydrant		$100	$32	$15	$20		$40	$25	$30				$37.43	$10.00	($27.43)	-73%
Parking overtime	$25	$25	$15	$6	$7	$7	$20	$15	$15	$20	$10	$7	$14.33	$5.00	($9.33)	-65%
Parking left side of curb		$25				$15		$15	$12				$16.75	$10.00	($6.75)	-40%
Parking improperly		$25		$6		$5	$20		$15				$14.20	$10.00	($4.20)	-30%
Parking in No Parking area		$25	$25	$15		$15	$20	$25	$15				$20.00	$10.00	($10.00)	-50%
Meter Violation	$25	$25	$20	$6	$7	$7	$20	$15	$20	$20	$10	$7	$15.17	$5.00	($10.17)	-67%
2nd violation same meter						$12							$12.00	$5.00	($7.00)	-58%
3rd violation same meter						$17							$17.00	$5.00	($12.00)	-71%
Blocking curb cut		$100					$40						$70.00	$10.00	($60.00)	-86%
Blocking driveway/alley		$25		$15		$15	$40	$20	$35				$25.00	$10.00	($15.00)	-60%
Key in unattended vehicle		$25				$20			$25				$23.33	N/A		
Parking on sidewalk		$25		$15		$15	$40	$70	$30				$32.50	$10.00	($22.50)	-69%
Loading zone		$25		$15		$15	$60	$15	$15	$26			$24.43	$35.00	$10.57	43%
Parking in handicaped space	$250	$100		$100	$40	$200	$100	$100	$75	$26	$50	$50	$99.18	$100.00	$0.82	1%
Unauthorized parking	$30	$20	$25	$25	$10			$10		$26	$15	$15	$19.56	$10.00	($9.56)	-49%
No neighborhood parking permit		$30			$20	$40	$25	$25					$28.00	$5.00	($23.00)	-82%
Parking in fire lane		$100			$20		$40			$32		$15	$41.40	$10.00	($31.40)	-76%
On crosswalk				$6			$40		$30				$25.33	$10.00	($15.33)	-61%
Storing/Abandon on street				$6					$50				$28.00	$10.00	($18.00)	-64%
Junk vehicle on private property									$25				$25.00	N/A		
Over 12" from curb				$6					$10				$8.00	$10.00	$2.00	25%
Taxi Zone				$6		$15	$100	$15					$34.00	N/A		
Double Parking	$35			$15	$10	$15	$40	$20	$30		$20	$15	$22.22	$35.00	$12.78	58%
Bus Zone				$15		$15	$40	$15	$35				$24.00	$5.00	($19.00)	-79%
Traffic Lane				$15			$40						$27.50	N/A		
Blocking intersection				$15			$40	$15	$30				$25.00	$10.00	($15.00)	-60%
Refeeding Meter						$10							$10.00	$5.00	($5.00)	-50%
Tree Zone						$15							$15.00	N/A		
No City or County License								$35	$30				$32.50	N/A		
Other Penalty				$6		$15							$10.50	N/A		

Table 9 – Recommended Modifications to the Parking Fine Structure

Parking Violation	Current	Proposed	$ Change	% Increased
Parking within 15 feet of fire hydrant	$10	**$40**	$30	300%
Exceeding 2 hr. limit	$5	**$15**	$10	200%
Parking left side of curb	$10	**$15**	$5	50%
Unreasonable Parking	$10	**$15**	$5	50%
Restricted Parking	$10	**$20**	$10	100%
Expired Meter	$5	**$15**	$10	200%
Blocking driveway/alley	$10	**$25**	$15	150%
Parking on sidewalk	$10	**$30**	$20	200%
Loading zone	$35	**$35**	$0	0%
Parking in handicapped space	$100	**$100**	$0	0%
Unauthorized parking	$10	**$20**	$10	100%
Exceeding 2 hr. limit in residential area	$5	**$30**	$25	500%
Parking in fire lane/fire hydrant	$10	**$75**	$65	650%
On crosswalk	$10	**$25**	$15	150%
Over 12" from curb	$10	**$10**	$0	0%
Double parking	$35	**$35**	$0	0%
Bus zone	$5	**$25**	$20	400%
Blocking intersection	$10	**$25**	$15	150%
Extended parking meter	$5	**$10**	$5	100%
Parking during street sweeping restriction	$5	**$10**	$5	100%
Parking on bridge	$10	**$15**	$5	50%

Residential Parking Permits

According to the PARKING TASK FORCE Report, the stated purpose of this program is to "*offer parking relief to all downtown residents.*" The permits are available to residents who live on specific streets in downtown Frederick. Any vehicle that properly displays a permit is entitled to park any day of the week without further charge for a period of time that does not exceed 48 hours within a defined area in any lawful metered or non-metered parking space. The annual fee is $50 for the first permit and $100 for the second permit with a 2 permit limit per house.

In most cities, resident parking permits (RPP's) vary in price according to the character of the neighborhood in which they are used as well as the parking privilege they extend. Generally, in communities that issue residential parking permits that allow parking in

non-metered areas are less costly. However, when parking privileges extend to metered parking spaces, the cost becomes higher because of the loss of meter revenue and the pricing strategy that attempts to discourage long-term parking at metered parking spaces. If the permits only allowed residents to park at non-income producing spaces, then the permits should only carry a modest service charge to cover operating costs which would be below or equal to current residential permit rates. Since parking privileges include metered parking spaces, it is believed that the higher price for the current permit is appropriate. However, an alternate approach should be considered to reduce the impact on metered parking spaces and offer a less costly alternative to residents.

Preserving turnover parking spaces is important to the vitality of a central business district. It is also important to encourage residents to live downtown. One solution could be to offer two kinds of permits. The different RPP parking privileges should carry different prices. One permit type would allow residents to park at any non-metered parking space or in any City-owned off-street parking facility. This permit would only cost a modest service charge to cover administrative fees. For those that wish to park at metered parking spaces as well, the cost should be much higher, say $150. Therefore, residents may chose whether they wish increased parking options at a higher cost or fewer parking options at a lower price. The disparity in permit costs would encourage residents who are long-term parking patrons to seek more passive parking destinations while discouraging parking at meters. Permits would have to be color coded to designate the permission level.

Special Parking Programs

Over a span of time, there are a number of special parking programs that were forged through partnerships between hard-working civic leaders and City representatives. Such programs are generally created as specific responses to specific needs for one or more parking concern. However, due to changing times and conditions, some programs have taken on more or less relevance in contemporary Frederick. Each program is defined in this section and includes the following.

- Courtesy Tickets
- Free Visitor Parking
- Park& Shop
- Holiday – Free Meter Parking
- Christmas Season – Free Deck Parking
- Loading Zones
- Temporary No Parking Signs

Courtesy Tickets

This program forgives tickets that are validated in the parking office within 30 minutes of issuance. Metered tickets received on parts of Market and Patrick Street are forgiven if they are presented to the Parking Division within ½ hour of issue unless they received another parking ticket that month. On Saturdays, a ticket can be validated by merchants.

Free Visitor Parking Program

This program is intended to notify out-of-town visitors in a friendly informational manner that their vehicle was parked in violation of parking regulations and that they are not being fined on the first offence. This is achieved by having Parking Enforcement Officers issue a special notice to vehicles with out-of-state license tags, which are parked overtime at meters. There is no fine associated with this notice.

Park and Shop

The purpose of this program is to promote the use of parking decks and encourage downtown shopping by giving downtown merchants the ability to reward their patrons for paying for some or all of their parking in parking decks. Merchants participate by purchasing half-hour blocks of time in the parking deck at a 20% discount form the Parking Department office located in the Court Street Deck. The merchants may then at

their discretion re-issue the half-hour validation stickers to customers to pay for some or the entire customer's parking.

Holiday – Free Meter Parking

The purpose of this program is to encourage shopping on Holidays by providing free parking at meters.

Christmas Season – Free Deck Parking

The purpose of this program is to encourage downtown shopping during the Christmas Holiday Season by providing free parking in parking decks.

Loading Zones

There is no perfect loading zone policy in any town. However, since it is believed that the current loading zone configuration, signage, and design are well executed no other comments will be rendered concerning the use and configuration of loading zones.

Temporary No Parking Signs

The purpose of this program is to recognize that special occurrences take place downtown such as funerals, construction, maintenance, weddings, etc. that require temporary no parking signs.

Special Program Comments and Recommendations

Most often crafted by hard working, dedicated, and well-intentioned individuals, similar special programs in other municipal jurisdictions work well for brief periods and solve immediate parking concerns. However as time passes and other programs enter the mix, programs sometimes interact with each other in a manner that was not intended and require revision to keep pace with changing conditions. The following are some

examples of program interaction and conditions that the City should revisit to reinvigorate their original intent.

- The interaction between the Holiday – Free Meter Parking program and the Christmas Season – Free Deck Parking program that may promote long-term parking on-street and force shoppers to use less proximate deck parking spaces.

- The exposure created by the Free Visitor Parking Program that allows Parking Violations Officers the discretion to determine whether an out-of-state vehicle belongs to a visitor or daily employee, and issue or not issue a parking violation accordingly.

- The exposure to the possibility that the Park and Shop Program may be reducing the cost of parking for non-retail parking patrons and not solely being used for retail patrons. Despite its exposure, with certain modifications outlined in a *Technical Memorandum* to the Parking Division, this program is considered to be viable.

- The exposure to the possibility that the Courtesy Ticket Program may be serving as a means to forgive one parking violation per month for repeated parking violators instead of providing a public relations gesture for visitors and shoppers. Another concern associated with this program is the propriety of bestowing civilian adjudication powers to merchants to forgive Saturday parking violations.

It is believed that the loading zone policy and related signage is exemplary and should not be modified. With respect to the Temporary No Parking Signs, we encourage the use of larger fields for entering information and suggest an increase in the deposit to encourage their prompt return. A more detailed evaluation of special programs has been issued to the Parking Division in the form of a *Technical Memorandum*.

Enforcement Program

The Parking Division's enforcement program is lightly staffed with 3 parking violations officers. Although it is usual and customary for each enforcement officer to cover between 250 and 300 parking meters, other enforcement zones with time limits are much more difficult and time consuming to enforce and require more staffing. One improvement that is suggested is to remove time limit zones and replace them with parking metered zones. This will ease enforcement, produce income, and promote turnover of parking spaces.

Ticket Collection

Another component of the enforcement program that is believed to be highly successful is the Complus system contract. The collection rate on outstanding parking violations is 92.2% which is one of the higher collection rates that we have recently encountered. Combined with Maryland's decriminalized system, the contract seems to be working well and no modifications are suggested.

Scofflaws

The City's scofflaw program was reviewed and found to be generally successful. However, the criteria that requires 10 unpaid parking violations to amass before one is considered to be a scofflaw is excessively lenient. Most cities generally set the threshold at 5 unpaid parking violations. It is recommended that 5 unpaid parking violations should be the new threshold to define a scofflaw.

Meter Feeding

As noted earlier in the report, meter feeding exceeds 15% throughout the study area. It is recommended that more emphasis should be placed on this infraction. Turnover of on-street parking spaces is the life blood of retailers and visitors. Any other program that

allows or encourages the use of metered parking spaces for long-term parking reduces the availability of these important short-term parking options.

SECTION 3 – FINANCIAL ASSESSMENT OF THE PARKING SYSTEM

In this section of the report the fiscal structure and financial solvency of the Frederick parking system will be reviewed and evaluated relative to the City's objectives to facilitate the development of several new parking structures. Expenses and revenues connected to the present and past operations of individual facilities, and the parking system as a whole, will be examined and evaluated based upon prevailing parking industry data. The summary that follows is intended to serve as an informative precursor for future decisions regarding the planning and financing of additional parking garage projects.

General Structure of the Parking Program

The City of Frederick has to be commended for fiscally organizing its municipal parking program so that it might function as a self-supporting enterprise. All parking program expenses and revenues have historically and consistently been accounted for in a stand alone account. While such an accounting approach might seem to be the norm, it has been DESMAN's experience that too often municipalities have failed or chosen not to structure its parking program in manner that would allow it to be evaluated like a private business enterprise. Although a City might have legitimate grounds for operating its parking program at below market margins, the accounting for the program should always be fiscally organized so that the value, cost, and performance of the program assets can be objectively assessed. This approach, at very least, makes it possible to comprehend the full measure of any operating deficits and/or net cash flows produced by the parking programs.

The City of Frederick has set up a Special Revenue Fund account for its parking programs. This construct has enabled the City to use most all parking proceeds to fund parking related expenditures. The creation of this fund has also made it possible to assign and restrict a portion of the parking program's annual proceeds to amortize long-term debt for parking projects that have been financed with G.O. Bonds.

Under the present structure the true and respective operating expenditures, revenues and long-term debt attributable to each of the three City parking decks are clearly accounted for separately from the revenues and expenses connected with the operations, maintenance and enforcement of the City's parking meter system and the administration of the parking division.

The only shortcoming of the City's the Special Reserve Fund account established for the parking division is that it is not a true Enterprise Fund account. The Special Reserve Fund does not mandate the Parking Division to raise user charges when, and as deemed, necessary to adequately support its operations. Unlike an Enterprise Fund account where all program revenue sources are pledged to support the program operations (though not statutorily), the monies in the "Parking Division Special Reserve Fund" account can be diverting from the program at anytime by either the administrative or legislative bodies of municipal government. While such political and administrative financial maneuvers have not impacted the Parking Division, its current designation as a Special Reserve Fund account leaves open the possibility of such actions being taken in the future. Therefore, DESMAN supports the administration's plans to officially establish the Parking Division as an Enterprise Fund account. Beside the benefits discussed above, this action will help establish a firewall between the Parking Division's debt obligations and the rest of the City General Obligation (GO) debt. The City's GO liability for the Parking Division will be formally limited to the division's revenue sources and any additional GO funds that might be necessary to support the division in a fiscal emergency will eventually be paid back.

Parking Division Revenues & Expenses

Municipal parking programs are typically characterized as having either, or both, an on-street and off-street parking operation. In the case of the City of Frederick, its parking division is responsible for both the on-street and off-street parking operations. Consequently, in assessing the financial circumstances of the division is it useful to categorize Divisional revenues and expenses as being tied to one or another of the

parking operations. Through this approach, one can begin to assess the financial performance of each operation and consider how the two operations impact one another.

Revenue Sources

The Frederick Parking Division has three primary sources of revenue that include 1) Licenses & Permits, 2) Fines & Forfeitures and 3) User Charges. In addition to these three primary revenue sources, intergovernmental transfers, interest earnings and rental income are considered secondary revenue sources. License & Permit revenue and Fines & Forfeiture revenues are viewed as on-street parking revenue sources while both the on- and off-street parking operations each generate user charges. Using this breakdown of revenue sources the on-street parking operations has been generating about 40% of the division's annual revenue, while the off-street parking operations has been producing about 51% of the annual revenue. The remaining 9% of the division's annual revenue is received from the secondary revenue sources mentioned above.

Table 10 that follows summarizes the Parking Division revenue production since 1998. According to the City's financial records between 1999 and 2002 the Parking Division has generated total annual revenue of between $1,737,000 and $3,038,000.

The off-street parking revenue is derived entirely from user charges, which includes the fees for garage parking, income from permit parking privileges at several of the surface parking lots and the proceeds from the Park-N-Shop program. Together these income sources have generated more than $1,022,000 in 2002 which was a 7% increase over of the revenue generated by the same facilities in 2001. Although the Park-N-Shop program has been in effect since 1989 it was until 2001 that the Parking Division took responsibility for the program and began documenting the income from the program. It should be noted that the City's General Funds also makes an annual fund transfer to the parking Division for the cover the cost of discounted employee parking at the Carroll Creek Garage. According to the Director of Finance this fund transfer is reflected in the Carroll Creek Garage revenue total. The gain in revenue that has been realized since

1998 has been to the ever growing ever demand for parking in downtown, there have not been any rate increases.

Table 10
FREDERICK PARKING DIVISION
Special Fund Acount Annual Revenue

			Actual		
ON-STREET PARKING REVENUE:	**1998**	**1999**	**2000**	**2001**	**2002**
Licenses & Permits:					
Residential Permits	$17,875	$17,950	$19,000	$18,158	$19,095
No Parking Permits	$10,704	$9,521	$10,510	$10,232	$11,384
Total Licenses & Permits	$30,577	$29,470	$31,510	$30,391	$32,481
Charges for Services:					
Parking Meters	$350,067	$344,744	$336,953	$305,045	$375,009
Total Charges for Services	$350,067	$344,744	$336,953	$305,045	$375,009
Fines & Forfeitures:					
Parking Violations	$357,053	$333,405	$325,381	$362,191	$395,838
Parking Scofflaws	$2,847	$2,622	$2,090	$5,387	$5,363
Total Fines & Forfeitures	$359,900	$336,027	$327,471	$367,578	$401,201
TOTAL ON-STREET REVENUE	**$740,544**	**$710,241**	**$695,934**	**$703,014**	**$808,691**
OFF-STREET PARKING REVENUE:					
Charges for Services:					
Church Street Deck	$277,381	$309,719	$316,379	$323,584	$328,810
Court Street Deck	$358,833	$396,819	$392,550	$389,672	$423,712
Carroll Creek Deck	$115,203	$154,581	$188,081	$214,640	$241,107
Street Parking Privileges	$28,437	$35,285	$28,175	$25,468	$26,032
Park-N-Shop	$0	$0	$0	$1,398	$2,364
Total Charges for Services	$779,854	$896,404	$925,185	$954,762	$1,022,025
TOTAL OFF-STREET REVENUE	**$779,854**	**$896,404**	**$925,185**	**$954,762**	**$1,022,025**
OTHER REVENUE SOURCES:					
County Reimbursement	$28,787	$30,828	$39,531	$32,465	$27,027
Total Intergovernmental	$28,787	$30,828	$39,531	$32,465	$27,027
(Co. monthly cost per space)	*$24*	*$26*	*$33*	*$27*	*$23*
Miscellaneous:					
Investment Interest	$77,090	$91,031	$114,150	$156,146	$168,875
Rents	$4,469	$4,468	$2,219	$1,469	$1,102
Other	$3,710	$4,256	$3,639	$12,552	$10,525
Total Miscellaneous	$85,269	$99,755	$120,008	$170,167	$180,502
TOTAL OTHER REVENUE	**$114,056**	**$130,583**	**$159,539**	**$202,632**	**$207,529**
ALL REVENUE SOURCES	**$1,634,454**	**$1,737,228**	**$1,780,658**	**$1,860,408**	**$2,038,245**

Finally, about $207,000 of income was realized in 2002 from intergovernmental transfers, interest income and rents. The intergovernmental transfer is from the County government, which in accordance with a long-standing agreement, pays 25% of the Parking Division's annual costs for operating the Church Street parking garage in exchange for an entitlement of 100 parking spaces at the facility for County employees. This payment calculation is based upon routine operating costs and expenses for any needed garage repairs. The annual fund transfer from the County has equated to a monthly per space parking cost that range from a low of $24.00 in 1998 to a high of $33.00 in 2000. The investment interest is the earnings from net operating revenue held on deposit in the Parking Funds from year to year.

Lastly, the rent income shown on the table is from temporary users of the unfinished ground floor space in the Court Street for storage. This 6,200 square feet of space is presently being built-out and will be leased to the City Police Division at a rate of $10.00 per square feet.

Operating Expenditures

All Division of Parking annual expenditures are accounted for as 1) Parking Garage Operating Expenses, as 2) Debt Service Expenses, or as 3) Public Parking System/Facilities Expenses. The Parking Garage Operating Expenses includes the operating costs for the Church Street, Court Street and the Carroll Creek Garages. The Debt Service Expense includes the Parking Division portion of the City's General Obligation Debt attributable to bond funding used to develop and repair the Court Street Garage and the Carroll Creek Garage. The Debt Service total for 2002 includes the payment obligation for bond proceeds intended to be used to finance a proposed fourth parking garage. The Public Parking System/Facilities Expenses includes all the rest of the Division's annual expenditures that do not relate to the operations of the three parking garages. It should be noted that the City Capital Improvement expenditures for Parking Division facilities and equipment are accounted for in the five-year Capital Improvement Program Budget.

The annual expense table that follows (Table 11) noted that the garage operating expenses and the parking system/facilities expenses each account for about 25% of the division's total annual expenses while debt service expenses account slightly more than 50% of the total.

Table 11
FREDERICK PARKING DEPARTMENT
Special Fund Account Annual Expenses

			Actual		
	1998	**1999**	**2000**	**2001**	**2002**
Garage Operating Expenditures	$309,117	$336,129	$346,873	$331,304	$333,284
Other Public Parking Expenditures	$316,332	$273,054	$288,212	$320,927	$322,914
Other Miscelleanous Expenses	$5,088	$0	$6,561	$0	$0
Debt Service Obligations	$759,848	$748,689	$689,730	$671,698	$749,345
PARKING EXPENDITURES	**$1,390,385**	**$1,357,872**	**$1,331,376**	**$1,323,929**	**$1,405,543**

The total Parking Garage Operating Costs have averaged approximately $330,000 since 1998. This total translates into an average operating cost of about $225 per space for all the parking garage spaces. Based upon DESMAN's experience, the average operating cost per space for the Frederick parking garages falls into the low to median expenditure range for parking garages with comparable usage characteristics.

Table 12 on the following page illustrates the combined expenses for parking deck operations. A detailed breakdown of the operating expenditures for each of the three parking garages has been included in the appendix (Exhibits G1, G2 and G3). The historical records of expenditures between 1998 and 2002 shows that about 53% the total operating expenditures for the garages was attributable to personnel wages, benefits, FICA and workman's compensation. The only other significant expenditures during this timeframe have been for energy costs (17%) and repair/maintenance services (11%).

Table 12

FREDERICK PARKING DEPARTMENT
Special Fund Account Expenditures for the Parking Garages

COMBINED EXPENSE TOTAL (Church Street, Court Street & Carroll Creek Garages)

1469 Total Garage Spaces **Actual**

	1998	1999	2000	2001	2002
Salaries	$121,542	$132,326	$148,464	$166,835	$165,026
Overtime	$4,395	$3,439	$4,544	$5,325	$6,306
Workman's Compensation	$2,163	$2,736	$2,733	$3,409	$3,902
FICA	$9,635	$10,386	$11,747	$13,109	$12,983
Benefits	$5,626	$5,223	$4,824	$8,496	$16,115
Supplies	$8,875	$9,750	$8,934	$5,813	$9,654
Energy	$57,730	$52,641	$62,661	$52,928	$54,891
Repair & Maintenance	$10,265	$15,455	$17,399	$12,106	$9,635
Professional Services	$0	$0	$612	$18,840	$8,170
Cleaning Services	$0	$0	$0	$0	$0
Repair & Maintenance Services	$40,163	$13,823	$68,005	$25,429	$27,196
Rentals	$129	$0	$0	$0	$0
Communications	$4,965	$5,688	$6,433	$7,201	$6,873
Travel	$0	$0	$0	$0	$0
Advertising	$112	$0	$0	$0	$0
Printing & Binding	$0	$0	$0	$0	$0
Insurance	$11,467	$11,282	$10,517	$11,813	$12,533
Bldg Improvements	$0	$0	$0	$0	$0
Machinery & Equipment	$32,110	$73,380	$0	$0	$0
TOTAL OPERATING EXPENSES	$309,177	$336,129	$346,873	$331,304	$333,284
Oper. Cost per Space	$210	$229	$236	$226	$227

The expenses for maintaining and operating the City's surface parking lots, operating and enforcing the parking meter system, parking violation processing, material and supply purchases and the administrative personnel wages are grouped in the Public Parking System/Facilities Expense category at are illustrated on Table 13. Approximately 63% of the total non-garage operating expense for the Parking Division is attributable to personnel wages, benefits, FICA and workman's compensation. The only other significant expenditure is for professional services for a private data processing firm that manages the City's parking violations system.

It is important to note that the non-garage operating expenses for the Parking Division rose 18% from 1999 through 2002 due in large part to rising wage and benefit costs.

Table 13
FREDERICK PARKING DIVISION
Special Fund Account Expenditures for the Public Parking System/Facilities

COMBINED EXPENSE TOTAL (Excluding Parking Garage Operating Expenses)

			Actual		
	1998	**1999**	**2000**	**2001**	**2002**
Salaries	$149,991	$125,372	$137,185	$166,831	$149,787
Overtime	$5,794	$7,757	$7,600	$6,468	$6,452
Workmens Comp	$3,823	$2,756	$2,855	$3,602	$4,123
FICA	$11,937	$10,187	$11,070	$12,966	$12,249
Benefits	$39,343	$30,874	$32,935	$35,044	$31,850
Supplies	$15,350	$12,269	$10,076	$12,507	$11,871
Energy	$2,785	$2,487	$2,856	$2,825	$2,745
Repair & Maintenance	$4,703	$2,750	$5,173	$1,650	$5,295
Professional Services	$68,239	$65,060	$60,121	$66,504	$83,254
Cleaning Services	$0	$0	$0	$0	$0
Repair & Maintenance Services	$10,405	$9,566	$14,069	$8,863	$11,161
Rentals	$342	$134	$218	$220	$253
Communications	$1,213	$1,128	$1,252	$789	$1,012
Travel	$485	$497	$585	$560	$710
Advertising	$0	$0	$0	$0	$0
Printing/Binding	$0	$0	$0	$0	$0
Insurance	$1,922	$2,217	$2,217	$2,098	$2,152
Bldg. Improvements	$0	$0	$0	$0	$0
Machinery & Equipment	$0	$0	$0	$0	$0
TOTAL PUBLIC PARKING EXPENSES	**$316,332**	**$273,054**	**$288,212**	**$320,927**	**$322,914**

Parking Division Annual Debt Service Obligation

The City Frederick has issued General Obligation Bonds to finance the development and major repairs for the Parking Division garages. The last G.O. Bonds issued by the City of Frederick in 2001 were strongly rated AA3 by Moody's and AA- by Standard & Poor's. This rating enabled the City to secure a good interest rate slightly below 5%. Through this funding structure the Parking Division receives project funding from the bond proceeds and assumes prorated share of annual fees, interest and principle payments for the G.O. Bond debt. Past debt on the Church Street Garage has already been retired, but annual debt service obligations remain on the Court Street and the Carroll Creek Garages (see Table 14). The total outstanding debt balance for the Court Street Garage is approximately $985,000. The outstanding debt on the Carroll Creek Garage is scheduled to be retired by the end of 2012. However, in 2001 the City issued $45.6 million in G.O. Bonds of which approximately $2.7 million has been earmarked for funding the acquisition of property for a proposed fourth parking garage.

Table 14
FREDERICK PARKING DEPARTMENT
Special Fund Account Annual Debt Service Obligations

			Actual		
	1998	**1999**	**2000**	**2001**	**2002**
Court Street Garage	$514,143	$509,613	$457,049	$447,980	$396,663
Carroll Creek Garage	$245,705	$239,076	$232,681	$223,718	$205,041
Proposed Deck #4 Interest & Fees	$0	$0	$0	$0	$103,541
Church Street Deck Rehab	$0	$0	$0	$0	$44,100
TOTAL ANNUAL DEBT SERVICE	**$759,848**	**$748,689**	**$689,730**	**$671,698**	**$749,345**

Parking Division Annual Cashflow Analysis

Historically, the Parking Division annual revenues have exceeded its annual operating expenses which has allowed the Division to retain and accumulate a cashflow balance each year. In 2002, the Parking Division has maintained a cashflow balance of approximately $1.2 million. From 1998 through 2002 the Parking Division annual cashflow after debt service payments have contributed approximately $1.18 to this fund balance (see Table 15).

Table 15
FREDERICK PARKING DEPARTMENT
Special Fund Account Annual Cashflow Analysis

	1998	**1999**	**2000**	**2001**	**2002**
On Street Parking Revenue	$740,544	$710,241	$695,934	$703,014	$808,691
Off Street Parking Revenue	$779,854	$896,404	$925,185	$954,762	$1,022,025
Other Revenue Sources	$114,056	$130,583	$159,539	$202,632	$207,529
ALL REVENUE SOURCES	**$1,634,454**	**$1,737,228**	**$1,780,658**	**$1,860,408**	**$2,038,245**
Garage Operating Expenditures	$309,177	$336,129	$346,873	$331,304	$333,284
Other Public Parking Expenditures	$316,332	$273,054	$288,212	$320,927	$322,914
Miscellaneous	$5,088	$0	$6,561	$0	$0
ALL OPERATING EXPENDITURES	**$630,597**	**$609,183**	**$641,646**	**$652,231**	**$656,198**
NET INCOME AVAILABLE FOR DEBT SERVICE	**$1,003,857**	**$1,128,045**	**$1,139,012**	**$1,208,177**	**$1,382,047**
DEBT SERVICE OBLIGATIONS	**-$759,848**	**-$748,689**	**-$689,730**	**-$671,698**	**-$749,345**
PARKING CASH FLOW SURPLUS/DEFICIT	**$244,009**	**$379,356**	**$449,282**	**$536,479**	**$632,702**
OTHER OPERATING REVENUES/EXPENSES					
Fixed asset dispositions	$0	$480	$0	$0	$0
Debt proceeds	$0	$0	$0	$0	$1,284,748
Payment to refunded bond escrow	$0	$0	$0	$0	-$1,098,232
Transfers Out	-$190,000	-$120,464	-$539,192	-$315,000	-$70,661
NET INCREASE/DECREASE IN ANNUAL FUND BALANCE	**$54,009**	**$259,372**	**-$89,910**	**$221,479**	**$748,557**
ENDING FUND BALANCE	**$767,570**	**$821,579**	**$1,080,951**	**$991,041**	**$1,212,520**
	$821,579	*$1,080,951*	*$991,041*	*$1,212,520*	*$1,961,077*

Preliminary Findings Regarding the Parking Division Financial Situation

The Parking Division has sustained a strong financial performance from 1998 through 2002 however the new debt to be incur to fund the present campaign to structure two new parking garages in downtown is expected to eventually consume the existing undesignated fund balance. The City will most likely have to raise parking user charges, parking violation fines and parking meter rates in order to hedge against rising operating cost and debt obligations. It might also be necessary for the City to amend its program of funding employee parking.

As the City moves forward with its intention to formally establish the Parking Division as an Enterprise Fund Account, DESMAN would recommend that the Parking Division expenditures and revenues be more cleanly allocated to the On-Street Parking Program (i.e. the On-street Parking Meter System operations, maintenance and enforcement) and the Off-Street Parking Program (i.e. the Parking Garage with the Off-Street Parking Lots). All general administrative expenses should be proportionally allocated to the two programs. Such changes will improve the City's ability to clearly assess financial performance of both programs and make necessary fiscal changes in response to program surplus and deficits.

SECTION 4 - ASSESSMENT OF FUTURE PARKING CONDITIONS

Introduction

This phase of the report evaluates future parking need under immediate, mid-range, and long-range conditions. As such, the analysis contained herein documents known, proposed and potential development projects by type, size, and location. It also introduces various parking factors and adjustments used to estimate peak demand. Finally, the analysis estimates future parking deficits by block given these developments' impact. Future parking demand also takes into consideration the potential future absorptions of presently vacant office and retail space.

With a determination of future parking surplus and deficit conditions, DESMAN evaluated a number of measures aimed at reducing the demand for long-term (employee) parking in the core area of the downtown. As these strategies cannot single-handedly address current and future parking shortfall, DESMAN must also evaluate the opportunity to develop additional structured parking facilities within or adjacent to high demand/deficit areas. As such, Phase II also includes an evaluation of a number of alternative parking development sites, and develops structured parking concepts and construction cost estimates for selected sites. In Phase III of this Report (to be completed) DESMAN will develop a phasing plan for the new/modified parking policies, operational procedures, and pricing structures and evaluate the fiscal implications of a recommended program action plan, to include the cost, revenue and timing for new downtown parking structures.

Assessment of Future Development

<u>Known, Proposed and Potential Development</u>

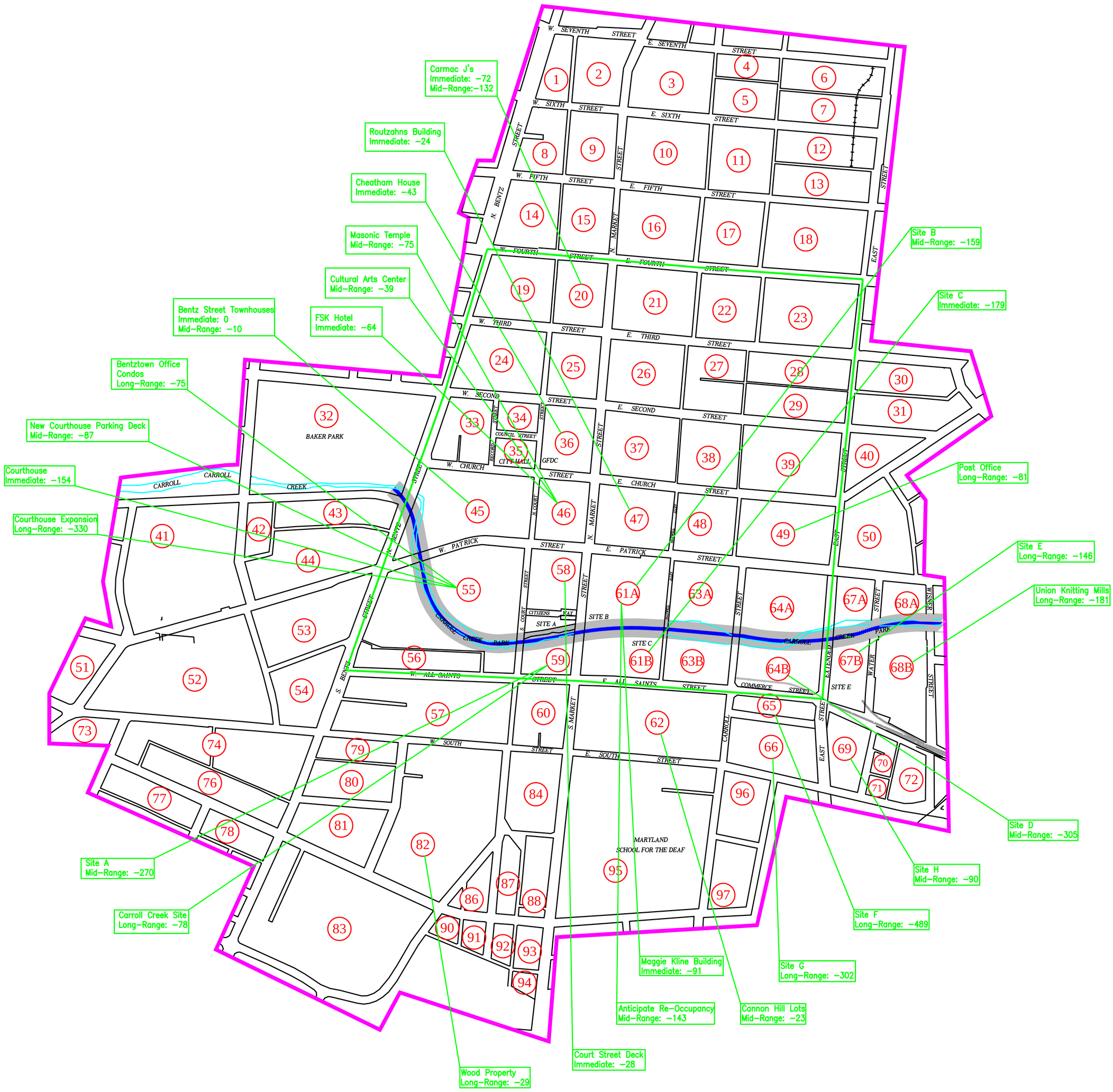
DESMAN obtained information from a subcommittee of the Parking Task Force, the Frederick Planning Department, the Greater Frederick Development Corporation, and a

local real estate professional on known, proposed, and potential development projects within the study area. This information was presented the Parking Task Force to validate the information and to forecast the probable phasing of these projects over time. For purposes of this study, immediate (0-2 years), mid-range (3-5 years), and long-range (>5 years) time frames were selected. The development projects range from the Francis Scott Key Building residential conversion (nearly complete) to long-range projects under the East Street Master Plan. Table 16a, 16b, and 16c summarizes the information that was provided for each development, under each of the future scenarios, and Exhibit 6 illustrates the developments' locations within downtown Frederick.

Note that Table 16b, Mid-Range development projections, includes information regarding the potential absorption of presently vacant yet viable commercial/residential space. As with the new development information, DESMAN met with the parking subcommittee in an effort to identify such potential.

Table 16a
Known, Proposed and Potential Development Activity
Under an Immediate (0-2 years) Analysis

Project Name	Block Code	Land Use Type	Density
Routzahns Building	47	Office	8,000 sq.ft.
FSK Apartments	46	Residential	50 units
		Theater	100 seat
		Office	14,500 sq.ft.
		Restaurant	1,000 sq.ft.
		Classroom	2,000 sq.ft.
Cheatham House	36	Office	12,000 sq.ft.
Site C	61B	Residential	105 units
Court Street Deck	58	Govt. Office	8,000 sq.ft.
48 S. Market Street Building	61A	Restaurant	3,000 sq.ft.
		Office	3,000 sq.ft.
Carmack J's - Option 1 - Reuse	20	Retail	12,000 sq.ft.
		Office	4,000 squ
Courthouse	55	Office	28,000 sq.ft.



DESMAN
ASSOCIATES

Location of Immediate, Mid-Term, and Long-Term
Development Activity and Parking Deficits

EXHIBIT:
6

Table 16b
Additional Known, Proposed and Potential Development
Activity Under a Mid-Range (3-5 years) Analysis

Project Name	Block Code	Land Use Type	Density
Bentz Street Townhouses	45	Home Office	8 units
Cannon Hill Lofts	62	Residential	12 units
		Office	8,000 sq.ft.
New Courthouse Parking Deck	55	Retail	6,000 sq.ft.
		Office	14,000 sq.ft.
East Street Master Plan - Site H	69	Office	30,000 sq.ft.
East Street Master Plan - Site D	64B	Tourism	4,000 sq.ft.
		Hotel	90 units
		Residential	50 units
		Retail	23,000 sq.ft.
Carroll Creek Development - Site A	59	Office	90,000 sq.ft.
Carroll Creek Development - Site B	61A	Office	26,800 sq.ft.
		Retail	13,036 sq.ft.
Masonic Temple	46	Office	25,000 sq.ft.
Cultural Arts Center (Classrooms)	46	Classrooms	14,000 sq.ft.
Re-Occupancy of Vacant Space	61A	Office	47,000 sq.ft.
		Retail	10,000 sq.ft.
		Restaurant	5,000 sq.ft.
		Residential	30 units

Table 16c
Additional Known, Proposed and Potential Development
Activity Under a Long-Range (>5 years) Analysis

Project Name	Block Code	Land Use Type	Density
Union Knitting Mills	68B	Retail	20,000 sq.ft.
		Office	40,000 sq.ft.
Bentztown Office Condos	55	Office	25,000 sq.ft.
Carroll Creek Site	59	Retail	10,000 sq.ft.
		Residential	38 units
Site E	67B	Hotel	101 units
		Retail	19,000 sq.ft.
Site F	65	Office	135,000 sq.ft.
Site G	66	Residential	9 units
		Tourism	20,000 sq.ft.
		Office	54,200 sq.ft.
		Retail	16,000 sq.ft.
Wood Property	82	Townhouses	23 units
Post Office	49	Retail	4,000 sq.ft.
		Office	9,000 sq.ft.
		Residential	33 units
Courthouse Expansion	55	Govt. Office	60,000 sq.ft.

Estimate of Parking Need

In order to accurately model peak parking demand associated with known, proposed, and potential development projects, the concepts of parking demand factors and shared use adjustments need to be introduced. By applying demand factors to the density of various land uses, the peak weekday parking activity associated with those developments can be estimated.

Land Use Parking Demand Factors

Land use parking demand factors or ratios are per-unit measures of peak hour parking generation. These land use parking demand factors are unique to each land use component. For example, each 1,000 square feet of a restaurant will generate 8.0 parked vehicles during the typical peak activity period of a hotel. Therefore, a 10,000 square foot restaurant would generate a demand for 80 spaces during the peak parking period for restaurant activity, which generally occurs during the evening and early morning hours. Conversely, every 1,000 square feet of occupied office space will generate 3 parked vehicles during the typical peak weekday activity period at an office building, which generally occurs between 10am and 2pm. Table 17 illustrates the weekday peak parking demand factors that DESMAN believes are relevant and accurate in downtown Frederick. Note that these factors are based on research conducted by the Urban Land Institute, the Institute of Transportation Engineers, and, more importantly, on DESMAN experience and insight into auto use patterns in Frederick today (see pedestrian questionnaire results in the Phase I Report).

Table 17
Peak Parking Demand Factors

Land Use	Parking Space Units	Spaces per Weekday
General Office	Per 1,000 SF	3.0
Government Office	Per 1,000 SF	5.5
Courthouse (Fed., State, County)	Per 1,000 SF	5.5
Retail	Per 1,000 SF	3.5
Restaurant	Per 1,000 SF	8.0
Residential	Per Dwelling Unit **(1)**	1.5
Hotel	Per Room	1.25
Theater	Per Seat	0.3
Classroom	Per 1,000 SF	10.0

NOTES:
(1) Assumes one and one-half vehicles owned per dwelling unit.

Source: Urban Land Institute, Institute of Transportation Engineers, DESMAN Experience

However, the parking needs associated with different activities (office, retail, hotel, etc.) fluctuate differently throughout a day. Furthermore, different activities generate different types of parkers with different expectations (hours of use, duration of stay, parking rates, customer services levels, etc.). Therefore, a study of parking accumulation patterns is required.

Parking Accumulation Patterns

The daylong activity patterns and peak activity periods associated with various land uses are quite different. For example, the arrival and departure patterns of vehicles generated by a hotel relate to overnight room occupancy. Parking generation for a restaurant is greatest between the hours of 6:00 PM and 10:00 PM during the dinner hour. Conversely, the vehicle arrival and departure patterns for an office building relate to the work hours of office building employees. Parking generation for an office building is greatest at about 10:00 AM when most employees are at work and visitors typically begin arriving. The hourly accumulation of vehicles for each of the types of land uses anticipated to occur within downtown Frederick are illustrated on Tables 18 for a

weekday activity. These accumulation patterns were documented by the Urban Land Institute in their report on *Shared Parking.*

Table18
Representative Hourly Accumulation by Percent of Peak Hour (Weekday)

Hour of Day	Office	Court-house	Retail	Restaurant	Residential	Hotel	Theater	Classroom
6:00 AM	3%	3%	0%	0%	100%	100%	0%	3%
7:00 AM	20%	20%	8%	2%	87%	85%	0%	20%
8:00 AM	63%	63%	18%	5%	79%	65%	0%	63%
9:00 AM	93%	93%	42%	10%	73%	55%	0%	93%
10:00 AM	100%	100%	68%	20%	68%	45%	5%	100%
11:00 AM	100%	100%	87%	30%	59%	35%	5%	100%
12:00 Noon	90%	90%	97%	50%	60%	30%	10%	90%
1:00 PM	90%	90%	100%	70%	59%	30%	10%	90%
2:00 PM	97%	97%	97%	60%	60%	35%	10%	97%
3:00 PM	93%	93%	95%	60%	61%	35%	20%	93%
4:00 PM	77%	77%	87%	50%	66%	45%	25%	77%
5:00 PM	47%	47%	79%	70%	77%	60%	65%	47%
6:00 PM	23%	23%	82%	90%	85%	70%	70%	23%
7:00 PM	7%	7%	89%	100%	94%	75%	95%	7%
8:00 PM	7%	7%	87%	100%	96%	90%	100%	7%
9:00 PM	3%	3%	61%	100%	98%	95%	100%	3%
10:00 PM	3%	3%	32%	90%	99%	100%	100%	3%
11:00 PM	0%	0%	13%	70%	100%	100%	45%	0%
12:00 Midnight	0%	0%	0%	50%	100%	100%	10%	0%

Development Based Weekday Demand Estimates

To determine the future demand for parking associated with new development and commercial absorption, the factors and adjustments presented above are applied to the development information. Tables 19a, 19b, and 19c (on the following page) illustrate the parking demand, potential displacement, and resulting parking deficit associate with each development and under each future condition. For example, the development of 72 residential units on "Site C" along Carroll Creek will displace 85 existing parking spaces. During the peak weekday (11am) period, and adjusting for residential hourly parking need at 11am (87% of max. demand), the project will create a daytime demand for 94 spaces. As a result, a peak weekday deficit of 179 spaces (85 spaces displaced + 94 space demand) would be created by this new development.

Based on this information and analysis, DESMAN would suggest that within the next two years (immediate scenario) development activity would create an deficit of 730 spaces (see Table 19a). Under the mid-range scenario, that deficit would increase by 482 spaces (see Table 19b) to 1,212 spaces. Finally, development activity under the long-range scenario would generate an additional deficit of 1,712 spaces, thereby increasing the overall development impact to a deficit of 3,654 parking spaces.

Table 19a
Peak Parking Demand, Space Displacement & Resulting
Development Based Parking Deficit Under an Immediate (0-2 years) Analysis

Project Name	Block Code	Land Use Type	Density	Parking to be Displaced	Peak Weekday Demand Factor (1)	Peak Hour Adjustment (2)	Demand	Resulting Parking Surplus/Deficit
Routzahns Building	47	Office	8,000 sq.ft.	0	3	100%	24	-24
FSK Apartments	46	Residential	50 units	0	1.5	85%	64	-64
	46	Theater	100 seats	0	0.3	5%	2	-2
	46	Office	14,500 sq.ft.	0	3	100%	44	-44
	46	Restaurant	1,000 sq.ft.	0	8	70%	6	-6
	46	Classroom	2,000 sq.ft.	0	10	100%	20	-20
Subtotal		---	---	0	---	---	135	-135
Cheatham House	36	Office	12,000 sq.ft.	0	3	100%	36	-36
Site C	61B	Residential	105 units	142	1.5	87%	137	-279
Court Street Deck	58	Govt. Office	8,000 sq.ft.	0	3.5	100%	28	-28
48 S. Market St. Building	61A	Restaurant	3,000 sq.ft.	0	8	70%	17	-17
	61A	Office	3,000 sq.ft.	0	3	100%	9	-9
Subtotal		---	---	0	---	---	26	-26
Carmack J's - Option 1 - Reuse	20	Retail	12,000 sq.ft.	0	3.5	87%	37	-37
	20	Office	4,000 sq.ft.	0	3	100%	12	-12
Subtotal		---	---	0	---	---	49	-49
Courthouse	55	Office	28,000 sq.ft.	0	5.5	100%	154	-154
							Total	**-730**

Table 19b
Peak Parking Demand, Space Displacement & Resulting
Development Based Parking Deficit Under a Mid-Range (3-5 years) Analysis

Project Name	Block Code	Land Use Type	Density	Parking to be Displaced	Peak Weekday Demand Factor (1)	Peak Hour Adjustment (2)	Demand	Resulting Parking Surplus/Deficit
Bentz Street Townhouses	45	Home Office	8 units	0	2.5	100%	20	-20
Cannon Hill Lofts	62	Residential	12 units	0	1.5	85%	15	-15
		Office	8000 sq.ft.	0	1	100%	8	-8
Subtotal		----	----	0	----	----	23	-23
New Courthouse Parking Deck	55	Retail	6000 sq.ft.	27	3.5	87%	18	-45
		Office	14000 sq.ft.	0	3	100%	42	-42
Subtotal		----	----	27	----	----	60	-87
Site H	69	Office	30000 sq.ft.	0	3	100%	90	-90
Site D	64B	Tourism	4000 sq.ft.	80	3.5	87%	12	-92
		Hotel	90 units	0	1.25	70%	79	-79
		Residential	50 units	0	1.5	85%	64	-64
		Retail	23000 sq.ft.	0	3.5	87%	70	-70
Subtotal		----	----	80	----	----	225	-305
Site A	59	Office	90000 sq.ft.	0	3	100%	270	-270
Site B	61A	Office	26800 sq.ft.	0	3	100%	80	-80
		Retail	13036 sq.ft.	39	3.5	87%	40	-79
Subtotal		----	----	39	----	----	120	-159
Masonic Temple	46	Office	25000 sq.ft.	0	3	100%	75	-75
Cultural Arts Center (Classrooms)	46	Classrooms	14000 sq.ft.	0	2.8	100%	39	-39
Anticipated Re-Occupancy	61A	Office	47000 sq.ft.	0	1	100%	47	-47
		Retail	10000 sq.ft.	0	3.5	87%	30	-30
		Restaurant	5000 sq.ft.	0	8	70%	28	-28
		Residential	30 units	0	1.5	85%	38	-38
Subtotal		-----	----	0	----	----	143	-143
							Total	**-1212**

Table 19c
Peak Parking Demand, Space Displacement & Resulting
Development Based Parking Deficit Under a Long-Range (>5 years) Analysis

Project Name	Block Code	Land Use Type	Density	Parking to be Displaced	Peak Weekday Demand Factor (1)	Peak Hour Adjustment (2)	Demand	Resulting Parking Surplus/Deficit
Union Knitting Mills	68B	Retail	20000 sq.ft.	0	3.5	87%	61	-61
		Office	40000 sq.ft.	0	3	100%	120	-120
		----	----	0	----	----	181	-181
Bentztown Office Condos	55	Office	25000 sq.ft.	0	3	100%	75	-75
Carroll Creek Site	59	Retail	10000 sq.ft.	0	3.5	87%	30	-30
		Residential	38 units	0	1.5	85%	48	-48
		----	----	0	----	----	78	-78
Site E	67B	Hotel	101 units	0	1.25	70%	88	-88
		Retail	19000 sq.ft.	0	3.5	87%	58	-58
		----	----	0	----	----	146	-146
Site F	65	Office	135000 sq.ft.	84	3	100%	405	-489
Site G	66	Residential	9 units	19	1.5	85%	11	-30
		Tourism	20000 sq.ft.	0	3.5	87%	61	-61
		Office	54200 sq.ft.	0	3	100%	163	-163
		Retail	16000 sq.ft.	0	3.5	87%	49	-49
		----	----	19	----	----	283	-302
Wood Property	82	Townhouses	23 units	0	1.5	85%	29	-29
Post Office	49	Retail	4000 sq.ft.	0	3.5	87%	12	-12
		Office	9000 sq.ft.	0	3	100%	27	-27
		Residential	33 units	0	1.5	85%	42	-42
		----	----	0	----	----	81	-81
Courthouse Expansion	55	Govt. Office	60000 sq.ft.	0	5.5	100%	330	-330
							Total	**-1712**

Future Parking Surplus/Deficit Conditions

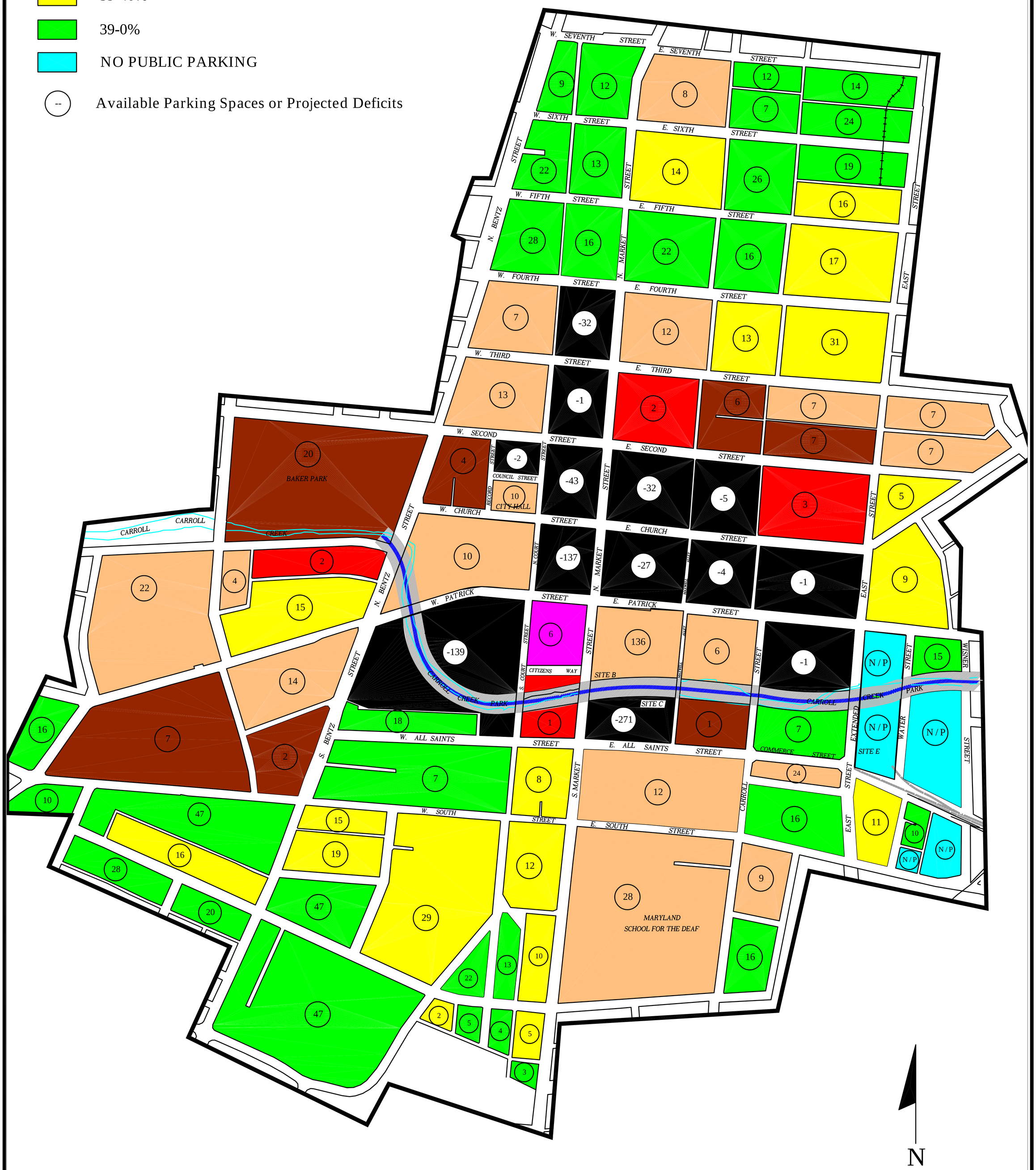
To determine future parking surplus/deficit conditions for each city block within the study area DESMAN simply layered the development generated deficits into the existing parking supply and utilization condition. Tables 20a, 20b, and 20c and Exhibit 7a, 7b, and 7c present the layering of development impacts onto the current public parking surplus/deficit figures by block (accounting for the public system's practical capacity). The blocks that are directly unaffected by development activity are not illustrated on these tables.

Immediate Development Scenario (0-2 Years)

Table 20a shows that there will be a deficit of 399 spaces due to the development happening immediately (0-2 years) in the downtown area. A large amount of the parking

LEGEND:

- 100+%
- 100-90%
- 89-80%
- 79-70%
- 69-60%
- 59-40%
- 39-0%
- NO PUBLIC PARKING
- (--) Available Parking Spaces or Projected Deficits



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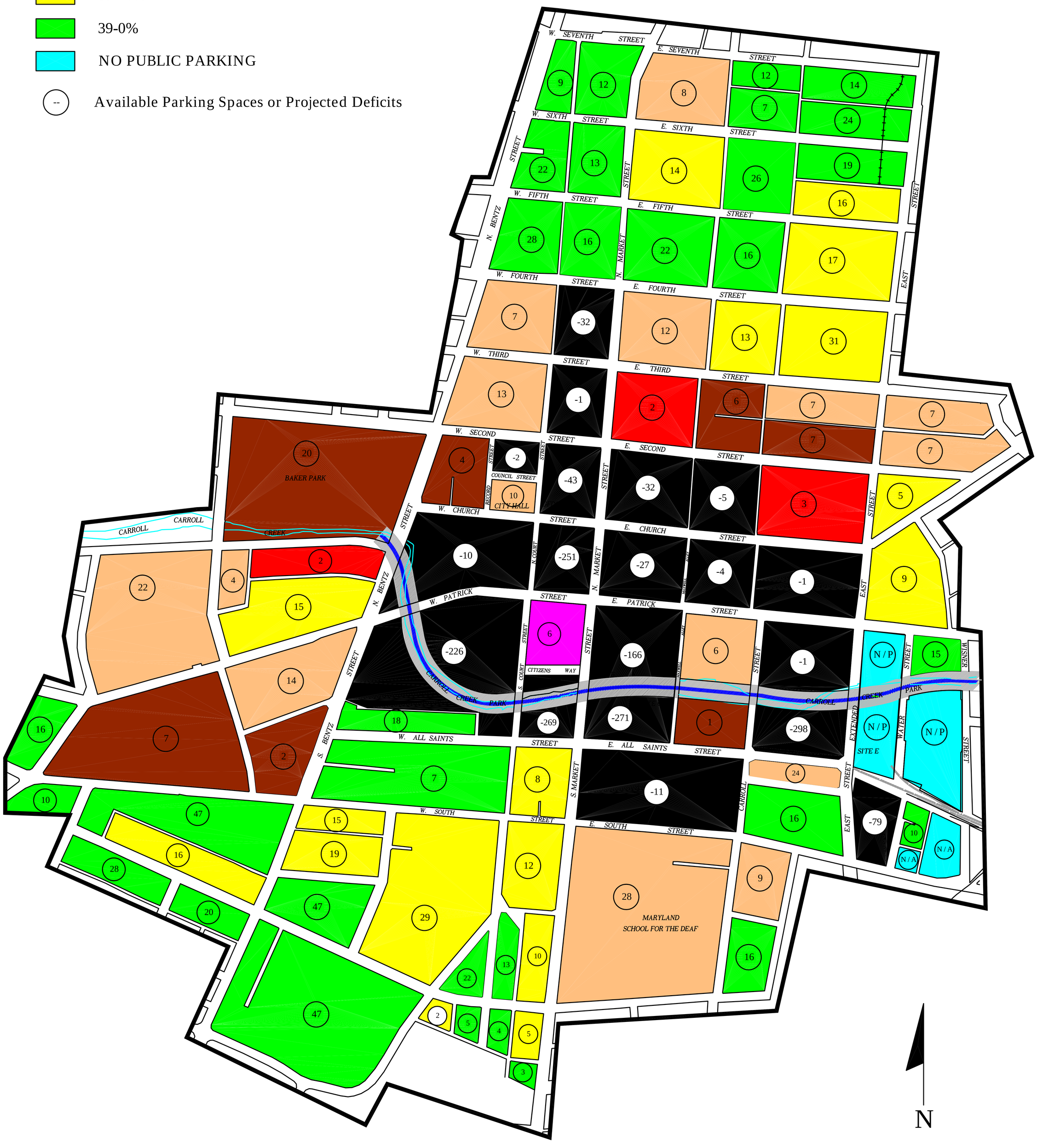
LEGEND:

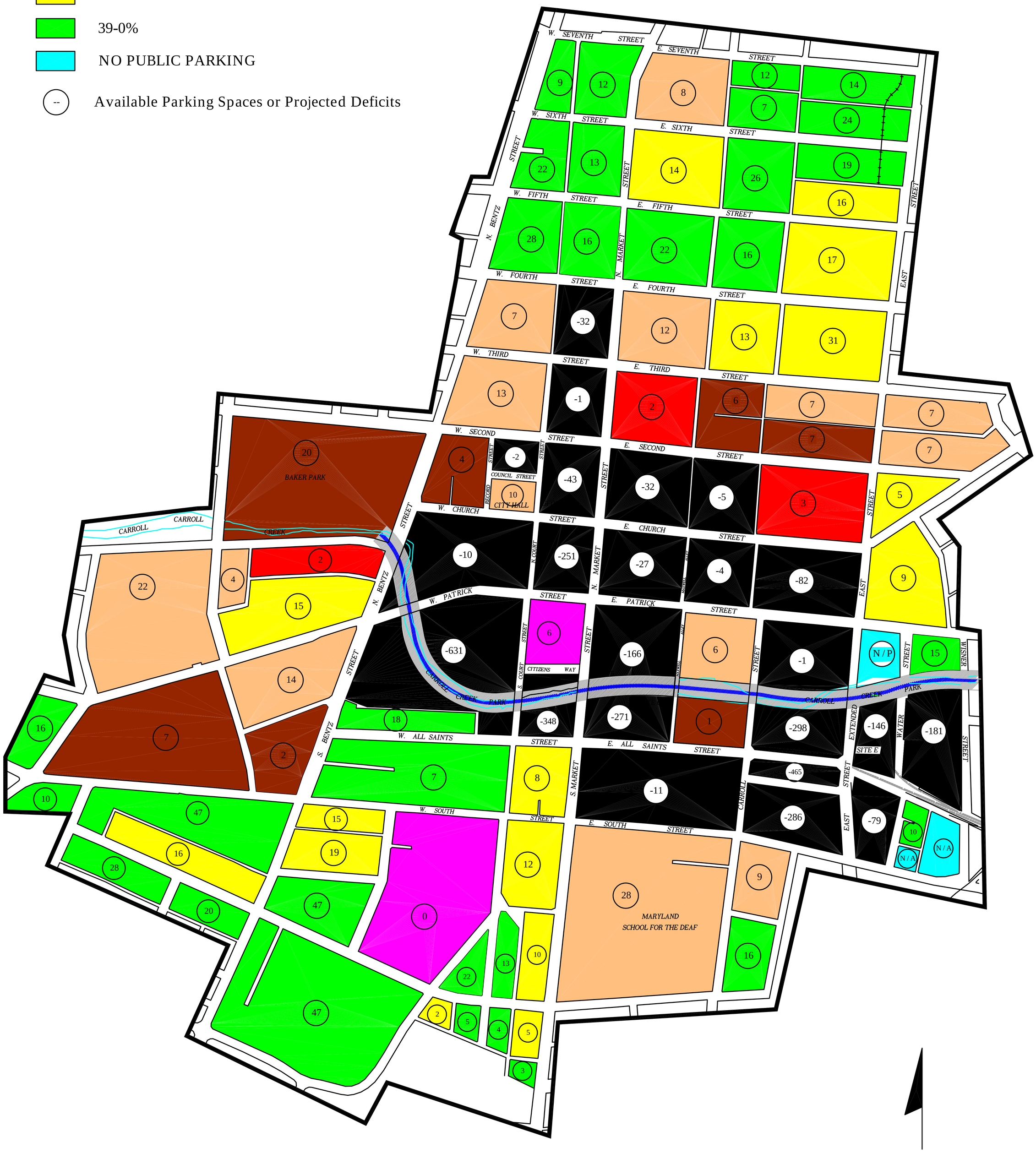
- 100+%
- 100-90%
- 89-80%
- 79-70%
- 69-60%
- 59-40%
- 39-0%
- NO PUBLIC PARKING
- -- Available Parking Spaces or Projected Deficits



DESMAN ASSOCIATES 8614 WESTWOOD CENTER DRIVE, SUITE 300 VIENNA, VIRGINIA 22182 Tel: (703) 448-1190 Fax: (703) 893-4067 A DIVISION OF DESMAN, INC. NEW YORK CHICAGO WASHINGTON, D.C. LOS ANGELES BOSTON CLEVELAND HARTFORD BALTIMORE	Public Parking Surplus/Deficit Under The Mid-Range Scenario (3-5 Years)	EXHIBIT: 7b

LEGEND:

- 100+%
- 100-90%
- 89-80%
- 79-70%
- 69-60%
- 59-40%
- 39-0%
- NO PUBLIC PARKING
- (--) Available Parking Spaces or Projected Deficits



DESMAN ASSOCIATES	Public Parking Surplus/Deficit Under The Long-Range Scenario (>5 Years)	EXHIBIT: 7c

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deficit will be produced by Site C and the Courthouse. Exhibit 7a shows graphically the deficit that will occur.

Table 20a
Immediate Development Scenario Block Surplus/Deficit (By Block)

Block	Current Public Supply	Current Operational Capacity	Current Peak Utilization	Current Surplus/Deficit	Immmediate Development Surplus/Deficit	Future Surplus/Deficit Conditions
20	44	40	23	17	-49	-32
36	29	26	33	-7	-36	-43
45	34	31	21	10	0	10
46	26	23	25	-2	-135	-137
47	37	33	36	-3	-24	-27
49	43	39	40	-1	0	-1
55	71	64	49	15	-154	-139
58	550	495	461	34	-28	6
59	13	12	11	1	0	1
61A	599	539	377	162	-26	136
61B	14	13	5	8	-279	-271
62	54	49	37	12	0	12
64B	11	10	3	7	0	7
65	93	84	60	24	0	24
66	21	19	3	16	0	16
67B	0	0	0	0	0	0
68B	0	0	0	0	0	0
69	28	25	14	11	0	11
82	83	75	46	29	0	29
	1750	1575	1244	331	-730	-399

Mid-Range Development Scenario (3-5 Years)

Table 20b shows that there will be a deficit of 1,612 spaces as the development impact under the mid-range scenario (3-5 years) is realized. With the development of Site D alone (located in Block 64B), a 298 space deficit will be experienced. Exhibit 7b illustrates the deficit and shows how the deficit begins to appear in the courthouse area and south of Carroll Creek along All Saints Street.

Table 20b
Mid-Range Development Scenario Block Surplus/Deficit (By Block)

Block	Current Public Supply	Current Operational Capacity	Current Peak Utilization	Current Surplus/Deficit	Mid-Range Development Surplus/Deficit	Future Surplus/Deficit Conditions
20	44	40	23	17	-49	-32
36	29	26	33	-7	-36	-43
45	34	31	21	10	-20	-10
46	26	23	25	-2	-249	-251
47	37	33	36	-3	-24	-27
49	43	39	40	-1	0	-1
55	71	64	49	15	-241	-226
58	550	495	461	34	-28	6
59	13	12	11	1	-270	-269
61A	599	539	377	162	-328	-166
61B	14	13	5	8	-279	-271
62	54	49	37	12	-23	-11
64B	11	10	3	7	-305	-298
65	93	84	60	24	0	24
66	21	19	3	16	0	16
67B	0	0	0	0	0	0
68B	0	0	0	0	0	0
69	28	25	14	11	-90	-79
82	83	75	46	29	0	29
	1750	1575	1244	331	-1943	-1612

Long-Range Development Scenario (>5 Years)

The long range scenario (>5 years) will produce a 3,323 parking deficit (Table 20c) with the deficit spreading into the southeast section of downtown Frederick (Exhibit 7c). Site F and G and the Courthouse Expansion, which consist of office, residential, tourism, and retail, will generated over half of the deficit (1,712 spaces) during the long-range scenario.

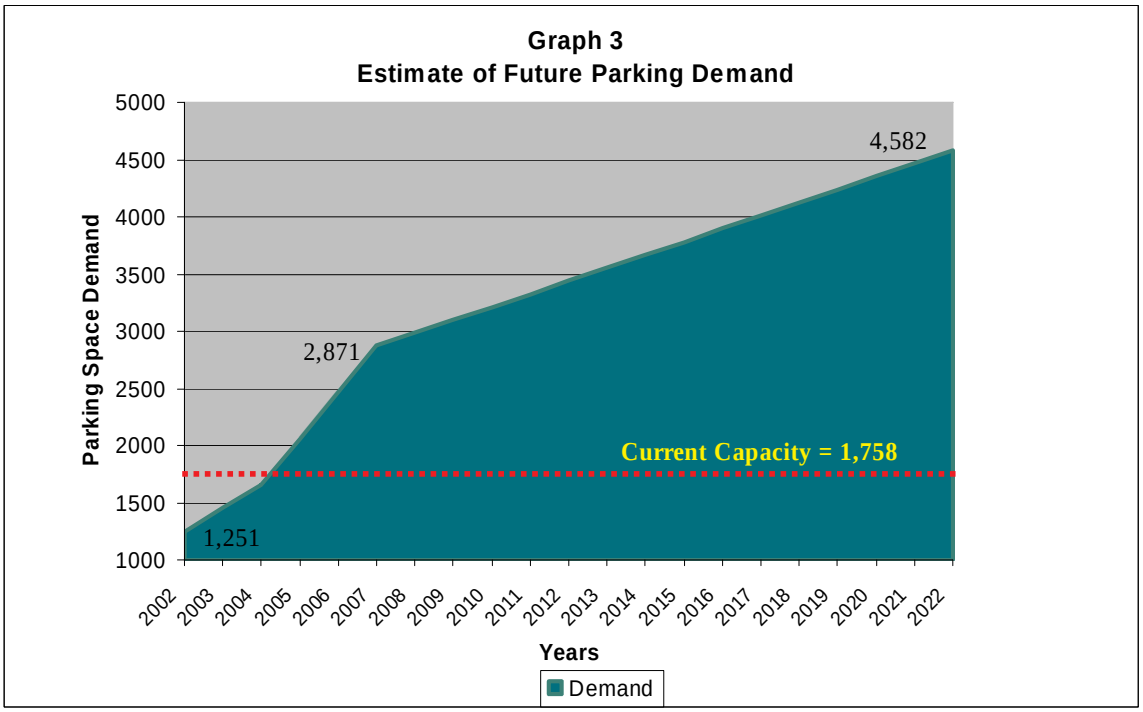
Table 20c
Long-Range Development Scenario Block Surplus/Deficit (By Block)

Block	Current Public Supply	Current Operational Capacity	Current Peak Utilization	Current Surplus/Deficit	Long-Range Development Surplus/Deficit	Future Surplus/Deficit Conditions
20	44	40	23	17	-49	-32
36	29	26	33	-7	-36	-43
45	34	31	21	10	-20	-10
46	26	23	25	-2	-249	-251
47	37	33	36	-3	-24	-27
49	43	39	40	-1	-81	-82
55	71	64	49	15	-646	-631
58	550	495	461	34	-28	6
59	13	12	11	1	-348	-348
61A	599	539	377	162	-328	-166
61B	14	13	5	8	-279	-271
62	54	49	37	12	-23	-11
64B	11	10	3	7	-305	-298
65	93	84	60	24	-489	-465
66	21	19	3	16	-302	-286
67B	0	0	0	0	-146	-146
68B	0	0	0	0	-181	-181
69	28	25	14	11	-90	-79
82	83	75	46	29	-29	0
	1750	1575	1244	331	-3654	-3323

The "Public Sector's" Responsibility

The just concluded analysis of immediate, mid-range, and long-range parking demand and deficit conditions is a rather stagnant analysis as it projects parking need that materialize in phases. In reality, development activity flows, ebbs and surges more gradually over time, depending and the economic, social, and political environment. Furthermore, development activity that was evaluated under the long-range scenario could, in all probability, occur sporadically over a 10 to 15 year period (2007-2022). For these reasons, DESMAN created a graphic (Graph 3) that gradually layers future development parking need evenly between the three future phases and over a 20-year period and compares that demand to the existing supply of spaces. Based on this layering, DESMAN would suggest that the most critical period for public parking decisions fall within the years 2004 and 2006 as by year 2008 the City will be facing a system-wide parking deficit of an estimated 1,113 spaces (1,758 supply minus 2,871

demand). This critical time period represents the baseline upon which a recommended parking "action plan" will be developed (to be discussed in Section 6 of this report).



It would appear from this analysis that the City should anticipate assuming the responsibility of meeting significant parking deficits through the construction of additional parking facilities (new decks and/or a peripheral shuttle lot). While DESMAN would agree that the development of appropriate infrastructure (roads, sewers, utilities, etc.) does fall under the purview of the public sector, in this case the City of Frederick, the parking deficits projected in this study are far too great for a municipality along to address. Therefore, in future sections of this analysis DESMAN will recommended the development of a responsible number of strategically sized and located parking decks. However the capacity of those decks will not, by themselves, address the projected need. DESMAN and the City should assume that private sector developers, through City Ordinance (on-site parking requirements), through special levies (Special Tax District), through market forces, through public/private sector "partnerships" or through other incentives would be encourage/required to meet, to some extent, their own parking needs.

SECTION 5 – OPPORTUNITIES TO MEET CURRENT & PROJECTED PARKING NEEDS

Introduction

The analysis presented in Section 4 – Assessment of Future Parking Conditions suggests that significant parking deficits will develop along the key Carroll Creek to Church Street east/west corridor and north along Market Street. Such anticipated deficits require a series of measures to both meet the demand for parking and simultaneously reduce the demand for parking. This section, therefore, is an overview of various measures that the City of Frederick can employ. They include marketing strategies to encourage car/vanpool use, management and pricing strategies to redistribute the demand for parking from the core to peripheral areas, planning strategies to introduce new park and ride opportunities, and, ultimately, evaluating alternatives that support the construction of additional parking decks downtown. Given the direct and significant impact that additional parking decks have on anticipated parking space shortfalls, the analysis of parking site alternatives and design concepts/cost estimates will be presented first.

Note that this is simply an overview of the various options and strategies, noting basic pros and cons. Detailed cost and benefit information regarding such options will be included in Section 6 – Development of a Parking Action Plan, as will implementation and scheduling recommendations.

Parking Facility Development Plans

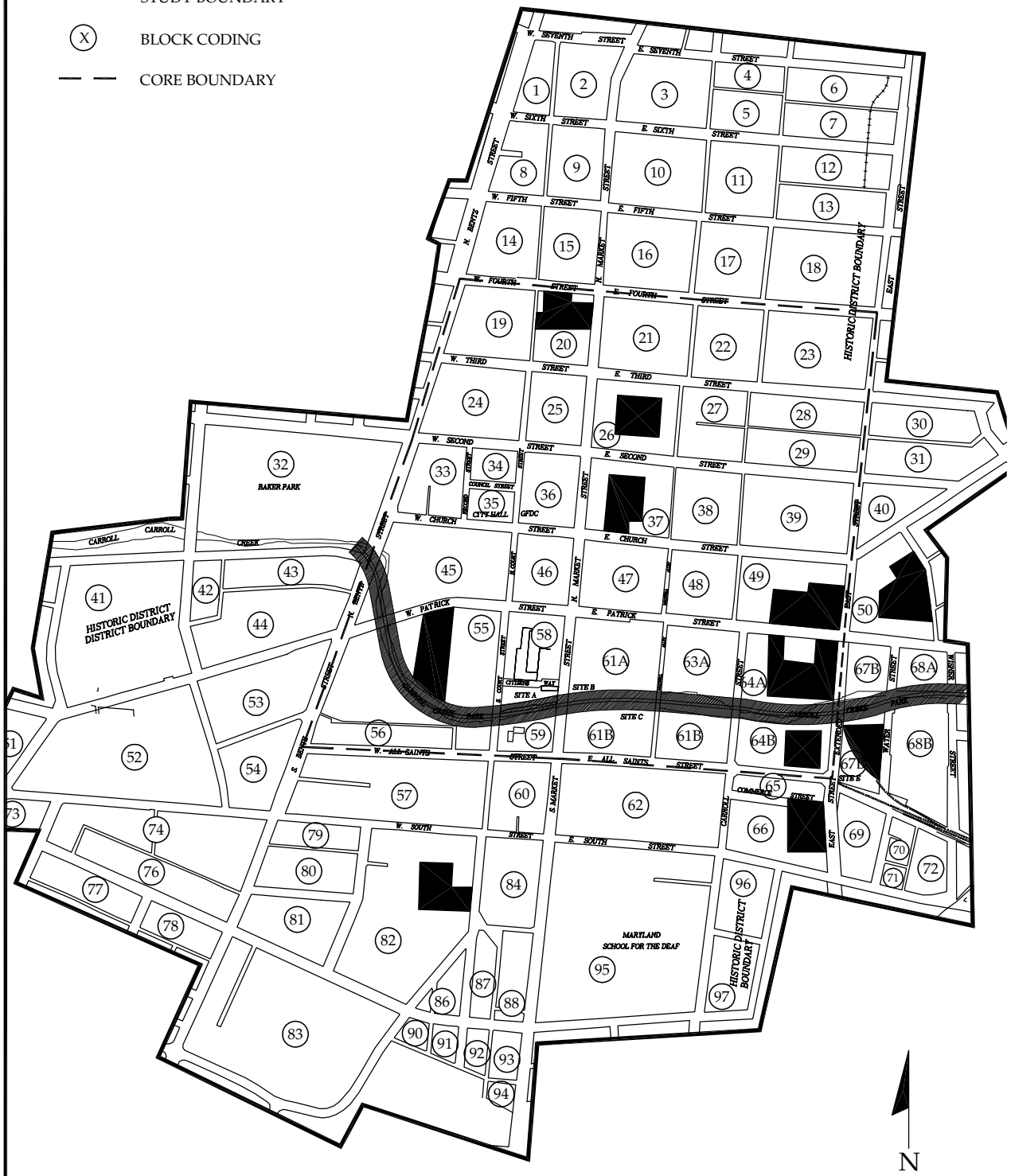
As there are a number of areas in downtown Frederick that will face significant parking deficits within the next several years, particularly in the blocks along Carroll Creek and Patrick Street, the construction of additional parking decks will be required. To this end, DESMAN and the Parking Task Force reviewed a number of sites that, in theory, could satisfy current and future parking deficits. Exhibit 8 illustrates the 11 different locations that were initially evaluated. However, the development of structured parking requires

LEGEND:

STUDY BOUNDARY

(X) BLOCK CODING

CORE BOUNDARY



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rather demanding site/footprint dimensions. As the goal of this portion of the study is to select three or four sites for more detailed design/evaluation, DESMAN needed to educate the Task Force on basic parking design parameters and guidelines.

Basic Parking Design Parameters

Parking structures are simply surface lots that ramp up to additional supported levels. As parking stalls are typically 18 ft. long and 9 ft. wide, and as typical two-way drive isles (90-degree parking) are 24 ft. wide, the standard parking bay equals 60 ft. (18+18+24). In order to circulate up and down, two drive isles are required. Therefore, the typical garage should be 124 ft. wide (including 4' for parapet walls and columns). Similarly, the length of the structure must be sufficient to permit the parking ramp to climb the required distance to the next parking level (from 5 to 10 ft. depending on design) while not exceeding a 5-6% slope. For example, a garage which requires a 10 ft. floor to floor ramping system (single helix) with a 5% slope would require 200 ft. of sloping floor plus another 27 to 45 ft. on each end (depending on traffic pattern) for a total of 248 to 290 ft.

These design standards can be reduced depending on the type of traffic flow (one-way), the angle of parking (less than 90 degrees), and the type of ramping system (single or double helix) employed. Unfortunately, such modifications reduce the design efficiency and increase the per space construction costs. Design efficiency is best defined by the number of square feet required to provide a single parking stall. As a rough rule of thumb, and in a perfect world, an efficiently designed parking structure should require no more than 320 sq.ft. per space.

Sites Selected for Further Analysis

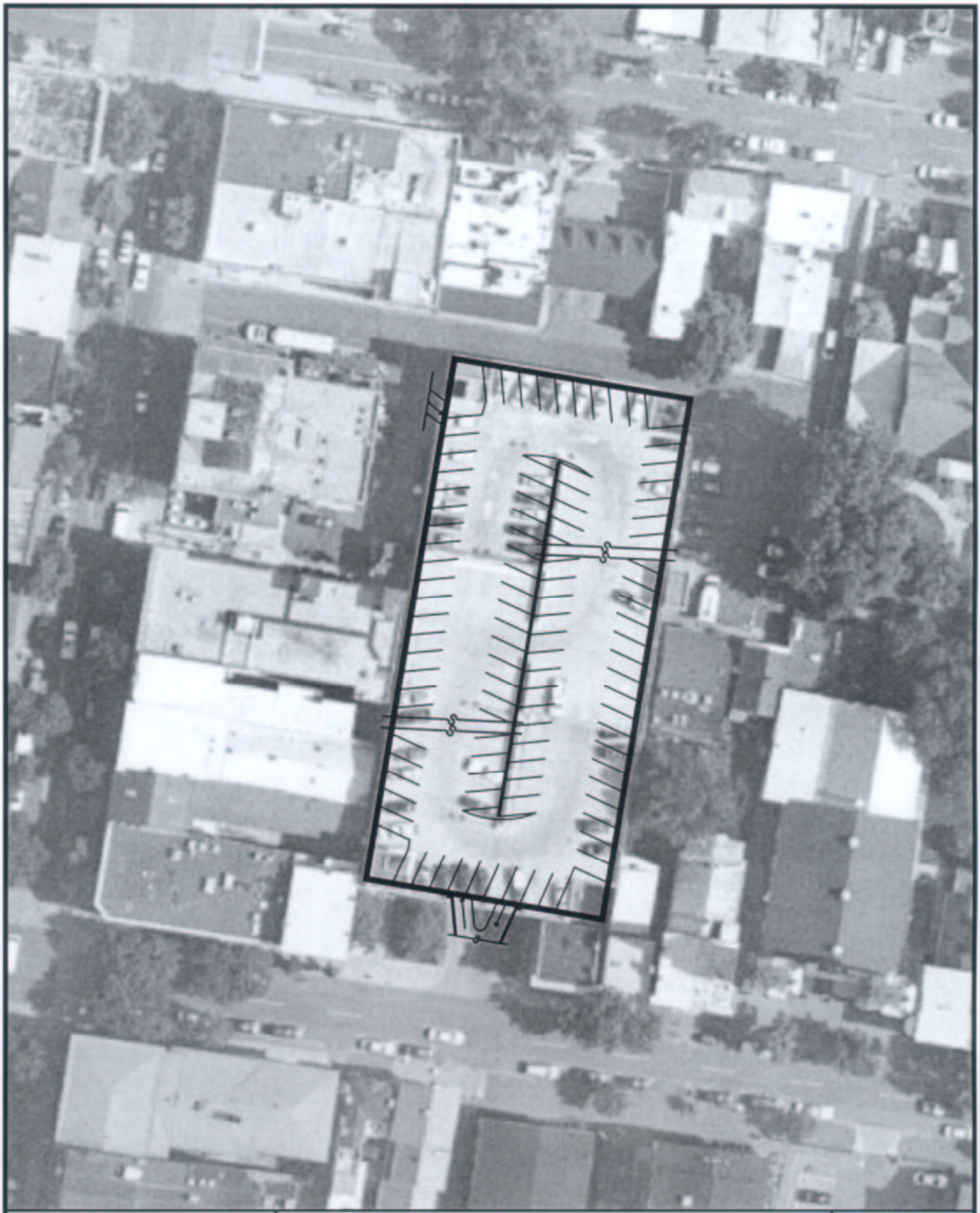
Based on the basic parking design parameters, and an evaluation of such factors as proximity to current and future deficits, vehicular accessibility, impact on adjacent/historic resources, and each site's inherent design efficiency (or inefficiency), DESMAN and the Task Force selected five (5) sites for further evaluation.

- Church Street Deck (Redevelopment)
- Delphey's / County Courthouse
- Sagner Ave./East St. Extended
- Patrick St. / East St.
- Post Office Property

For each of these properties, DESMAN identified the site boundaries and dimensions, topographic conditions, and roadway directional flow. Once the boundaries were defined, DESMAN's functional designer developed typically level structured parking layouts for each site, identifying vehicle entry/exit points, drive aisles, directional traffic flow, and internal ramping. These layouts were then layered over the aerial photograph taken in May of 2002 for ease of identification. Exhibits 9a through 9d show the parking concepts for each site. Note that as DESMAN wished to compare structure parking potential for each of these sites on an equal basis, the designs presented maximized the number of parking spaces on each site. Therefore, opportunities for ground floor retail space or for the enhanced "developability" of adjacent/undeveloped site area (new office building, new retail space, etc.) was not evaluated. Also note that all construction cost figures presented here represent FY 2002/2003 dollars and are meant for comparative purposes. Finally, parking space counts could/would be reduced to reflect sensitivity to Carroll Creek, to accommodations for adjacent or integrated mixed uses (office, retail, etc.). Simultaneously, construction costs could increase because of setback requirements, consideration for extensive aesthetic architectural treatments, and flex space.

Church Street Deck Site

This site, illustrated on Exhibit 9a, assumes that the existing 30+ year old parking structure is demolished with a new/replacement deck is developed on top of the present footprint. Unlike the other sites that will be evaluated, the City's redevelopment program for this site has assumed increasing the capacity on this site by building one level of additional below grade parking and one level of additional above grade parking. Based



DESMAN
ASSOCIATES

Evaluation of Potential Structured Parking Sites
Existing Church Street Deck Site

EXHIBIT
9a

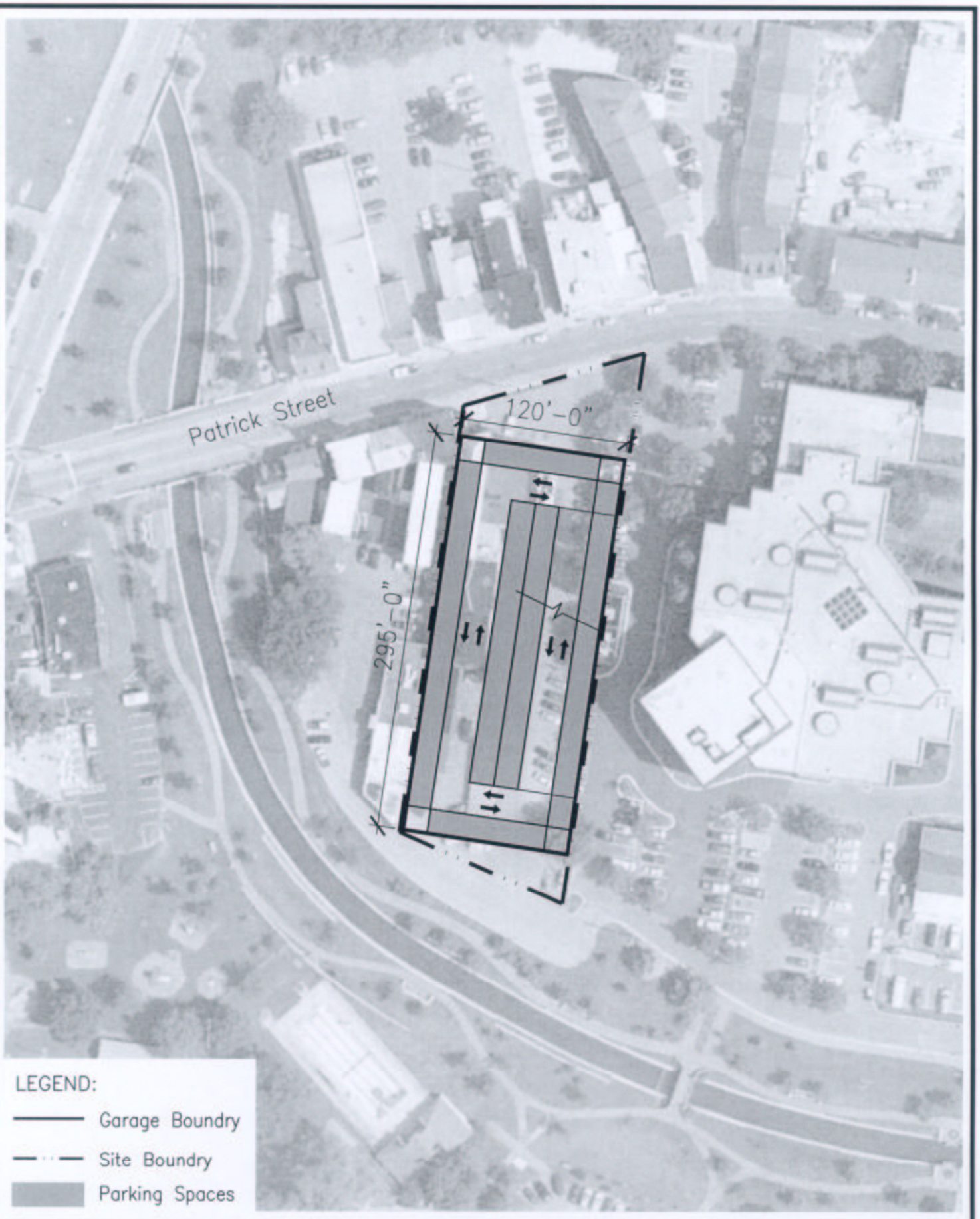
on the concept presented on Exhibit 9a, DESMAN believes that as many as 593 parking spaces can be provided on this site. Using FY 2002 dollars, demolition, excavation, and foundation wall costs are estimated at $799,000. Using a $34 per square foot construction cost and a total area calculation of 189,000 square feet (parking area), the construction cost is estimated at $6,426,000. The total cost in FY 2002 dollars would be $7,225,000, or $12,180 per space.

Delphey's / Courthouse Site

This site, illustrated on Exhibit 9b, has the potential to support a parking structure with a dimension of 120 ft. by 295 ft. This footprint would preserve sufficient area for the development of an integrated commercial building along the Patrick Street frontage. Additionally, vehicular/service access has been preserved along the Carroll Creek side of the property. The site permits the design of a relatively efficient parking structure (approx. 310 sq.ft. per stall). Assuming five supported levels, this site could accommodate a parking structure with as many as 714 spaces. As noted earlier, these parking layouts maximize the space count. The space count would be reduced significantly if internal office space (Parking Department), storage space, and/or building utilities space is included on the ground floor of each structure. Based on the $34 per square foot construction cost, the 220,300 sq.ft. parking structure would cost $7,490,200, or approximately $10,490 per space.

Sagner Ave. / East St. Extended (Development "Site E")

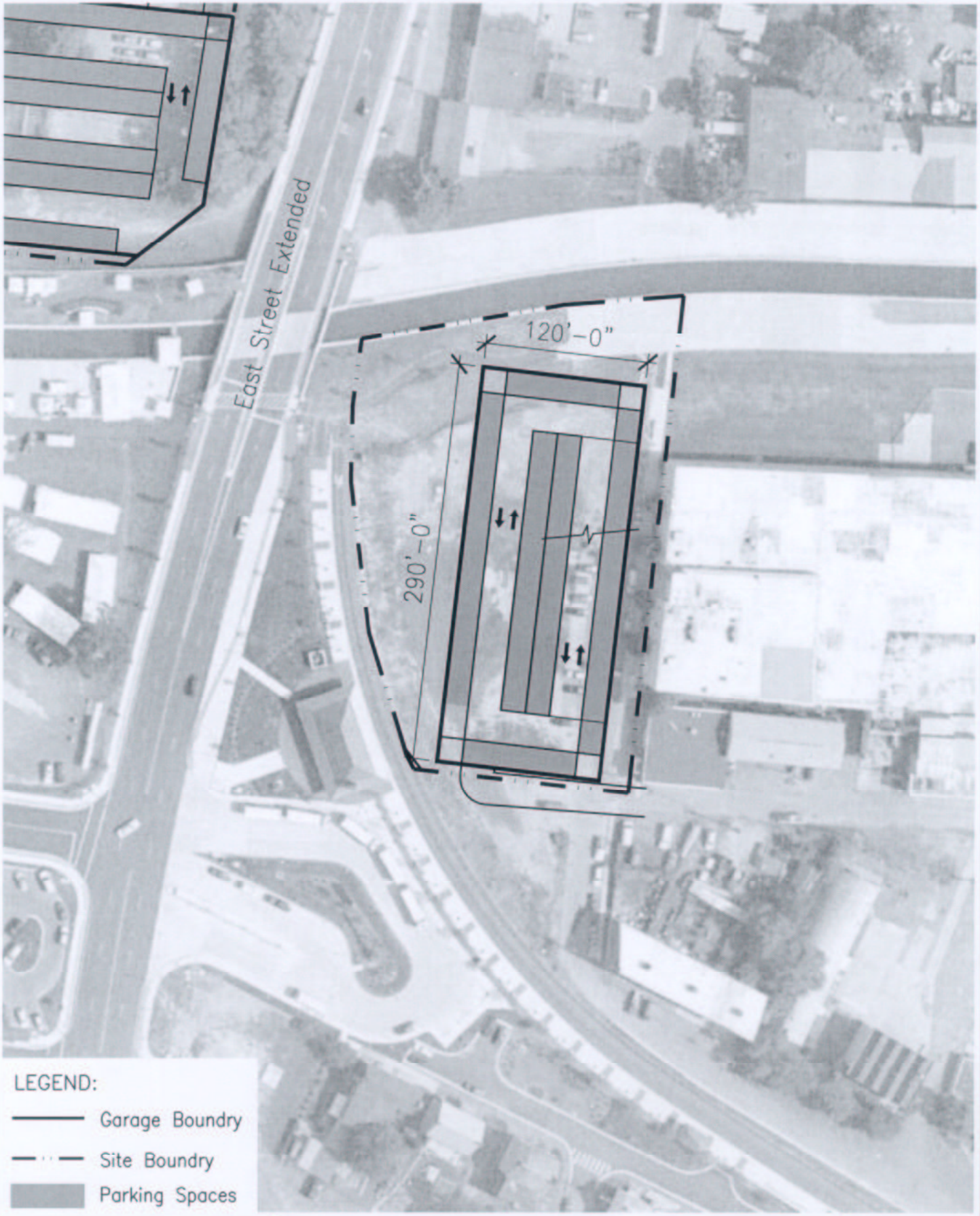
This site, located just across the tracks from the new MARC station (see Exhibit 9c), would permit the development of a parking structure quite similar to the Delphey's/Courthouse site (120 ft. by 290 ft. dimension). Access and egress to and from the site for both pedestrians and vehicles is rather problematic. Nonetheless, the site's inherent design efficiency would permit the development of 761 spaces on six supported levels. Six rather than five levels were permitted due to the site's less significant impact



DESMAN ASSOCIATES

Evaluation of Potential Structured Parking Sites
Delphey's / Court House Site

EXHIBIT
9b



DESMAN ASSOCIATES

Evaluation of Potential Structured Parking Sites
Sagner Avenue / East Street Extended

EXHIBIT
9c

on visual or historic resources. The overall cost of construction (243,600 sq.ft. times $34 per sq.ft.) is estimated at $8.28 million, or $10,880 per space.

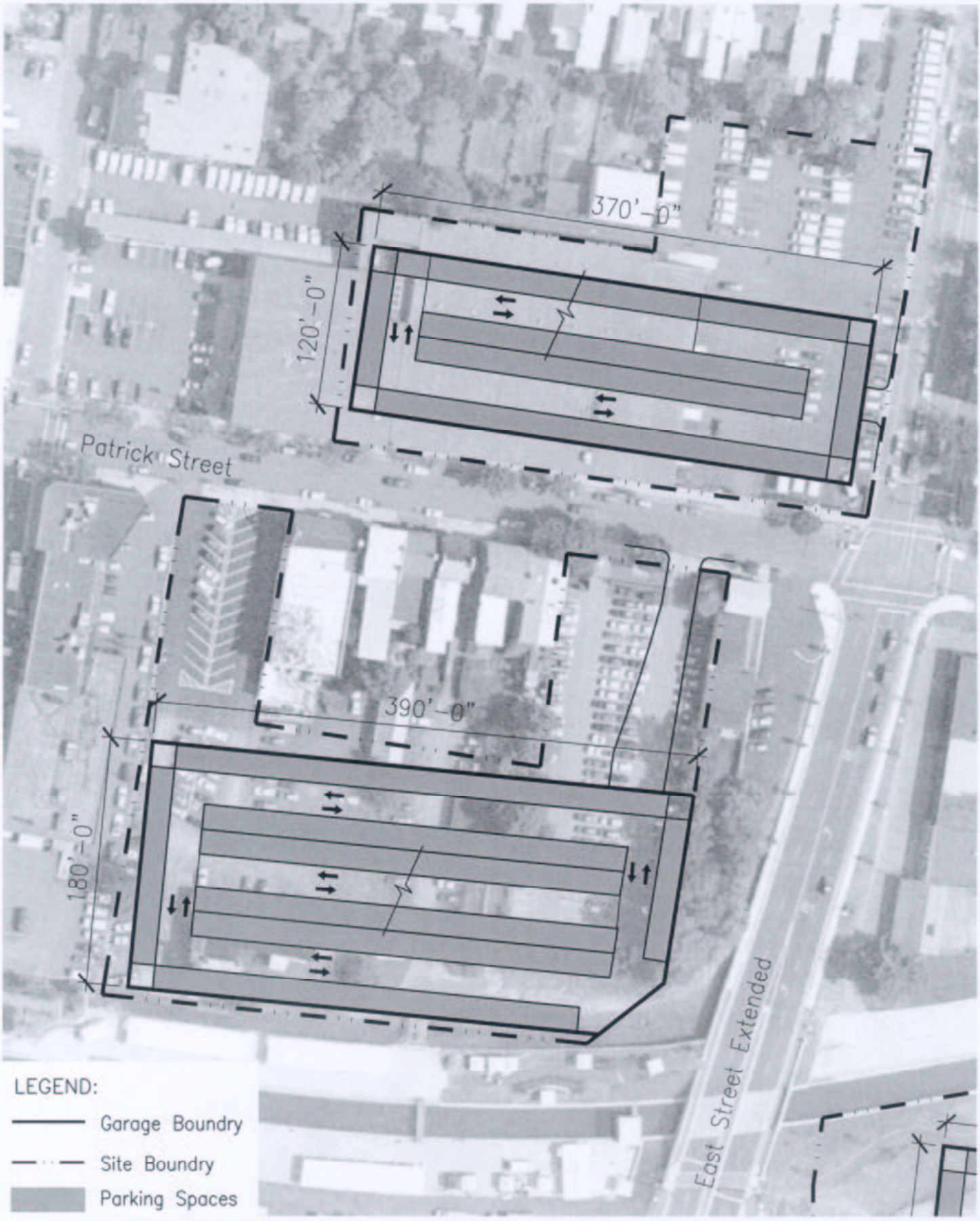
Patrick Street / East Street

Exhibit 9d illustrates the siting of a parking structure on the "rear courtyard" site bounded by East Street Extended, Carroll Creek, and the buildings long Patrick Street. Because of the desire to maximize parking on this site, the southeast corner of the parking structure needed to be eliminated, thereby slightly decreasing the site's design efficiency. Like the Delphey's/Courthouse site, five rather than six supported levels have been assumed. Because of the overall length of the site, as many as 220 parking spaces could be accommodated on each typical level. Assuming only five levels (44 ft. tall), in an effort to minimize the structures impact on the neighborhoods visual resources, as many as 1,085 spaces can still be provided. The total construction cost for this 220,000 square foot structure is estimated at $11.3 million, or $10,400 per space.

Post Office Site

This site, also illustrated on Exhibit 9d, presents a 120 ft. by 370 ft. parking structure. Note that not all of the property is used for structured parking. The actual width of the property (160 ft.) does not lend itself to efficient design. Therefore, a 20 ft. front and rear yard setback (for sidewalk café or vegetative screening for example) has been preserved. Access to the site could be gained from both East Street (as shown) and Patrick Street. The overall efficiency of the structure would be similar to the other sites studied (between 290 and 300 sq.ft. per stall). Under this design, as many as 740 parking spaces can be provided at a relatively efficient 300 square feet per space. Overall, a structure on this site would cost $7.54 million, or $10,200 per space.

Note that all construction cost figures are estimates as much more detailed information regarding geotechnical conditions, topography, utility locations, and setback requirements, to name a few, is required. Furthermore, these estimates do not include



DESMAN ASSOCIATES

Evaluation of Potential Structured Parking Sites
Patrick Street /East Street
Post Office Site

EXHIBIT
9d

design fees, cost of permits, demolition costs, land acquisition costs, and the cost to relocated or reinforce existing underground utilities. Finally, these costs reflect FY2002/2003 dollars.

Structured Parking Recommendation

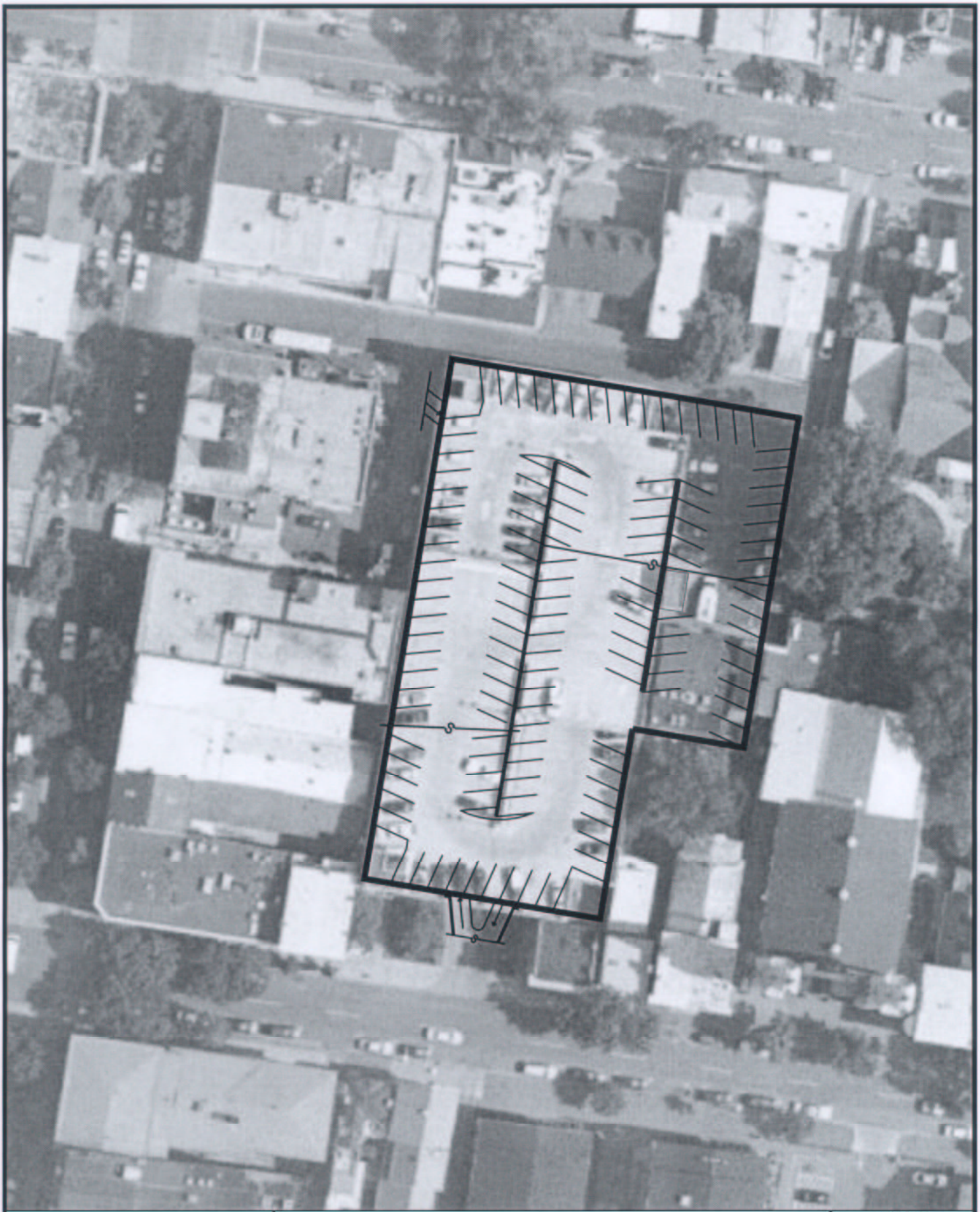
Based on the parking needs assessment, the evaluation of alternative structured parking sites, and the more detailed design/cost calculations for the selected location, DESMAN recommends that the City should focus on two particular sites to address immediate and mid-range parking needs and to address the ultimate redevelopment of the Church Street Deck: the Delphey's/Courthouse site and the Patrick Street/East Street site. These two locations could act as "bookends" to meet the parking demand that is and will be generated along the Carroll Creek/Patrick Street corridor. Both sites, particularly the Patrick Street/East Street, have excellent vehicular and pedestrian ingress and egress capabilities. While these facilities may be too far to be attractive to short-term parkers who wish to frequent the shops and restaurants along Market Street, they would be viable alternatives for long-term parkers such as employees and business visitors. To counter act that deficiency, these facilities could/should be used to redistribute long-term parkers (City, County, and private sector employees) from the Church Street Deck, thereby increasing the supply of short-term parking to support for retail and restaurant establishments. These decks, particularly the Patrick Street/East Street site, could provide some relief to core area parkers (and the businesses they frequent) while the Church Street Deck is redeveloped.

DESMAN recommends that the City begin the steps necessary to develop the Delphey's/Courthouse as soon as possible in order to meet pending deficits in those areas of the City. While parking structures can be developed in stages, adding additional levels as the need arises over time, it is recommended that the full and maximum number of spaces permitted on this site, estimated at 700 and 750 spaces, be developed during a one time/construction phase. Simultaneously, the City should begin exploring land acquisition and land development requirements associated with the Patrick Street/East

Street site as DESMAN suggests that this parking deck, depending on the timing of future development activity, should be in place by no later than 2008.

The timing of these two decks is critical for a number of reasons, the most significant being the status of the City's Church Street Deck. DESMAN's structural engineers, under a separate contract with the City, have evaluated the structural integrity of that facility and have suggested that it might not be beneficial to maintain that structure beyond FY 2008-2010 as annual maintenance and repair costs would be significant and would not be a prudent expenditure of City dollars. However, this deck supports the City's core area retail and office activities. Businesses within a two block radius of that facility are dependent on the access it provides its customers and employees.

Ultimately, whether through, rehabilitation of the existing structure or through demolition and reconstruction, the Church Street site should always serve as a site for a structured parking. The demand for short-term and long-term parking in this area will only increase. In fact, DESMAN's analysis suggests that this area will need an additional 240 spaces within the next 3 to 5 years. For this reason, DESMAN and the City's Department of Public Works wished to explore the opportunity to further maximize the number of parking spaces on this site by expanding both vertically (as presented early) and horizontally. Exhibit 9e present an alternative parking concept that presumes that the City can acquire some but not all of the property just to the east, both the City's own surface lot and the property that supports the La Paz Mexican Restaurant. By constructing a partial third parking bay on this property, the parking deck could yield an additional 20 spaces per typical level. Therefore, and in addition to the space count yielded in the previous garage concept (593 spaces), this alternative could net as many as 132 more parking spaces (725 spaces total). Structurally speaking this alternative would be more cost effective then adding below grade parking levels which can cost between $18,000 and $24,000 per space. However, the land acquisition requirements and the negative impact that a large parking space might have on the adjacent church could prove fiscally and politically difficult. Therefore, the upcoming analysis of system wide



DESMAN
ASSOCIATES

Alternative Expansion Concept (Horizantal)
for the Church Street Deck Site

EXHIBIT
9e

recommendations and financial feasibility choose to focus on the more conservative Church Street Deck scheme presented on Exhibit 9a.

Strategies to Minimize the Demand for Parking

The parking needs analysis indicates that significant public parking deficits will exist in the very near future. While adding additional parking capacity through the development of new parking decks and surface lots is important, some consideration should be given to reducing the demand for parking within the core area of downtown Frederick. Future parking deficits are almost exclusively focused on the city blocks bound by Church Street, Bentz Street, Carroll Creek, and East Street. Given this focus, there may be value in identifying opportunities to redistribute current and future parking demands to peripheral locations. Furthermore, certain parking policies can act as enhancements to car and vanpool programs, thereby increasing employee per auto occupancy rates and decreasing the demand for parking. Finally, and from a more regional perspective, improvements to the public transit (bus) system can have profound effects on parking within a high-density employment center, such as downtown Frederick. While theoretical in nature, DESMAN will revisit the analysis of development driven parking demand to suggest what reductions could occur if public transportation were more successful.

Satellite Lots and Shuttle Service

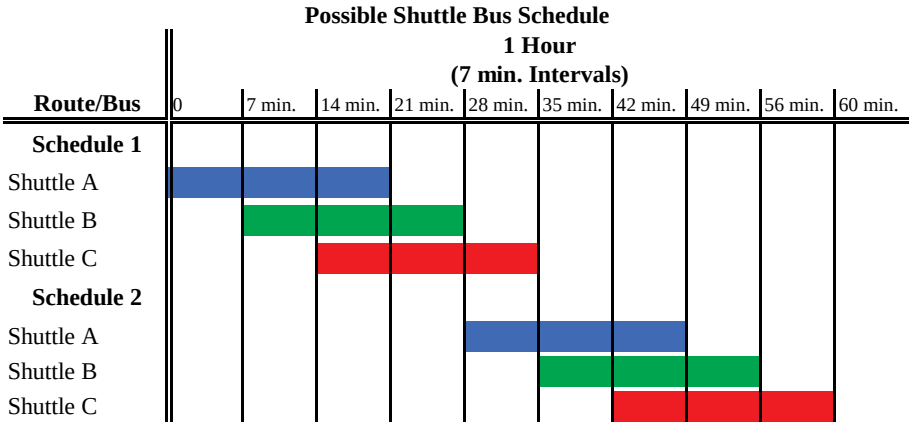
A direct strategy to reduce parking within the core of a downtown involves the implementation and operation of a successful satellite lot intercept program with efficient AM and PM peak hour shuttle service. The Task Force had already identified two locations where existing parking lots could be used to intercept downtown parkers; the Harry Grove Stadium lot and the Fairgrounds lot(s). DESMAN personnel conducted a "travel time run" from these two locations to the Courthouse (Court Street Deck) and to City Hall recording the distance and, more importantly, the time. It was discovered that the time/distance to and from Harry Grove Stadium (15 minutes round trip) was less than

to/from the Fairgrounds (nearly 18 minutes round trip). Additionally, access to the Harry Grove Stadium lot for the regional road network is considerably more convenient. Finally, the Stadium lot is well paved and well lit. For these reason, DESMAN focused on the analysis of shuttle bus services, routing, schedules and cost for a Harry Grove Stadium shuttle program.

DESMAN would recommend that the shuttle route follow South Market Street to the corner of Church Street. The first shuttle stop would be just before the intersection of Market and Church Street. Presumably this would be a relatively attractive stop for County employees. The shuttle would then travel north to Second Street and loop west and south to Court Street. A stop in front of City Hall would be optional. The final stop along the route would be in front of the County Courthouse and the Court Street Deck. The shuttle would then return to Harry Grove Stadium via Court Street and, ultimately, Market Street (where it returns to two way traffic). Including a stop a City Hall and anticipated boarding and alighting, DESMAN estimates the one round trip during the AM or PM hour to take 20 to 24 min. As the recommended "headway" between pick-up times is less than 7 minutes, DESMAN recommends that three 24 passenger buses be used initially. This would ensure that a bus will be at the intercept lot every 6 to 7 minutes. As the demand for satellite parking and shuttle service increases, additional buses can be added. The smaller 24 passenger vehicles are recommended as traffic volumes, street width, and turning radius are critical issues.

Assuming the headway and travel time figures are relatively accurate, three 24 passenger shuttles can pick up and drop off as many as 144 parkers during a peak one hour period (see the figure below). This schedule includes 7 minutes for pickup/drop-off and staging at the Stadium Lot. During the critical 21 minutes before 8am and 9am and 21 minutes after 4:30pm and 5:30pm, i.e., tradition office hours, these shuttles should be able to process as many as 72 passengers (assumes shuttles start route at 0, 7, and 14 minutes).

Graph 4



Shuttle lease and operating costs are difficult to calculate as a significant number of decisions regarding operating hours, staffing, and public versus private leased operation are required. However, approximate cost calculations based on similar/existing operations can be made based on the parameters identified above. The City of Buffalo, New York, through Buffalo Place, Inc., operates a similar shuttle program. Eight 24 passenger shuttles pick up individuals who park for free in a private lot that Buffalo Place leases. That program, less parking space lease costs, costs Buffalo Place nearly $480,000 per year (to a private contractor) or $60,000 per bus per year. Based on the three shuttles recommended under this program and the City of Buffalo's leasing experience, the shuttle program could cost the City of Frederick between $180,000 and $200,000 per year. For perspective purposes, if as few as 100 individuals choose to utilize this program, and assuming it's a free service, the average cost to operate per person would equal $1,800 to $2,000 per year. If as many as 200 individuals use the service, the average cost per person would be $900 to $1000 per year.

Clearly such a program has direct costs and no direct operating revenue. Furthermore, such a shuttle program would require supervision by an experienced transit supervisor or transportation agency. The City and County should therefore form a partnership to fund and operate the system. Funding could come from a variety of County and City sources, including the City's Parking Enterprise Fund, and the County could provide the necessary

professional and technical assistance. However, DESMAN recommends that this shuttle program should not be simply an extension of an existing/regional bus/routing system, but be dedicated to the purpose of intercepting commuters and providing effective parking alternatives.

In summary, for the program to be successful, users of the satellite and shuttle system must perceive the program to be:

- Quick and efficient
- Clean & safe
- Well lit
- Well policed with parameter fencing
- Have reasonable frequency of midday service
- Have provisions for immediate (emergency) access
- Have Shuttle booths (open or climate controlled)
- An attractive alternative to "high cost" downtown parking

Public Transit's Impact on Parking Demand

At present, and based on DESMAN's pedestrian questionnaires, only 3% of employees travel to work using a "bus" (92.8% drove) and only 1.6% of visitor, shoppers and others used a "bus" (83.9% drove). While DESMAN's pedestrian questionnaires may not be statistically significant and, therefore, truly representative, the 3% figure can be used as a base to determine the reduction in parking demand that could occur as increases in public transit ridership are realized.

For example, the average square feet for office employees range between 200 to 250 sq.ft. per, or 4.0 to 5.0 employees per 1,000 sq.ft. (Source: National Research Council). The peak period general office parking demand factor used in this study is 3.0 spaces per 1,000 sq.ft. Obviously, the parking demand factors used to evaluate future development impact already takes into consideration the fact that not all office employees drive to

work alone and park downtown, i.e., the difference between the 3.0 parking factor and the 4.0/5.0 employee factor.

A 100,000 square foot office building in Frederick would generate a peak weekday demand for 300 spaces. It could be assumed that that office building employs 500 dayshift and night shift workers (5.0 factor). Using the 3% public transit (bus) figure, only 15 of those 500 workers would use public transportation. If that rate increased to a figure of, say 8%, the number of employees in that building that use public transit would increase to 40 (500 times 8%), thereby reducing the demand for parking by 25 vehicles (40 minus 15). The parking demand factor for that building and City wide would drop from 3.0 to 2.75 per 1,000 sq.ft. (275 parkers divided by 100,000 sq.ft.). Under this scenario it could be assumed that with a 1% increase in public transit ridership the parking demand factor associated with general office buildings would drop by 0.5%. While 0.5% may not be significant by itself, the overall reduction in parking demand associated with office buildings through downtown Frederick could be significant. For example, if the total amount of office space in downtown Frederick equals 1 million sq.ft., a modest 4% increase in public transit utilization would reduce peak weekday parking demand by an estimated 200 spaces.

Enticements to Car and Vanpool Programs

Car and vanpool programs are most often related to large employment generators, such as large corporate headquarters, hospitals, and government office buildings. These large employers form the "critical mass" necessary to match employees and shared commuting patterns. The traditional incentives to car and vanpool programs are, generally speaking, tied to reductions in commuting travel times (HOV lanes). Where traffic congestion is not a major issue, car/vanpool users are motivated by more altruistic measures (less pollution, saves gas costs, commuter "solidarity", etc.). While traffic congestion is a major issue in Frederick and the Baltimore/Washington region, DESMAN's survey of downtown Frederick employees, shoppers and business visitors found little evidence of carpooling.

As a means to reduce parking demand in a city center, however, incentives and therefore motivation can be largely economic. Therefore, special car/vanpool pricing and location programs can be used to encourage such ridership. Car and vanpool program members, once registered with the employer and a city's parking office, would be permitted to park in assigned spaces in a prime location or locations at below the current monthly parking rate. For example, registered can/vanpool vehicles could park in the Church Street Deck on the second or third level of the garage (first and second level reserved for transient parkers) at $20 below the recommended monthly rate. Unfortunately, even the most successful car/vanpool program has minimal effect on the overall demand for parking in a downtown. Nonetheless, car and vanpool incentives should be one of a menu of options that both the Parking Division and the downtown employers/employees should consider.

Enhancements to Bicycle Commuting

While only a tiny fraction of downtown commuters use bicycles, some consideration for bike facilities (racks, lockers, pathways, etc.) is required. In fact, parking structures represent an excellent location for the placement of bike racks and lockers. Lockers are valuable as they are more theft resistant than bike racks, permit the storage of helmets, pads, and other accessories, and protects bikes for the elements. As such, some consideration in existing and future parking decks should be given to bike "parking" facilities.

The "Best Incentive is a Good Disincentive"

The success, relatively speaking, of the above referenced strategies is dependent on a complex series of cost and benefit decisions made by the downtown employees. As such, parking rates for car/vanpool users, for example, need to be considerably lower than those for single/double occupancy vehicles in order to entice people to car/vanpool. For example, the recommended permit parking rate in the Church Street Deck, which is

nearest to the County office building, could be increased to $70 per month. The monthly permit rate for registered car/vanpool vehicles would be set at $35 per month. The incentive to use the Harry Grove Stadium satellite lot/shuttle is even more significant as DESMAN would suggest that this service is free of charge for both parking and shuttle use. Obviously, as the cost to park in downtown decks increases, these alternative travel strategies become even more attractive.

Another pricing incentive program could be directed towards public and private sector employers. At present, some small and large public and private sector employers subsidize parking for their employees. If those employees were required to pay the current monthly rate or an increased monthly rate (to be discussed), a percentage of them may choose to use one of the alternative methods described above.

Another "disincentive", and an "incentive" to the car/vanpool and shuttle program, involves a monthly permit attrition process. Under this strategy, monthly permit contracts with individual who leave the parking system would be allowed to expire, with no matching re-issuance. For example, a current monthly contract parker moves out of the area. That permit would normally be issued to an individual who may be on a waiting list. Under this program, that newly available monthly permit would not be reissued. Potential parkers who wish to park on a daily basis would either be required to park daily, which is currently twice the monthly rate ($5 per day times 20 days equals $100), or join a carpool, vanpool, or shuttle program. This attrition program would affect public and private sector parkers alike. Based on discussions with the supervisor of the Parking Division, as many as 40 monthly permit holders leave the system per year. Over a 3 year period as many as 120 spaces normally issued to monthly permit holders could be available for alternative uses (transient parkers, development agreement parkers, etc.)

Unfortunately, pricing and attrition programs are very unpopular. Considerable political capital must be expended in an effort to get these programs implemented. However, the parking situation in Frederick, as evident in the parking needs analysis, is approaching a "breaking point" where the actual demand for parking will exceed the available public

supply. As these reduction strategies can be initiated fairly quickly as compared to the construction of a parking deck, they represent some of the tools the City can use to address pending shortfalls.

Summary

This section of the report introduced a number of strategies that could be employed meet future parking needs in downtown Frederick. These strategies simply outline the options that the City can explore, noting general pros, cons, costs and benefits. However, a much more specific series of recommendations are required, noting implementation costs (both financial and political), implementation schedules, and timing. Section 6 of this report will include a parking "action plan" that recommends a series of program improvements, both physically (new meters, new decks, improved signage, etc.) and operationally (additional staffing, new job responsibilities, modified chain of command, etc.). This action plan would include a basic financial analysis of current and projected costs and benefits (revenues) that would, in essence, preserve the economic viability and responsibility of the public parking system.

SECTION 6 – 10-YEAR PARKING IMPLEMENTATION PLAN

Introduction

Thus far, the report has documented current parking inventory and use figures (Section 1), assessed the operational strengths and weaknesses of the Parking Division (Section 2), and assessed the financial opportunities and limitations associated with the so termed "Parking Enterprise Fund" (Section 3). Additionally, the report has presented an assessment of future parking conditions (Section 4), estimating the parking demand that would be generated by public and private development activity under immediate-term, near-term, and long-term scenarios. With an assessment of future parking deficits by block and future phase, the report provided an overview on various strategies to reduce the demand for parking and/or meet that demand through the development of additional parking facilities (Section 6). This section of the report relies on the information that has been gathered and presents an implementation plan or "action plan" that could guide the City's decision makers and it's parking professionals for the next ten years. As this section of the report builds from the information and insight gained from these previous efforts, the narrative will be brief and direct, choosing rather to focus on the recommended (and specific) steps necessary to meet downtown Frederick's parking needs.

10-Year Action Plan and Schedule of Improvements

Working with the City of Frederick and the Parking Task Force, DESMAN identified a number of policy, operations, management, planning and development alternatives. The following presents the step by step actions that the City should take to reinforce its public parking system to meet the complexity of challenges that it will face in the not to distant future. The financial implications of this action plan, along with additional funding alternatives (if necessary) will be examined separately.

A key to the implementation and action plan is the schedule and timeframe graphic illustrated on Exhibit 10. This graphic is supported by the narrative that follows.

Immediate Actions (being "Day-One")

1. ***Adopt Mission Statement*** – Adopting the revised Mission Statement and its coactive goals should be the first course of action. This is essential because it paints a picture of the new parking system and serves as a basis for all subsequent recommendations and actions. This task can be completed almost immediately at no cost to the public parking system.

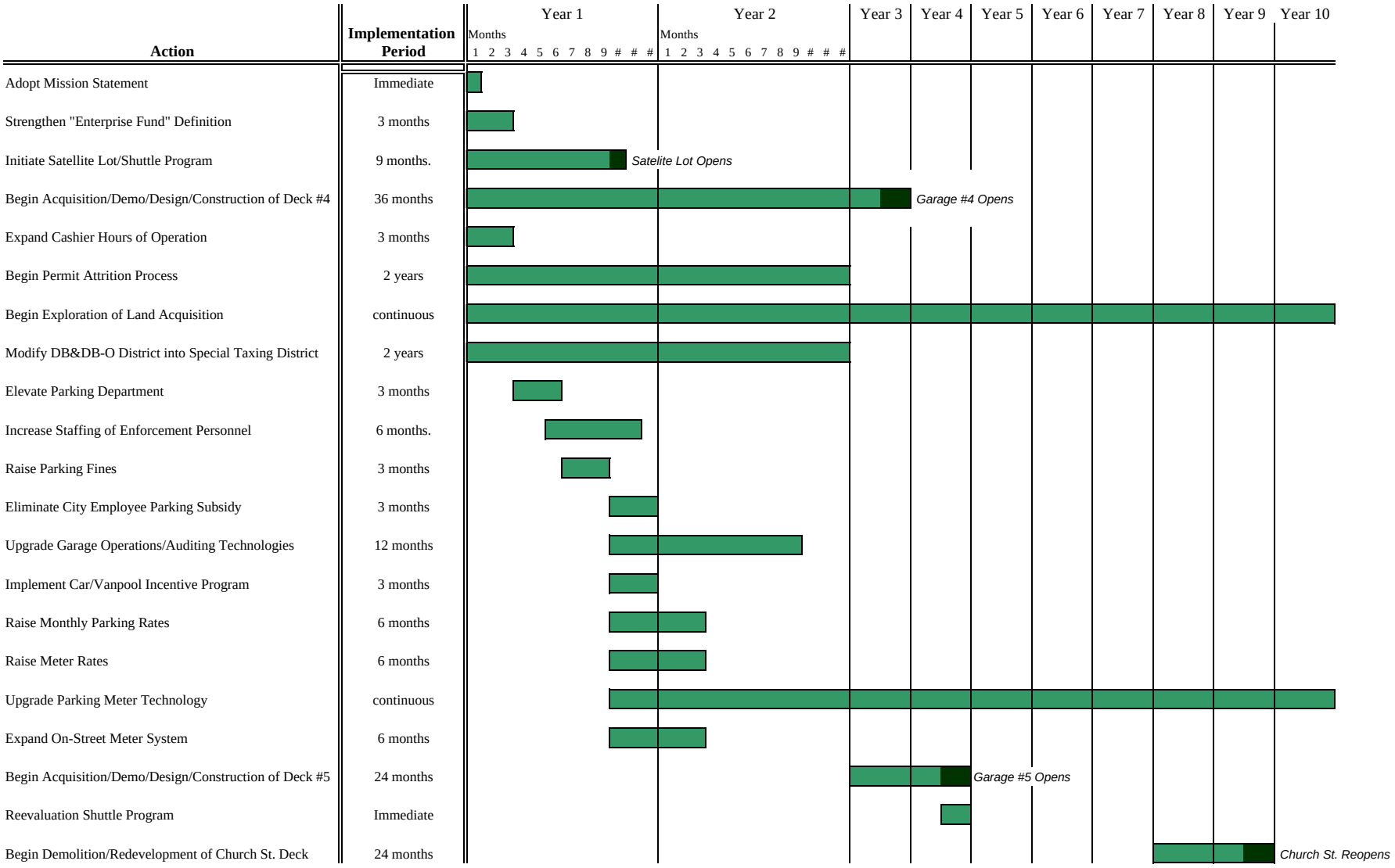
   It is suggested that the Parking System's ***Mission Statement*** should read as follows:

The City of Frederick's on and off-street parking system shall support existing land uses, assist the City's economic development initiatives, and preserve parking for its residents, by providing adequate and high quality parking resources and related services for all user groups that need to park within the City.

2. ***Strengthen "Enterprise Fund" Definition*** – It is essential to formalize the current parking fund by creating a parking enterprise fund. Although current City leaders have wisely treated the *Parking Fund* as an enterprise fund, there is no guarantee that this philosophy will be continued by future City leaders. In other communities, DESMAN has observed "raids" on dollars earmarked for parking that proved detrimental to the ability of their parking systems to meet their stated goals. The City will need to work with its financial and legal council in the development of appropriate and legal term and conditions. Nonetheless, this task should begin immediately and it can be completed within a month.

3. ***Satellite Lot/Shuttle Program*** – The City must first explore any and all state/federal funds that would be available to initiate the satellite lot/shuttle

Exhibit 10
City of Frederick Downtown Parking Study
Parking Action Plan - Implementation Schedule



program. A pilot grant could be available from a number of sources. The City should also approach to operate/fund this shuttle with the County given the current experience with public transportation. Regardless of the partnership with the County or grant funding opportunities, the City should implement the shuttle program even at a full City cost of $180,000 to $200,000 annually. The shuttle program is the key to the new deck construction program (to be discussed) as existing parking will be displaced and the public parking system is already at capacity. As the shuttle program could be costly, the City should reconsider its value as Deck #5 comes on line. However, this decision should also consider the pending impact of the Church Street Deck reconstruction program which would displace a great many parking space and cause considerable disruption to on-street parking activity along Church Street.

4. ***Design/Construction of Deck #4*** – The timing of this construction project is obviously critical as the demand for parking in this area of downtown Frederick is already significant. The goal is to develop a minimum of 650 spaces on this site to accommodate pending parking deficits in the area. DESMAN is aware that the City is already in negotiations with the property owner. However, even if the property is immediately acquired, condemnation, demolition and construction will take an anticipated 24 months. Appendix Exhibit H-1, H-2, H-3 and H-4 present more detailed construction cost, development cost, and operating cost figures as well as a preliminary 15-year proforma analysis which includes the County's financial commitment as defined in the "Deck 4" agreement.

5. ***Expanding Cashier Hours of Operation*** – The current hours that the parking facilities are staffed do not correspond well to the hours of parking demand while simultaneously creating a fiscal loophole. Since cashiering hours currently end at 6:00 PM, some all-day patrons leave after 6:00 PM and pay the evening rate of $1 instead of the $5 that they should be charged. This deprives the Parking Division of $4 for each such transaction. At minimum, cashiering hours should be extended to 9:00 PM to diminish this fiscal exposure. Given the magnitude of

this loophole, if just 8 transactions of this type were prevented daily in each facility, the cost for the extra 3 hours of cashiering would be covered. This action should be implemented immediately so as to avoid future loss of parking revenue. In an effort to fine tune the location and hours of operation, DESMAN suggests a pilot program be examined.

This is a fluid program that needs to be managed on a daily basis to balance the transient/monthly mix with a facility's maximization

6. ***Begin Monthly Permit Attrition Process*** – In situations that involve month-to-month contract parking patrons, an attrition program can reduce the number of monthly parking patrons. This would increase transient parking inventory. For each space that is turned into a transient parking space, parking income would increase by $50 per space per month. The attrition program also serves as a transportation demand reduction strategy because the higher cost to parking as a non-monthly parking patron would force long-term patrons to consider other parking alternatives. The attrition program should cease when additional parking supply comes on-line. The attrition program would only "free-up" an estimated 40 spaces per year. Nonetheless, the program should be implemented immediately and it should continue for at minimum 2 years or until the Delphey's/Courthouse Deck is complete.

7. ***Define and Encourage Public/Private Partnerships in the Development of Additional Parking Spaces –*** The public sector cannot, by itself, be expected to provide sufficient parking for all existing and future development activity. Nor should the private sector be expected to provide the parking spaces their project requires and, simultaneously, share that resource with adjacent properties owners and land use activities. However, by combining the drive, capital, and incentive associated with private sector development initiatives with public sectors altruism and larger "public good" perspective, developers could be encourage to provide additional parking that could serve presently under served commercial businesses.

For example, the City could partner (fund) to support the development of a parking structure on privately held land. A portion of that parking structure could be reserved for the private sector developer who owns the land. Under public sector operation, any available surplus parking can be used to serve a variety of other activities unrelated to that developer.

8. ***Begin Exploration of Land Acquisition*** – The process of land acquisition can be time-consuming. Once properties that are required for future parking projects are identified, it is recommended that the assembly of key properties should immediately commence, with the focus being Deck #5 – the Patrick Street/East Street Site.

9. ***Explore with Business Community Funding Sources to Keep Parking Fees Low*** – There is no provision for property owners/businesses in the DB and DB-O District to support the public parking infrastructure that, in turn, supports their activity. DESMAN would suggest that a Special Taxing District or a Business Improvement District (BID) be establish to levy a modest annual fund from the property/business owners in the DB and DB-O area. The fund can be based on assessed value of commercial property or on the number of parking spaces that would be typically required (divided by 1/2 per current ordinance of course) to support that business. Such a Tax District or BID would affect new businesses and existing business alike as it is hoped that such a parking levy does not impact only new development activity. The required fund can be a fixed annual fee not to exceed a specific amount without political discourse and 2/3 approval by affected property owners. Naturally, any additional tax on property owners is undesirable. To balance this reality, affected property owners would need to see tangible improvements to the public parking infrastructure within their neighborhoods. For example, members of the Special Tax or BID district would benefit from a program to provide free or below market parking spaces for their patrons.

It could be anticipated that such enabling legislation would require 1 year to enact, with an additional year required before the benefit from this additional revenue is realized. Regardless, the public parking system cannot be counted on to support existing and future parking structures through basic user fees alone as it does not appear that the market rate in Frederick could support an expanding parking system. DESMAN will consider the need (and annual fiscal support) for such a program as an alternative to the based financial analysis (to be discussed).

10. ***Changes to Zoning Ordinance*** - Overall the City's parking space requirements (Section 14.04 City Ordinance) are in-line with other municipalities across the region. Like other municipalities, they are overly complex and they require considerable analysis by city planners as site plans and development proposals are received for review. This analysis, however, focuses on the modification of DB and DB-O District's parking requirements (Section 14.05) which states that "one half of parking spaces required by Section 14.04 of this Ordinance must be provided unless a total exemption …applies". Clearly, many properties/buildings in this district cannot provide sufficient on-site parking as necessary to support current or redeveloped activities. Therefore, DESMAN approves of the reduction in on-site parking that is required.

11. ***Elevate Parking Division to a Parking Department*** – Future parking projects, practices, procedures, and technologies will require the Parking Division to take on a new degree of sophistication and thus necessitate the hiring of individuals with enhanced skill sets. These future actions will require a more streamlined administrative and organizational structure (i.e. Parking Department organized under an enterprise fund) that is characterized by centralization of functions and responsibilities (i.e., the manager of the Department reports directly to the mayor). After the City elevates the current Parking Division to a formal Parking Department, it is recommended that the City should, in time, reevaluate the Parking Department/Enterprise Fund structure and consider the alternative Parking Authority and select the one that best serves its interests.

Near-Term Actions (within next 6 months to a year)

12. ***Increase Staffing to meet needs of Implementation Plan*** – As the complexity of the parking system increases, the roles, responsibilities and staffing of the Parking Department needs to increase right along with it. The level (City Department) of leadership and management will need to be elevated, the hours of operation (previously discussed) will needed to be expanded, the degree of enforcement, though even handed, will need to increase, and sophisticated issues associated with construction administration, parking marketing, and land acquisition will needed to be addressed.

    With regards to parking enforcement, a rule of thumb for staffing parking enforcement personnel is to have 1 Parking Violations Officer (PV0) for each 250-300 parking meters. Three PVO's would be adequate for the 770 parking meters that the City currently uses. However, since PVO's are responsible for enforcement of 2-hour zones and Resident Parking Permit Zones, at least one additional PVO should be added to the enforcement staffing plan. Based on the current 6 hour shifts, using part-time staff would cost approximately $9,360 per year. As increasing the staffing of enforcement personnel may appear as an "aggressive" approach to parking management, DESMAN recommends that such increases in staffing should only occur after other management and operational actions have been put in motion (within 6 months to 1 year).

13. ***Raise Parking Fines*** – The price of parking violations are intended to be sufficiently high to encourage compliance with parking regulations. In 20 of 23 violations categories, other cities that were benchmarked against Frederick averaged 60% higher parking violations. Parking fines should be raised as soon as possible to assist in promoting compliance with parking regulations but not occur until after other programs are enacted. DESMAN recommended fine structure is documented in Section 2 to this report (see page 40). Note that the goal of this increase is simply to increase the turnover of on-street (metered)

parking spaces, improve vehicular traffic circulation, and improve overall public safety. DESMAN also recommends making changes to the City's scofflaw program in an effort to improve on the collection of fines and fees.

14. ***Implement Car/Vanpool Incentive Program*** – It is recommended that the City should institute and implement a car/vanpool incentive program. The existing access control system may have or can be upgraded to allow for carpool software that would only recognize 1 access card for the carpool. This software package links multiple access cards together and only allows one to work for the designated structure. If a second carpool member attempts to enter the facility while another carpool member is present, the system prints out a carpool violation or can be programmed to prevent access by the other carpool members.

15. ***Raise Monthly Parking Rates*** – Because the parking system will require additional income to support the increasing costs of the parking system, all parking rates should be raised, but kept within reason. A balance must be struck between the cost of on and off-street parking rates. The monthly parking rates in parking decks and off-street lots should be more attractive to long-term parking patrons than their on-street parking space counterparts. Otherwise, long-term parking patrons will park on-street and defeat the purpose of parking meters – to create turnover parking for short-term parking patrons. It is recommended that off-street monthly parking rates should be elevated but not exceed $70 per month. This increase could be implemented gradually or as a one time fee increase. However it is implemented, DESMAN recommends the $70 fee should be in place by Year 2005. Note that this also assumes that parking meter rates will be raised to $1 per hour (to be discussed). Off-street hourly rates can also be raised including the daily maximum. With $70 off-street monthly rates and $1 on-street rates at parking meters, the off-street daily maximum can be as high as $7. This recommendation should be enacted only after the shuttle program is in full operation.

16. ***Raise Meter Rates*** –Because it is essential to have higher on-street rates to discourage long-term parking, it is recommended that on-street parking rates should be raised to $1 per hour. This rate is in keeping with the more progressive parking systems that were benchmarked, however approximately $.75 per hour was the average. If the City does not adopt the recommended rate of $1 and elects to raise rates to $.75 per hour, monthly parking rates off-street should not exceed $60 per month as to maintain a balance between on and off-street parking for their intended purposes.

17. ***Upgrade Parking Meters*** – Current parking meters are mechanical and do not have an audit capability, that is, the amount deposited is unknown. Unlike mechanical parking meters, electronic parking meters can be audited because they retain in memory the amount that was deposited since the last collection. With electronic parking meters, the amount deposited into the parking meter, not the amount collected, could be compared with the amount deposited in the bank. This can be accomplished by the purchase of entirely new parking meters @ $358 each or by replacement of the internal mechanism in existing housings @ $149 each. The parking meter housings that were observed were in good condition and do not appear to require replacement. Replacement of mechanical internal mechanisms with electronic internal mechanisms is recommended. For the 770 existing parking meters the replacement cost would be $114,730 (list price). This can be accomplished under a 5-year lease/purchase, or purchased outright. If parking meter rates were raised to the recommended level of $1 per hour, the new electronic meter mechanisms would be fully paid in approximately 4 months. This program of improvement should be the ongoing goal of the Parking Division as an effort to improve auditing and revenue accountability.

    Given the complexity and diversity of parking meter and revenue collection technology, the Parking Department should conduct pilot programs to evaluate the various technical options, ranging from new electronic single-space meters to multi-space meter devices.

18. ***Explore Development of Publicly Sponsored Resident Only Parking in Select Alleyways*** - As the demand for short term parking increases along the commercial corridors of Downtown Frederick, the pressure on on-street parking in residential areas adjacent to these commercial area will increase in direct proportion. As such, DESMAN suggests that, in addition to strengthen the City's enforcement of parking rules and regulations within the residential neighborhoods, the City should explore the potential to expand on the number of parking spaces within selected areas of the City's alleyway system for use by residents. Many of the homes in the area do not have off-street parking spaces. Those that do have spaces are located off the alleyways within private driveways and "carriage" garages (small wooden one and two car structures). The alleyways function as public access to private parking. Therefore, the concept of expanding on the number of residential only parking spaces in these areas is a good one. Depending on the width and extend of public right-of-way in these areas, and depending on the cooperative nature of residential property owners themselves, the City could work to improve the flow and function of these areas and, in doing so, introduce reserved (numbered) parallel parking spaces. The existing residential permit program can be used to assign residents to reserved parking behind their homes. Depending on the success of this program and the demand for reserved residential spaces, the City could charge a fee somewhat higher than it currently charges for on-street (non-reserved) residential parking permits in an effort to help cover the cost of implementation and management. It should be noted, however, that while physically and functionally possible, all property owners along these alleyways would need to formally approve of such a program, thereby greatly complicating the ability to implement.

<u>Long-Term Actions (beyond year 1)</u>

19. ***Upgrade Garage Operations/Auditing Technologies*** – Coinciding with the completion of construction of Deck #4, it is recommended that the decentralized revenue and access control systems in the existing parking structures should be

upgraded and placed on-line with the new deck. The primary upgrades should include the introduction of machine-readable tickets, enable the generation of centralized reports from all facilities at the new Deck #4 office, limit access privileges to sensitive data and functions at local facilities, and control the issuance and deletion of access privileges from the main parking office. The new parking deck and its related main parking office should have an on-line, real-time, machine readable access and revenue control system in a networked environment and connect to the other facilities via modem. The office equipment should have a fully equipped parking access and revenue control workstation.

20. ***Expand On-Street Meter System*** – Although not applicable to all of the 462 two-hour timed parking spaces, a portion of those parking spaces lend themselves to installation of parking meters. Some suggested locations for installation for new parking meters are W. Third Street between Court and Bentz with 26 spaces, E. 2nd Street between Maxwell Alley and the next alley to the east with 20 spaces, E. Church Street between Maxwell Alley and the next alley to the east with 19 spaces, and in total comprise of 65 parking spaces. Based on $480.52 which is the current average income per parking meter per year, the additional annual income from these parking meters would be $31,234. This would ease parking enforcement, produce additional parking income, and assist the turnover of parking spaces by introducing a pricing strategy for those parking spaces. It is recommended that the aforementioned locations of existing 2-hour zones should have parking meters installed.

21. ***Begin Design/Construction of Deck #5*** – The timing of a "fifth" parking deck is almost as critical as the timing of the fourth parking deck, the Delphey's/Courthouse Deck. Previously, DESMAN recommended the Patrick Street/East Street Site as the location for the fifth deck given its proximity to current and future parking deficits. Additionally, this deck and this site is critical in that it supports the reconstruction of the 30+ year old Church Street Deck. This Patrick/East Street deck should be operational 1 to 2 years before the Church

Street Deck begins its redevelopment process. Appendix Exhibit I-1, I-2, I-3 and I-4 present more detailed construction cost, development cost, and operating cost figures as well as a preliminary 15-year proforma analysis.

22. ***Begin Demolition/Redevelopment of Church St. Deck*** – The Church Street Deck was recently rehabilitated to extend its useful life. Regardless of the maintenance and structural rehabilitation programs, this deck is rapidly approaching the end of its useful life. The City realizes that additional funds used to support and upgrade that facility would be wasted dollars. As such, the reconstruction of this structure is a forgone conclusion. The timing of its reconstruction is also well documented. By Year 2008 the City and its engineering consultants have recommended that the structured be razed with a newer, larger parking structure redeveloped on this location. Unfortunately, demolition and construction, anticipated to take two years, will have a dramatic and detrimental impact on the business in that area. Accommodations for current parkers would need to be secured in Deck #5 (Patrick Street/East Street deck) and relief from the Special Parking Tax/BID (if enacted) would need to be granted to those business that are impacted the most. Appendix Exhibit J-1, J-2, J-3 and J-4 present more detailed construction cost, development cost, and operating cost figures as well as a preliminary 15-year proforma analysis.

    Note that it would be desirable to maximize the number of spaces on this site through any and all reasonable measures, including additional below grade levels (at a very high per space construction cost) or through horizontal expansion at illustrated on Exhibit 9e (which would required very costly and politically painful land acquisition).

Impact of Fiscal Resources

Section 3 to the report evaluated the Parking Division's fiscal structure and financial solvency. Note once again that the term Parking Department was not used. Regardless

of the terminology, that analysis established the Parking Division's current strengths and weaknesses and it represents the base upon which future costs and revenues are projected.

First, DESMAN needed to review the Parking Action Plan and Implementation Plan to identify those recommendations that will have a fiscal impact (obviously, adopting the Mission Statement has no direct fiscal impact). Recommendations that would have a fiscal impact fall into two categories; those that have no physical impact on the parking system (raising rates, hiring additional staff, etc.) and those that have a physical impact (additional parking meters, new shuttle lot, new parking decks, etc.). Table 21 presents an estimated impact associated with each of the Action Plan items that would effect parking revenue or parking operating expenses. Because the development of additional structured parking facilities would have huge financial impact on the parking system, DESMAN's financial analysis is segregated into a "no build" analysis and a "development impact" analysis. For each analysis, a 15-year system operating proforma has been created. Note that these proforma statements are not for use in official bond documents or for direct incorporation into the City's formal Capital Improvement Program. Many of the cost and revenue assumptions are based on concepts, plans, and ideas. They are not based on construction documents, equipment specifications, or formal revenue audits/projections. They are simply projections to be used to make better planning and management decisions today and in the near future.

"Base System" Analysis (No Build Scenario)

Table 22 on the following page presents a 15-year proforma statement of the City's Parking Division and its Special Fund Account (Annual Cashflow Analysis). The analysis starts with the Fund's 2002 revenue, expenditures, debt service obligations, and parking cashflow figures. Under Year 2003 it is assumed that newly enacted programs and recommendations have not yet impacted revenues and expenses. As such, the figures presented in that year reflect adjustments associated with historic average annual growth. By Year 2004, however, many of the operational, staffing, and rate recommendations listed in the Action Plan will have had an effect. Increases in parking fines have been

Table 21
Current & Projected Special Fund Account Annual Cashflow Analysis
without Development of Additional Parking Facilities or Shuttle Program

	Current	Projected															
	2002	**2003**	**2004**	**2005**	**2006**	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**
On-Street Parking Revenue																	
Licenses & Permits (+3.5% per year beyond 2004)	$32,400	$33,500	$33,500	$34,700	$35,900	$37,200	$38,500	$39,800	$41,200	$42,600	$44,100	$45,600	$47,200	$48,900	$50,600	$52,400	$54,200
Parking Meters	$375,000	$387,800	$678,700	$678,700	$678,700	$678,700	$814,400	$814,400	$814,400	$814,400	$977,300	$977,300	$977,300	$977,300	$1,172,800	$1,172,800	$1,172,800
Fines & Forfeitures	$401,200	$414,800	$497,800	$497,800	$497,800	$497,800	$497,800	$497,800	$497,800	$497,800	$497,800	$497,800	$497,800	$497,800	$497,800	$497,800	$497,800
Total On-Street Revenue	$808,600	$836,100	$1,210,000	$1,211,200	$1,212,400	$1,213,700	$1,350,700	$1,352,000	$1,353,400	$1,354,800	$1,519,200	$1,520,700	$1,522,300	$1,524,000	$1,721,200	$1,723,000	$1,724,800
Off-Street Parking Revenue	$1,022,000	$1,101,700	$1,322,000	$1,322,000	$1,322,000	$1,322,000	$1,586,400	$1,586,400	$1,586,400	$1,586,400	$1,903,700	$1,903,700	$1,903,700	$1,903,700	$2,284,400	$2,284,400	$2,284,400
Other Revenue Sources (+2% per year beyond 2004)	$207,400	$249,700	$249,700	$254,700	$259,800	$265,000	$270,300	$275,700	$281,200	$286,800	$292,500	$298,400	$304,400	$310,500	$316,700	$323,000	$329,500
ALL REVENUE SOURCES	**$2,038,000**	**$2,187,500**	**$2,781,700**	**$2,787,900**	**$2,794,200**	**$2,800,700**	**$3,207,400**	**$3,214,100**	**$3,221,000**	**$3,228,000**	**$3,715,400**	**$3,722,800**	**$3,730,400**	**$3,738,200**	**$4,322,300**	**$4,330,400**	**$4,338,700**
Garage Operating Expenses	$333,300	$339,600	$346,100	$353,000	$360,100	$367,300	$374,600	$382,100	$389,700	$397,500	$405,500	$413,600	$421,900	$430,300	$438,900	$447,700	$456,700
Public Parking System/Facilities Expenses	$322,900	$324,200	$345,500	$352,400	$359,400	$366,600	$373,900	$381,400	$389,000	$396,800	$404,700	$412,800	$421,100	$429,500	$438,100	$446,900	$455,800
Other Miscelleanous Expenses	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
ALL OPERATING EXPENDITURES	**$656,200**	**$663,800**	**$691,600**	**$705,400**	**$719,500**	**$733,900**	**$748,500**	**$763,500**	**$778,700**	**$794,300**	**$810,200**	**$826,400**	**$843,000**	**$859,800**	**$877,000**	**$894,600**	**$912,500**
NET INCOME AVAILABLE FOR D/S	**$1,381,800**	**$1,523,700**	**$2,090,100**	**$2,082,500**	**$2,074,700**	**$2,066,800**	**$2,458,900**	**$2,450,600**	**$2,442,300**	**$2,433,700**	**$2,905,200**	**$2,896,400**	**$2,887,400**	**$2,878,400**	**$3,445,300**	**$3,435,800**	**$3,426,200**
Debt Service Obligations (D/S)	$601,000	$601,000	$601,000	$601,000	$601,000	$601,000	$601,000	$601,000	$601,000	$601,000	$601,000	$601,000	$601,000	$601,000	$601,000	$601,000	$601,000
PARKING CASHFLOW SURPLUS/(DEFICIT)	**$780,800**	**$922,700**	**$1,489,100**	**$1,481,500**	**$1,473,700**	**$1,465,800**	**$1,857,900**	**$1,849,600**	**$1,841,300**	**$1,832,700**	**$2,304,200**	**$2,295,400**	**$2,286,400**	**$2,277,400**	**$2,844,300**	**$2,834,800**	**$2,825,200**
Cummulative		*$1,703,500*	*$3,192,600*	*$4,674,100*	*$6,147,800*	*$7,613,600*	*$9,471,500*	*$11,321,100*	*$13,162,400*	*$14,995,100*	*$17,299,300*	*$19,594,700*	*$21,881,100*	*$24,158,500*	*$27,002,800*	*$29,837,600*	*$32,662,800*

ASSUMPTIONS TO "BASE" FINANCIAL CONDITION

Year 2003 - No new policies/programs are enacted that effect current revenues and expenditures. However, past average annual increases in cost and expenses are included.
Year 2004 - Raising Parking Fines by between 50% and 400% (depending on violation) increases Parking Fine revenue by estimated 20%. In future years do not assume an increase in Fine Revenues though increase in actual fines would be required
Year 2004 - Raising off-street rates (both monthly and long-term transients) and extended cashier operating hours increases off-street parking revenue by an 20%. In future years, monthly rates should be increased 20% every four years.
Year 2004 - Raising Meter Rates from $0.50 per hour to $1.00 per hour would increase meter revenue by an estimated 75%. In future years, meter rates should be increased 20% every four years.
Year 2004 - Increasing cashier hours of operations increases operating costs by $20,000. In future years base operating expenses increase 2% per year.

Table 21
Anticipated Impact on Parking Revenue and Expense Associated with Recommended Action Plan
(Adjustments to Operations, Development of Additional Parking Facilities and Satelite Shuttle Program)

	Projected															
	2003	**2004**	**2005**	**2006**	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**
REVENUE SOURCE ASSUMPTIONS/ADJUSTEMENTS																
Annual Adjustments to Licenses & Permits	N.C.	N.C.	3.5% growth	3.5% growth	3.5% growth	3.5% growth	3.5% growth	3.5% growth	3.5% growth	3.5% growth	3.5% growth	3.5% growth	3.5% growth	3.5% growth	3.5% growth	3.5% growth
Impact of Meter Rate Increase, Expansion of Meter System, and Periodic Increases	N.C.	75% increase	N.C.	$30,000 increas	N.C.	20% rate increas	N.C.	N.C.	N.C.	20% rate increas	N.C.	N.C.	N.C.	)% rate increa	N.C.	N.C.
Impact of Increased Fines & Forfeitures Rates	N.C.	20% increase	N.C.	N.C.	N.C.	N.C.	N.C.	N.C.	N.C.	N.C.	N.C.	N.C.	N.C.	N.C.	N.C.	N.C.
Impact on Off-St. Revenue associated with Demolition Church St. Garage (to be redeveloped -	N.C.	N.C.	N.C.	N.C.	Less $415,000	Less $415,000	Less $415,000	Less $415,000	Less $415,000	Less $498,000	Less $498,000	Less $498,000	Less $498,000	Less $597,600	Less $597,600	Less $597,600
Anticipated Increase in Other Revenue Sources	N.C.	2% growth	2% growth	2% growth	2% growth	2% growth	2% growth	2% growth	2% growth	2% growth	2% growth	2% growth	2% growth	2% growth	2% growth	2% growth
OPERATING EXPENSE ASSUMTIONS/ADJUSTEMENTS																
Garage Operating Expenses & Impact associated with Expanded Hours of Operation	N.C.	$20,000 Increas	2% growth	2% growth	2% growth	2% growth	2% growth	2% growth	2% growth	2% growth	2% growth	2% growth	2% growth	2% growth	2% growth	2% growth
Public Parking System/Facilities Expenses & Impact associated with Equipment Upgrades	N.C.	$20,000 Increas	2% growth	2% growth	2% growth	2% growth	2% growth	2% growth	2% growth	2% growth	2% growth	2% growth	2% growth	2% growth	2% growth	2% growth
Other Miscelleanous Expenses	N.C.	N.C.	N.C.	N.C.	N.C.	N.C.	N.C.	N.C.	N.C.	N.C.	N.C.	N.C.	N.C.	N.C.	N.C.	N.C.
SHUTTLE OPERATING EXPENDITURE	$200,000 cos	4% Increase	4% Increase	4% Increase	4% Increase	4% Increase	4% Increase	4% Increase	4% Increase	4% Increase	4% Increase	4% Increase	4% Increase	4% Increase	4% Increase	4% Increase
DEBT SERVICE COVERAGE/LOSS FOR DECK DEVELOPMENT PROGRAM (See	N.C.	-680,293	-401,720	-1,539,514	-1,228,039	-1,411,235	-1,075,271	-348,124	-224,362	25,996	163,444	253,864	563,144	829,454	998,814	1,293,304

N.C. = No Change from Previous Year

ASSUMPTIONS TO "DEVELOPMENT" FINANCIAL MODEL (in addition to Base Assumptions)

Year 2003 - Initiate Satellite Parking and Shuttle Program. First year operating cost estimate at $200,000. In future years operating costs increases by 4% per year.
Year 2004 - Upgrade Garage Operations/Auditing Equipment assumes increase in annual operating cost of $20,000. In future years costs increase by 2% per year
Year 2004 - Expand Hours of Operation is Church Street Garage assumes increase in annual operating cost of $20,000. In future years costs increase by 2% per year.
Year 2006 - Expand On-Street Meter System by 130 spaces yields net annual revenue increase of $30,000. In future years, meter rates (and therefore revenue) would increase by 8% every two years.
Year 2007 and 2008 - Assumes the loss of parking revenue that would have been generated by the Church Street Deck - estimated at $415,000 in 2007, $498,000 in Year 20 and $597,600 in Year
Revenue associated with a redeveloped Church Street Deck is reflected on Table 22.

Table 22
Current & Projected Special Fund Account Annual Cashflow Analysis
without Development of Additional Parking Facilities or Shuttle Program

	Current	Projected															
	2002	**2003**	**2004**	**2005**	**2006**	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**
On-Street Parking Revenue																	
Licenses & Permits (+3.5% per year beyond 2004)	$32,400	$33,500	$33,500	$34,700	$35,900	$37,200	$38,500	$39,800	$41,200	$42,600	$44,100	$45,600	$47,200	$48,900	$50,600	$52,400	$54,200
Parking Meters	$375,000	$387,800	$678,700	$678,700	$678,700	$678,700	$814,400	$814,400	$814,400	$814,400	$977,300	$977,300	$977,300	$977,300	$1,172,800	$1,172,800	$1,172,800
Fines & Forfeitures	$401,200	$414,800	$497,800	$497,800	$497,800	$497,800	$497,800	$497,800	$497,800	$497,800	$497,800	$497,800	$497,800	$497,800	$497,800	$497,800	$497,800
Total On-Street Revenue	$808,600	$836,100	$1,210,000	$1,211,200	$1,212,400	$1,213,700	$1,350,700	$1,352,000	$1,353,400	$1,354,800	$1,519,200	$1,520,700	$1,522,300	$1,524,000	$1,721,200	$1,723,000	$1,724,800
Off-Street Parking Revenue	$1,022,000	$1,101,700	$1,322,000	$1,322,000	$1,322,000	$1,322,000	$1,586,400	$1,586,400	$1,586,400	$1,586,400	$1,903,700	$1,903,700	$1,903,700	$1,903,700	$2,284,400	$2,284,400	$2,284,400
Other Revenue Sources (+2% per year beyond 2004)	$207,400	$249,700	$249,700	$254,700	$259,800	$265,000	$270,300	$275,700	$281,200	$286,800	$292,500	$298,400	$304,400	$310,500	$316,700	$323,000	$329,500
ALL REVENUE SOURCES	**$2,038,000**	**$2,187,500**	**$2,781,700**	**$2,787,900**	**$2,794,200**	**$2,800,700**	**$3,207,400**	**$3,214,100**	**$3,221,000**	**$3,228,000**	**$3,715,400**	**$3,722,800**	**$3,730,400**	**$3,738,200**	**$4,322,300**	**$4,330,400**	**$4,338,700**
Garage Operating Expenses	$333,300	$339,600	$346,100	$353,000	$360,100	$367,300	$374,600	$382,100	$389,700	$397,500	$405,500	$413,600	$421,900	$430,300	$438,900	$447,700	$456,700
Public Parking System/Facilities Expenses	$322,900	$324,200	$345,500	$352,400	$359,400	$366,600	$373,900	$381,400	$389,000	$396,800	$404,700	$412,800	$421,100	$429,500	$438,100	$446,900	$455,800
Other Miscelleanous Expenses	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
ALL OPERATING EXPENDITURES	**$656,200**	**$663,800**	**$691,600**	**$705,400**	**$719,500**	**$733,900**	**$748,500**	**$763,500**	**$778,700**	**$794,300**	**$810,200**	**$826,400**	**$843,000**	**$859,800**	**$877,000**	**$894,600**	**$912,500**
DEVELOPMENT SITE B & C OBLICATIONS	**$0**	**$0**	**$900,000**	**$900,000**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**
NET INCOME AVAILABLE FOR D/S	**$1,381,800**	**$1,523,700**	**$1,190,100**	**$1,182,500**	**$2,074,700**	**$2,066,800**	**$2,458,900**	**$2,450,600**	**$2,442,300**	**$2,433,700**	**$2,905,200**	**$2,896,400**	**$2,887,400**	**$2,878,400**	**$3,445,300**	**$3,435,800**	**$3,426,200**
Debt Service Obligations (D/S)	$601,000	$601,000	$601,000	$601,000	$601,000	$601,000	$601,000	$601,000	$601,000	$601,000	$601,000	$601,000	$601,000	$601,000	$601,000	$601,000	$601,000
PARKING CASHFLOW SURPLUS/(DEFICIT)	**$780,800**	**$922,700**	**$589,100**	**$581,500**	**$1,473,700**	**$1,465,800**	**$1,857,900**	**$1,849,600**	**$1,841,300**	**$1,832,700**	**$2,304,200**	**$2,295,400**	**$2,286,400**	**$2,277,400**	**$2,844,300**	**$2,834,800**	**$2,825,200**
Cummulative		*$1,703,500*	*$2,292,600*	*$2,874,100*	*$4,347,800*	*$5,813,600*	*$7,671,500*	*$9,521,100*	*$11,362,400*	*$13,195,100*	*$15,499,300*	*$17,794,700*	*$20,081,100*	*$22,358,500*	*$25,202,800*	*$28,037,600*	*$30,862,800*

ASSUMPTIONS TO "BASE" FINANCIAL CONDITION

Year 2003 - No new policies/programs are enacted that effect current revenues and expenditures. However, past average annual increases in cost and expenses are included.
Year 2004 - Raising Parking Fines by between 50% and 400% (depending on violation) increases Parking Fine revenue by estimated 20%. In future years do not assume an increase in Fine Revenues though increase in actual fines would be required
Year 2004 - Raising off-street rates (both monthly and long-term transients) and extended cashier operating hours increases off-street parking revenue by an 20%. In future years, monthly rates should be increased 20% every four years.
Year 2004 - Raising Meter Rates from $0.50 per hour to $1.00 per hour would increase meter revenue by an estimated 75%. In future years, meter rates should be increased 20% every four years.
Year 2004 - Increasing cashier hours of operations increases operating costs by $20,000. In future years base operating expenses increase 2% per year.

approved and implemented. Increases in off-street and on-street (metered) rates have been approved. Adjustments to revenue/collection equipment have been made. Additional staff associated with increased hours of operation in the decks has been hired as has an additional staff person for enforcement.

Using this base - no build scenario, and adjusting for the $900,000 financial obligation that would be pledge to parking for the Site B and Site C development proposals, the Division's projected operating surplus of $780,800 in 2002 quickly grows to a surplus of $1,473,700 in Year 2006. With programmed rate increases and anticipated increases in annual operating costs, the City would anticipate an annual operating surplus of between $1.43 million (Year 2007) and $2.82 million (Year 2018) each year. This analysis even assumes that the Debt Service Obligation for the Carroll Creek Deck ($396,000 in 2001) and the Court Street Deck ($205,000 in 2002) would remain constant for the next 15 years. These debt service figures were originally presented in Section 2 of this report (see table labeled "Special Fund Account Annual Debt Service Obligations").

"Development Impact" Analysis (Build Scenario)

The most significant cost item or items associated with this scenario is new parking deck construction. Appendix Exhibits H-1 through J-4 previously documented the construction cost, land acquisition cost, development costs, operating expenses, and potential parking revenue that would be generated by a deck on the Delphey's/Courthouse site (Year 2004), the Patrick/East Street site (Year 2006), and the redevelopment of the Church Street Deck (Year 2009). Note that all costs are adjusted in an attempt to reflect real year dollars. The individual parking deck proforma statements were then layered together into a statement of operating and debt service coverage for all three. That statement is illustrated on Table 23 on the following page.

Under this "build" scenario, illustrated on Table 24, the Year 2002 operating surplus of $780,800 would be reduced to a operating deficit of $319,193 as the debt obligation, operating cost and parking revenue associated with the Delphey's/Courthouse Deck is

Table 22
City of Frederick Structured Parking Development Program
PROFORMA: Statement of Operations and Debt Service Coverage

	FY 2004(1) Year 1	FY 2005 Year 2	FY 2006 Year 3	FY 2007 Year 4	FY 2008 Year 5	FY 2009 Year 6	FY 2010 Year 7	FY 2011 Year 8	FY 2012 Year 9	FY 2013 Year 10	FY 2014 Year 11	FY 2015 Year 12	FY 2016 Year 13	FY 2017 Year 14	FY 2018 Year 15
Parking Income (2)	$673,337	$961,910	$1,848,856	$2,187,751	$2,406,525	$3,591,149	$4,339,500	$4,508,732	$4,773,452	$4,959,610	$5,100,440	$5,455,570	$5,775,880	$6,001,130	$6,353,470
Interest on Reserve (3)	$68,170	$68,170	$166,280	$166,280	$166,280	$185,270	$207,996	$207,996	$240,694	$240,694	$240,694	$247,024	$247,024	$247,024	$247,024
Total Operating Income	$741,507	$1,030,080	$2,015,136	$2,354,031	$2,572,805	$3,776,419	$4,547,496	$4,716,728	$5,014,146	$5,200,304	$5,341,134	$5,702,594	$6,022,904	$6,248,154	$6,600,494
Total Operating and Maintenance Expenses (4)	$285,600	$295,600	$783,350	$810,770	$1,212,740	$1,255,190	$1,299,120	$1,344,590	$1,391,650	$1,440,360	$1,490,770	$1,542,950	$1,596,950	$1,652,840	$1,710,690
Net Income (before Debt Service)	$455,907	$734,480	$1,231,786	$1,543,261	$1,360,065	$2,521,229	$3,248,376	$3,372,138	$3,622,496	$3,759,944	$3,850,364	$4,159,644	$4,425,954	$4,595,314	$4,889,804
Debt Service (3)	$1,136,200	$1,136,200	$2,771,300	$2,771,300	$2,771,300	$3,596,500	$3,596,500	$3,596,500	$3,596,500	$3,596,500	$3,596,500	$3,596,500	$3,596,500	$3,596,500	$3,596,500
Net Income (Loss)	($680,293)	($401,720)	($1,539,514)	($1,228,039)	($1,411,235)	($1,075,271)	($348,124)	($224,362)	$25,996	$163,444	$253,864	$563,144	$829,454	$998,814	$1,293,304
Cummulative	($680,293)	($1,082,013)	($2,621,527)	($3,849,566)	($5,260,801)	($6,336,072)	($6,684,196)	($6,908,558)	($6,882,562)	($6,719,118)	($6,465,254)	($5,902,110)	($5,072,656)	($4,073,842)	($2,780,538)
Debt Service Coverage	0.40	0.65	0.44	0.56	0.49	0.70	0.90	0.94	1.01	1.05	1.07	1.16	1.23	1.28	1.36

Development "Action Plan":

Year 2004 - Assumes Garage #4, the Delphey's/Courthouse Deck is operational. During first full operating year revenue is esimated to be 80% of potential.

Year 2006 - Assumes Garage #5, the Patrick Street/East Street Deck, is operational. During first full operating year revenue is esimated to be 80% of potential.

Year 2009 - Assumes Garage #6, the redeveloped Church Street Deck, is operational. During first full operating year revenue is esimated to be 80% of potential.

Table 23
Current & Projected Special Fund Account Annual Cashflow Analysis
with Development of Additional Parking Facilities and Shuttle Program

	Current	Projected															
	2002	**2003**	**2004**	**2005**	**2006**	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**
On-Street Parking Revenue																	
Licenses & Permits (+3.5% per year beyond 2004)	$32,400	$33,500	$33,500	$34,700	$35,900	$37,200	$38,500	$39,800	$41,200	$42,600	$44,100	$45,600	$47,200	$48,900	$50,600	$52,400	$54,200
Parking Meters	$375,000	$387,800	$678,700	$678,700	$708,700	$708,700	$850,400	$850,400	$850,400	$850,400	$1,020,500	$1,020,500	$1,020,500	$1,020,500	$1,224,600	$1,224,600	$1,224,600
Fines & Forfeitures	$401,200	$414,800	$497,800	$497,800	$497,800	$497,800	$497,800	$497,800	$497,800	$497,800	$497,800	$497,800	$497,800	$497,800	$497,800	$497,800	$497,800
Total On-Street Revenue	$808,600	$836,100	$1,210,000	$1,211,200	$1,242,400	$1,243,700	$1,386,700	$1,388,000	$1,389,400	$1,390,800	$1,562,400	$1,563,900	$1,565,500	$1,567,200	$1,773,000	$1,774,800	$1,776,600
Off-Street Parking Revenue	$1,022,000	$1,101,700	$1,322,000	$1,322,000	$1,322,000	$907,000	$1,171,400	$1,171,400	$1,171,400	$1,171,400	$1,405,700	$1,405,700	$1,405,700	$1,405,700	$1,686,800	$1,686,800	$1,686,800
Other Revenue Sources (+2% per year beyond 2004)	$207,400	$249,700	$249,700	$254,700	$259,800	$265,000	$270,300	$275,700	$281,200	$286,800	$292,500	$298,400	$304,400	$310,500	$316,700	$323,000	$329,500
ALL REVENUE SOURCES	**$2,038,000**	**$2,187,500**	**$2,781,700**	**$2,787,900**	**$2,824,200**	**$2,415,700**	**$2,828,400**	**$2,835,100**	**$2,842,000**	**$2,849,000**	**$3,260,600**	**$3,268,000**	**$3,275,600**	**$3,283,400**	**$3,776,500**	**$3,784,600**	**$3,792,900**
Garage Operating Expenses	$333,300	$339,600	$366,100	$373,400	$380,900	$388,500	$396,300	$404,200	$412,300	$420,500	$428,900	$437,500	$446,300	$455,200	$464,300	$473,600	$483,100
Public Parking System/Facilities Expenses	$322,900	$324,200	$345,500	$352,400	$359,400	$366,600	$373,900	$381,400	$389,000	$396,800	$404,700	$412,800	$421,100	$429,500	$438,100	$446,900	$455,800
Other Miscelleanous Expenses	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
ALL OPERATING EXPENDITURES	**$656,200**	$663,800	$711,600	$725,800	$740,300	$755,100	$770,200	$785,600	$801,300	$817,300	$833,600	$850,300	$867,400	$884,700	$902,400	$920,500	$938,900
SHUTTLE OPERATING EXPENDITURE	N.A.	$200,000	$208,000	$216,300	$225,000	$234,000	$243,400	$253,100	$263,200	$273,700	$284,600	$296,000	$307,800	$320,100	$332,900	$346,200	$360,000
NET INCOME AVAILABLE FOR D/S	**$1,381,800**	**$1,323,700**	**$1,862,100**	**$1,845,800**	**$1,858,900**	**$1,426,600**	**$1,814,800**	**$1,796,400**	**$1,777,500**	**$1,758,000**	**$2,142,400**	**$2,121,700**	**$2,100,400**	**$2,078,600**	**$2,541,200**	**$2,517,900**	**$2,494,000**
CURRENT DEBT SERVICE OBLICATIONS	$601,000	$601,000	$601,000	$601,000	$601,000	$601,000	$601,000	$601,000	$601,000	$601,000	$601,000	$601,000	$601,000	$601,000	$601,000	$601,000	$601,000
REVISED CASHFLOW PROJECTIONS	**$780,800**	**$722,700**	**$1,261,100**	**$1,244,800**	**$1,257,900**	**$825,600**	**$1,213,800**	**$1,195,400**	**$1,176,500**	**$1,157,000**	**$1,541,400**	**$1,520,700**	**$1,499,400**	**$1,477,600**	**$1,940,200**	**$1,916,900**	**$1,893,000**
DEBT SERVICE COVERAGE/LOSS FOR DECK DEVELOPMENT PROGRAM	N.A.	N.A.	($680,293)	($401,720)	($1,539,514)	($1,228,039)	($1,411,235)	($1,075,271)	($348,124)	($224,362)	$25,996	$163,444	$253,864	$563,144	$829,454	$998,814	$1,293,304
REVISED CASHFLOW W/ DECK DEVELOPMENT PROGRAM	$780,800	$722,700	$580,807	$843,080	($281,614)	($402,439)	($197,435)	$120,129	$828,376	$932,638	$1,567,396	$1,684,144	$1,753,264	$2,040,744	$2,769,654	$2,915,714	$3,186,304
CUMMULATIVE SYSTEM WIDE SURPLUS/DEFICIT	$780,800	$1,503,500	$2,084,307	$2,927,387	$2,645,773	$2,243,334	$2,045,899	$2,166,028	$2,994,404	$3,927,042	$5,494,438	$7,178,582	$8,931,846	$10,972,590	$13,742,244	$16,657,958	$19,844,262

ASSUMPTIONS TO "DEVELOPMENT" FINANCIAL MODEL (in addition to Base Assumptions)

Year 2003 - Initiate Satellite Parking and Shuttle Program. First year operating cost estimate at $200,000. In future years operating costs increases by 4% per year.
Year 2004 - Upgrade Garage Operations/Auditing Equipment assumes increase in annual operating cost of $20,000.
Year 2006 - Expand On-Street Meter System by 130 spaces yields net annual revenue increase of $30,000. In future years, meter rates (and therefore revenue) would increase by 8% every two years.

Table 24
Current & Projected Special Fund Account Annual Cashflow Analysis
with Impact Associated with Recommended Action Plan

	Current	Projected															
	2002	**2003**	**2004**	**2005**	**2006**	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**
On-Street Parking Revenue																	
Licenses & Permits (+3.5% per year beyond 2004)	$32,400	$33,500	$33,500	$34,700	$35,900	$37,200	$38,500	$39,800	$41,200	$42,600	$44,100	$45,600	$47,200	$48,900	$50,600	$52,400	$54,200
Parking Meters	$375,000	$387,800	$678,700	$678,700	$708,700	$708,700	$850,400	$850,400	$850,400	$850,400	$1,020,500	$1,020,500	$1,020,500	$1,020,500	$1,224,600	$1,224,600	$1,224,600
Fines & Forfeitures	$401,200	$414,800	$497,800	$497,800	$497,800	$497,800	$497,800	$497,800	$497,800	$497,800	$497,800	$497,800	$497,800	$497,800	$497,800	$497,800	$497,800
Total On-Street Revenue	$808,600	$836,100	$1,210,000	$1,211,200	$1,242,400	$1,243,700	$1,386,700	$1,388,000	$1,389,400	$1,390,800	$1,562,400	$1,563,900	$1,565,500	$1,567,200	$1,773,000	$1,774,800	$1,776,600
Off-Street Parking Revenue	$1,022,000	$1,101,700	$1,322,000	$1,322,000	$1,322,000	$907,000	$1,171,400	$1,171,400	$1,171,400	$1,171,400	$1,405,700	$1,405,700	$1,405,700	$1,405,700	$1,686,800	$1,686,800	$1,686,800
Other Revenue Sources (+2% per year beyond 2004)	$207,400	$249,700	$249,700	$254,700	$259,800	$265,000	$270,300	$275,700	$281,200	$286,800	$292,500	$298,400	$304,400	$310,500	$316,700	$323,000	$329,500
ALL REVENUE SOURCES	**$2,038,000**	**$2,187,500**	**$2,781,700**	**$2,787,900**	**$2,824,200**	**$2,415,700**	**$2,828,400**	**$2,835,100**	**$2,842,000**	**$2,849,000**	**$3,260,600**	**$3,268,000**	**$3,275,600**	**$3,283,400**	**$3,776,500**	**$3,784,600**	**$3,792,900**
Garage Operating Expenses	$333,300	$339,600	$366,100	$373,400	$380,900	$388,500	$396,300	$404,200	$412,300	$420,500	$428,900	$437,500	$446,300	$455,200	$464,300	$473,600	$483,100
Public Parking System/Facilities Expenses	$322,900	$324,200	$345,500	$352,400	$359,400	$366,600	$373,900	$381,400	$389,000	$396,800	$404,700	$412,800	$421,100	$429,500	$438,100	$446,900	$455,800
Other Miscelleanous Expenses	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
ALL OPERATING EXPENDITURES	**$656,200**	$663,800	$711,600	$725,800	$740,300	$755,100	$770,200	$785,600	$801,300	$817,300	$833,600	$850,300	$867,400	$884,700	$902,400	$920,500	$938,900
DEVELOPMENT SITE B & C OBLICATIONS	**$0**	**$0**	**$900,000**	**$900,000**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**
SHUTTLE OPERATING EXPENDITURE	N.A.	$200,000	$208,000	$216,300	$225,000	$234,000	$243,400	$253,100	$263,200	$273,700	$284,600	$296,000	$307,800	$320,100	$332,900	$346,200	$360,000
NET INCOME AVAILABLE FOR D/S	**$1,381,800**	**$1,323,700**	**$962,100**	**$945,800**	**$1,858,900**	**$1,426,600**	**$1,814,800**	**$1,796,400**	**$1,777,500**	**$1,758,000**	**$2,142,400**	**$2,121,700**	**$2,100,400**	**$2,078,600**	**$2,541,200**	**$2,517,900**	**$2,494,000**
CURRENT DEBT SERVICE OBLICATIONS	$601,000	$601,000	$601,000	$601,000	$601,000	$601,000	$601,000	$601,000	$601,000	$601,000	$601,000	$601,000	$601,000	$601,000	$601,000	$601,000	$601,000
REVISED CASHFLOW PROJECTIONS	**$780,800**	**$722,700**	**$361,100**	**$344,800**	**$1,257,900**	**$825,600**	**$1,213,800**	**$1,195,400**	**$1,176,500**	**$1,157,000**	**$1,541,400**	**$1,520,700**	**$1,499,400**	**$1,477,600**	**$1,940,200**	**$1,916,900**	**$1,893,000**
DEBT SERVICE COVERAGE/LOSS FOR DECK DEVELOPMENT PRO	N.A.	N.A.	($680,293)	($401,720)	($1,539,514)	($1,228,039)	($1,411,235)	($1,075,271)	($348,124)	($224,362)	$25,996	$163,444	$253,864	$563,144	$829,454	$998,814	$1,293,304
REVISED CASHFLOW W/ DECK DEVELOPMENT PROGRAM	$780,800	$722,700	($319,193)	($56,920)	($281,614)	($402,439)	($197,435)	$120,129	$828,376	$932,638	$1,567,396	$1,684,144	$1,753,264	$2,040,744	$2,769,654	$2,915,714	$3,186,304
CUMMULATIVE SYSTEM WIDE SURPLUS/DEFICIT	$780,800	$1,503,500	$1,184,307	$1,127,387	$845,773	$443,334	$245,899	$366,028	$1,194,404	$2,127,042	$3,694,438	$5,378,582	$7,131,846	$9,172,590	$11,942,244	$14,857,958	$18,044,262

ASSUMPTIONS TO "DEVELOPMENT" FINANCIAL MODEL (in addition to Base Assumptions)

Year 2003 - Initiate Satellite Parking and Shuttle Program. First year operating cost estimate at $200,000. In future years operating costs increases by 4% per year.
Year 2004 - Upgrade Garage Operations/Auditing Equipment assumes increase in annual operating cost of $20,000.
Year 2006 - Expand On-Street Meter System by 130 spaces yields net annual revenue increase of $30,000. In future years, meter rates (and therefore revenue) would increase by 8% every two years.

realized. That annual system deficit would increase as the Patrick/East Street Deck is developed in Year 2006. An annual operating system deficit of between $281,614 (Year 2006) and $402,439 (Year 2007) should be anticipated. Year 2007 would prove a most difficult year as DESMAN assumes that the parking revenue that would be generated by the existing Church Street Deck would be lost as demolition of that deck (and construction of a new deck on that site) would begin during that year. However, as the revenue from the new/improved Church Street Deck is realized, and as all future on-street and off-street rate increases take effect, the parking system would return to solvency, generating a $120,129 operating surplus in Year 2009, and an operating surplus of $828,376 in Year 2010.

Summary of Financial Analysis

The timing of parking deck construction is critical to the City of Frederick for a number of reasons. First, immediate and near-term parking deficits require that the City move forward as quickly as possible with the Delphey's/Courthouse Deck. That parking deck would not be financially self supporting during its first 12 years in operation even with the off-street rate increases that were recommended in this analysis. Second, the development of the Patrick/East Street Deck is required to support near-term and long-term parking deficits. Third, and finally, the Delphey's/Courthouse Deck and Patrick/East Street Deck will be needed to off-set the impact that is caused by the eventual demolition and reconstruction of the Church Street Deck. Unfortunately, the parking system's finances will be under considerable duress between the years that the Patrick/East Street Deck is developed (Year 2006) and when the new Church Street Deck begins to generate revenue (Year 2009). However, in the long run (Year 2010 and onward), the parking system, with appropriate rate increases, can support these and other system improvements.

Appendix Exhibit A - Off-Street Parking Inventory, Operation (Public vs. Private) and Peak Utilization Survey (by Block)

		Type	Capacity	Occupancy	Public/Private	Restrictions
Block 1	---	---	---	---	---	---
Block 2	1	Lot	76	66	Private	N/P 6AM-5PM
	2	Lot	5	2	Private	Tenants Only
	3	Lot	10	3	Private	
	4	Lot	6	6	Private	Proctor-Huffer
	5	Lot	8	6	Private	
	6	Lot	6	5	Private	
Block 3	7	Lot	10	2	Private	Worcestershire Shop
	8	Lot	21	16	Private	Used Car Lot Customer Parking
Block 4	---	---	---	---	---	---
Block 5	---	---	---	---	---	---
Block 6	9	Lot	59	10	Private	
Block 7	10	Lot	22	6	Private	BMC & Silo Factory
Block 8	11	Lot	15	8	Private	Tenants Only
Block 9	12	Lot	15	3	Private	Tenants Only
	13	Lot	12	9	Private	Jr. Fire Company
Block 10	14	Lot	50	28	Private	N/P 7AM-5PM/Service Staff Senior Citizen Only (20 Spaces)/Service Staff (30 Spaces)
Block 11	---	---	---	---	---	---
Block 12	15	Lot	8	6	Private	
Block 13	16	Lot	6	2	Private	Reman's
	17	Lot	37	13	Private	11-Jul
Block 14	18	Lot	20	2	Private	
Block 15	19	Lot	13	4	Private	Residential
	20	Lot	14	3	Private	North East Cleaners
Block 16	21	Lot	8	2	Private	Mackintoch Inc.
	22	Lot	24	9	Private	Parking by Month
Block 17	23	Lot	17	1	Private	
Block 18	24	Lot	20	17	Private	
	25	Lot	20	14	Private	Nelson
	26	Lot	10	6	Private	City Auto Parts
	27	Lot	70	70	Private	Glass Factory
Block 19	28	Lot	15	5	Private	
Block 20	29	Lot	40	40	Private	Tesoro Food Market (out of business)
	30	Lot	57	7	Public/Private	16 Spaces Public 2 Hour Meters 9AM - 5PM/41 Spaces Private
Block 21	31	Lot	13	5	Private	
	32	Lot	10	3	Private	
Block 22	33	Lot	5	3	Private	Quin Chapel
Block 23	34	Lot	22	4	Private	Sanctuary Progressive Church/Public Wed 10PM-Thurs 10AM & Sun 10PM-Mon 10AM
	35	Lot	7	3	Private	
Block 24	36	Lot	15	15	Private	Church
Block 25	37	Lot	10	6	Private	Clagett Enterprises
Block 26	38	Lot	28	9	Private	Professional Building
Block 27	39	Lot	4	0	Private	
	40	Lot	6	4	Private	
Block 28	41	Lot	20	2	Private	

Appendix Exhibit B - Summary of Off-Street Peak Utilization (Surplus or Deficit)

	Supply	Operational Capacity (90%)	Peak Occupancy	%	Surplus/Deficit
Block 1	---	---	---	---	---
Block 2	111	100	88	79%	12
Block 3	31	28	18	58%	10
Block 4	---	---	---	---	---
Block 5	---	---	---	---	---
Block 6	59	53	10	17%	43
Block 7	22	20	6	27%	14
Block 8	15	14	8	53%	6
Block 9	27	24	12	44%	12
Block 10	50	45	28	56%	17
Block 11	---	---	---	---	---
Block 12	8	7	6	75%	1
Block 13	43	39	15	35%	24
Block 14	20	18	2	10%	16
Block 15	27	24	7	26%	17
Block 16	32	29	11	34%	18
Block 17	17	15	1	6%	14
Block 18	120	108	107	89%	1
Block 19	15	14	5	33%	9
Block 20	97	87	47	48%	40
Block 21	23	21	8	35%	13
Block 22	5	5	3	60%	2
Block 23	29	26	7	24%	19
Block 24	15	14	15	100%	-2
Block 25	10	9	6	60%	3
Block 26	28	25	9	32%	16
Block 27	10	9	4	40%	5
Block 28	20	18	2	10%	16
Block 29	16	14	6	38%	8
Block 30	---	---	---	---	---
Block 31	29	26	10	34%	16
Block 32	---	---	---	---	---
Block 33	---	---	---	---	---
Block 34	3	3	1	33%	2
Block 35	---	---	---	---	---
Block 36	19	17	7	37%	10
Block 37	303	273	296	98%	-23
Block 38	45	41	45	100%	-5
Block 39	48	43	44	92%	-1
Block 40	54	49	18	33%	31
Block 41	198	178	129	65%	49
Block 42	---	---	---	---	---
Block 43	---	---	---	---	---
Block 44	129	116	70	54%	46
Block 45	140	126	84	60%	42
Block 46	13	12	8	62%	4
Block 47	97	87	77	79%	10

Appendix Exhibit C - On-Street Parking Inventory, Restrictions and Peak Utilization Survey by Block Face (core area utilization survey every 2 hours)

			Occupancy						
		Capacity	8:00 AM	10:00 AM	12:00 PM	2:00 PM	4:00 PM	6:00 PM	Restrictions
Block 1	North	4			2				N/P Midnight - 7 AM Tues. & Fri.
	South	7			4				N/P Midnight - 7 AM Mon. & Thurs.
	East	N/P	N/P	N/P	N/P	N/P	N/P	N/P	No Parking
	West	7			1				N/P Midnight - 7 AM Mon. & Thurs.
Block 2	North	7			2				No Restrictions
	South	3			0				N/P Midnight - 7 AM Mon. & Thurs.
	East	9			3				N/P 3-7 AM
	West	N/P	N/P	N/P	N/P	N/P	N/P	N/P	No Parking
Block Face 2A	North	12			0				N/P Midnight - 7AM Tues. & Fri.
Block 3	North	13			8				N/P Midnight - 7AM Tues. & Fri./Bus Stop
	South	15			11				N/P Midnight - 7AM Mon. & Thurs.
	East	N/P	N/P	N/P	N/P	N/P	N/P	N/P	No Parking
	West	8			5				2 Hour Parking 9AM - 5PM / N/P 3AM-7AM
Block Face 3A	North	5			0				N/P Midnight - 7AM Tues. & Fri.
Block Face 3B	North	5			2				N/P Midnight - 7AM Tues. & Fri.
Block 4	North	16			2				N/P Midnight - 7AM Tues. & Fri./N/P Trucks over 3/4 Tons (3 Spaces)
	South	N/P	N/P	N/P	N/P	N/P	N/P	N/P	No Parking
	East	N/P	N/P	N/P	N/P	N/P	N/P	N/P	No Parking
	West	N/P	N/P	N/P	N/P	N/P	N/P	N/P	No Parking
Block Face 4A	North	9			1				N/P Midnight - 7AM Tues. & Fri.
Block 5	North	N/P	N/P	N/P	N/P	N/P	N/P	N/P	No Parking
	South	13			5				N/P Midnight - 7AM Mon. & Thurs.
	East	N/P	N/P	N/P	N/P	N/P	N/P	N/P	No Parking
	West	N/P	N/P	N/P	N/P	N/P	N/P	N/P	No Parking
Block 6	North	24			8				N/P Midnight - 7AM Tues. & Fri.
	South	N/P	N/P	N/P	N/P	N/P	N/P	N/P	No Parking
	East	N/P	N/P	N/P	N/P	N/P	N/P	N/P	No Parking
	West	N/P	N/P	N/P	N/P	N/P	N/P	N/P	No Parking
Block Face 6A	North	17			5				N/P Midnight - 6 AM Tues. & Fri.
Block 7	North	N/P	N/P	N/P	N/P	N/P	N/P	N/P	No Parking
	South	20			5				N/P Midnight - 7 AM Mon. & Thurs.
	East	12			0				Private/Silo Factory
	West	N/P	N/P	N/P	N/P	N/P	N/P	N/P	No Parking
Block 8	North	6			0				N/P Midnight - 7 AM Mon. & Thurs.
	South	13			1				N/P Midnight - 7 AM Tues. & Fri.
	East	N/P	N/P	N/P	N/P	N/P	N/P	N/P	No Parking
	West	17			9				N/P Midnight - 7 AM Mon. & Thurs.
Block 9	North	6			5				N/P Midnight - 7 AM Mon. & Thurs.
	South	10			4				N/P Midnight - 7 AM Tues. & Fri.
	East	8			0				2 Hour Meters 9AM - 5PM/ N/P 3AM-7AM
	West	N/P	N/P	N/P	N/P	N/P	N/P	N/P	No Parking
Block 10	North	7			8				N/P Midnight - 7 AM Mon. & Thurs.
	South	16			7				N/P Midnight - 7 AM Tues. & Fri.
	East	N/P	N/P	N/P	N/P	N/P	N/P	N/P	No Parking
	West	12			3				2 Hour Meters 9AM - 5PM/ N/P 3AM-7AM/ 1 Hour Parking (3 Spaces)/ N/P 6AM-5PM Loading Zone Sat. 1 Hour Parking (2 Spaces)
Block 11	North	15			3				N/P Midnight - 7 AM Mon. & Thurs.
	South	11			0				N/P Midnight - 7 AM Tues. & Fri.
	East	17			10				No Restrictions
	West								No Parking
Block 12	North	23			5				N/P Midnight - 7 AM Mon. & Thurs.
	South	N/P	N/P	N/P	N/P	N/P	N/P	N/P	No Parking
	East	N/P	N/P	N/P	N/P	N/P	N/P	N/P	No Parking
	West	8			4				No Restrictions
Block 13	North	N/P	N/P	N/P	N/P	N/P	N/P	N/P	No Parking
	South	24			9				N/P Midnight - 7 AM Tues. & Fri.
	East	N/P	N/P	N/P	N/P	N/P	N/P	N/P	No Parking/Bus Stop
	West	8			4				No Restrictions
Block 14	North	9			1				N/P Midnight - 7 AM Tues. & Fri.
	South	16	5	6	6	6	7	8	N/P Midnight - 7 AM Mon. & Thurs.
	East	N/P	N/P	N/P	N/P	N/P	N/P	N/P	No Parking
	West	16			2				N/P Midnight - 7 AM Mon. & Thurs./Bus Stop

Appendix Exhibit D - Summary of On-Street Peak Utilization by Block Face (Surplus or Deficit)

	Supply	Operational Capacity (90%)	Peak Occupancy	%	Surplus/Deficit
Block 1	18	16	7	39%	9
Block 2	19	17	5	26%	12
Block Face 2A	12	11	0	0%	11
Block 3	36	32	24	67%	8
Block Face 3A	5	5	0	0%	5
Block Face 3B	5	5	2	40%	3
Block 4	16	14	2	13%	12
Block Face 4A	9	8	1	11%	7
Block 5	13	12	5	38%	7
Block 6	24	22	8	33%	14
Block Face 6A	17	15	5	29%	10
Block 7	32	29	5	16%	24
Block 8	36	32	10	28%	22
Block 9	24	22	9	38%	13
Block 10	35	32	18	51%	14
Block 11	43	39	13	30%	26
Block 12	31	28	9	29%	19
Block 13	32	29	13	41%	16
Block 14	41	37	9	22%	28
Block Face 14A	8	7	5	63%	2
Block Face 14B	8	7	3	38%	4
Block 15	26	23	7	27%	16
Block 16	40	36	14	35%	22
Block 17	22	20	4	18%	16
Block 18	43	39	22	51%	17
Block Face 18A	8	7	0	0%	7
Block 19	28	25	18	64%	7
Block Face 19A	N/P	N/P	N/P	N/P	N/P
Block Face 19B	N/P	N/P	N/P	N/P	N/P
Block 20	28	25	18	64%	7
Block 21	43	39	27	63%	12
Block 22	28	25	12	43%	13
Block 23	63	57	26	41%	31
Block Face 23A	N/P	N/P	N/P	N/P	N/P
Block Face 23B	N/P	N/P	N/P	N/P	N/P
Block 24	44	40	27	61%	13
Block Face 24A	N/P	N/P	N/P	N/P	N/P
Block Face 24B	6	5	6	100%	-1
Block 25	37	33	34	92%	-1
Block 26	48	43	41	85%	2
Block 27	38	34	28	74%	6
Block 28	29	26	19	66%	7
Block 29	29	26	21	72%	5
Block 30	26	23	16	62%	7
Block Face 30A	25	23	16	64%	7
Block 31	26	23	16	62%	7

Appendix Exhibit E - On/Off Street Surplus/Deficit and % Occupancy (by Block)

	Capacity	Practical Capacity 90%	Peak Occupancy	%	Surplus/ Deficit
Block 1	18	16	7	39%	9
Block 2	130	117	93	72%	24
Block Face 2A	12	11	0	0%	11
Block 3	67	60	42	63%	18
Block Face 3A	5	5	0	0%	5
Block Face 3B	5	5	2	40%	3
Block 4	16	14	2	13%	12
Block Face 4A	9	8	1	11%	7
Block 5	13	12	5	38%	7
Block 6	83	75	18	22%	57
Block Face 6A	17	15	5	29%	10
Block 7	54	49	11	20%	38
Block 8	51	46	18	35%	28
Block 9	51	46	21	41%	25
Block 10	85	77	46	54%	31
Block 11	43	39	13	30%	26
Block 12	39	35	15	38%	20
Block 13	75	68	28	37%	40
Block 14	61	55	11	18%	44
Block Face 14A	8	7	5	63%	2
Block Face 14B	8	7	3	38%	4
Block 15	53	48	14	26%	34
Block 16	72	65	25	35%	40
Block 17	39	35	5	13%	30
Block 18	163	147	129	79%	18
Block Face 18A	8	7	0	0%	7
Block 19	43	39	23	53%	16
Block Face 19A	N/P	N/P	N/P	N/P	N/P
Block Face 19B	N/P	N/P	N/P	N/P	N/P
Block 20	125	113	65	52%	48
Block 21	66	59	35	53%	24
Block 22	33	30	15	45%	15
Block 23	92	83	33	36%	50
Block Face 23A	N/P	N/P	N/P	N/P	N/P
Block Face 23B	N/P	N/P	N/P	N/P	N/P
Block 24	59	53	42	71%	11
Block Face 24A	N/P	N/P	N/P	N/P	N/P
Block Face 24B	6	5	6	100%	-1
Block 25	47	42	40	85%	2
Block 26	76	68	50	66%	18
Block 27	48	43	32	67%	11
Block 28	49	44	21	43%	23
Block 29	45	41	27	60%	14
Block 30	26	23	16	62%	7
Block Face 30A	25	23	16	64%	7
Block 31	55	50	26	47%	24
Block Face 31A	5	5	4	80%	1
Block 32	148	133	113	76%	20
Block Face 32A	11	10	11	100%	-1
Block Face 32B	7	6	7	100%	-1

Appendix Exhibit F - Survey of Comparable Cities

Issue	Buffalo	Cleveland	Rochester	Cincinnati	Indianapolis	Milwaukee	Pittsburgh	Portland	Kansas City, MO
Management structure: 1. How is public parking managed?	52% of City facilities are managed by BCAR on a non-profit basis with policy direction from the City Parking Board. 21% of City facilities and some stat lots are put out to bid under City Parking Board Direction. 22% are City Urban Renewal Agency facilities put out the bid by BURA. on-street parking is managed by the Parking Violation Bureau.	Division of Parking Facilities runs on and off street parking. A contractor manages 2 garages. The reminder are run in house. What about on-street?	Dept. of Economic Development bids management contracts for off street facilities for utilities, security, maintenance and labor. The Police Dept. monitors on street parking. What about on-street?	On and off street parking are managed by the Division of Parking Facilities under the direction of the Dept. of Public Utilities.	All public parking is On-Street and is managed by the Dept. of Transportation.	Dept. of Public Works manages parking structures, lots & towing. A private contractor is also used. (on street?)	5 member Parking Authority Board manages all of street parking and maintains all on & off street parking.	City contracts with private operators for attendants at Exit Booths. Operator bills expenses, overhead and profit. On street managed by Dept. of Transportation	Convention Center Dept. subcontracts with a Parking Operator for all services. On street managed by Dept. of Public Works.
2. Who makes price and policy decisions?	City Parking Board, and BCAR for BCAR system. BURA for BURA system. City Parking Board for remaining City facilities. Parking Violations Bureau and City Council for on-street.	The City Council makes all decisions.	Municipal Parking Division and Economic Development Dept. make recommendations that must be approved by the Mayor and City Council.	City Council.	the Transportation Committee of the City Council (including citizen reps.) recommends to the full Council for implementation	City rates established by Common Council ordinance.	Parking Authority Board for off street. City Council for on street.	Staff recommends to City Council which decides.	Staff recommends to City Board, who recommends to City Council which decides.
3 Responsibilities of different City departments.	Parking Violations Bureau manages on street parking with enforcement assistance from the Police Dept. The Treasury Dept. collects fees. The City Parking Board manages CIVIC and City facilities. The common Council must approve all publicly bid management contracts. BURA manages BURA facilities	Div. of Parking Facilities does all operation and general maintenance and house keeping. Parks Dept. does landscaping and snow plowing. In house enforcement offices of the Police Dept. do enforcement. What about on-street?	Dept. of Economic Development administers off street facilities. Engineering Dept. does Capital maintenance. Police Dept. monitors on street parking. (Metro repairs. Etc.) Finance Dept. Administers parking violations. What about on-street?	Parking Facilities Div. - Off street parking Traffic Engineering - On street parking City Treasurer - Meter collection Police - Security & Enforcement	On Street Dept. is responsible for installation and repair of metes. A contractor is used for collections and enforcement.	Dept. of Public Works for structures, lots and towing. Police and checkers for on street enforcement. (on street management?)	Pittsburgh Parking Authority does maintenance for on & off street. An operator is hired for off street facilities.	Bureau of General Services manages City parking garages. Bureau of Transportation manages on-street parking.	Dept. of P.W. Arch. Office manages on street parking, street traffic, permits and signage. Convention Center Dept. subcontracts garage operation and Kemper Arena Parking. Aviation Dept. subcontracts Airport Parking. City Council approves fees, policies, contracts, etc.
4. Private operator used to operate facilities (yes or no).	Yes for all systems.	Yes, 2 ramps	Yes.	Yes - 3 ramps	Yes - on street only	Yes for maintenance and security.	Yes.	Yes.	Yes.
5 Selection procedure.	CIVIC downtown owner corporation provides management on annual non-profit basis. They have long term (40 years) agreement with Allright parking. City/BURA use public bids.	Public bid.	RFP	Bids sent to interested operators.	RFP process public bid.	Public bid.	Sealed bid.	RFP process.	RFP process.
6 Selection criteria.	City and BURA lots: highest responsible bidder. CIVIC: Long term contracts with parking management firm.	Ramps: lowest management fee given specified operating expenses. Required lowest fee.	Highest % of gross revenues paid to the City, Operator Qualifications, experience.	Service, price.	Service level and price.	Lowest responsive bidder fee and operator expense.	Best price lock with controlled expenses and guaranteed revenues.	Low bid, performance of current operators.	Experience, cost, quality, greatest revenue
7. Facilities bid separately or together as a package?	BCAR/together BURA/separately City/separately	2 as a package	Separately	Separately	Separately by function.	Package. Bid separately.	Separately.	Now as one package. Are considering 2 packages to promote competition.	Separately.
8. May operators compete privately downtown?	Yes.	Yes.	Yes.	Yes.	Yes.	Yes.	Yes.	Yes.	Yes.
9. Use of incentives?	No.	No.	No specific incentives, but maximizing parking revenues increases the operators fee.	Yes for Management agreement. A percent of revenue over cap.	No.	No.	Yes, increased % fee over certain # of users.	No.	No, but would like to use them.
10 Promotion or validation programs?	CIVIC: Discount coupon books. Validation coupons. Monthly group discounts. Early bid all day special. VIP parker pass. Reserved parking stalls.	Coupon book with $200.00 worth of stamps.	Sr. Citizen discounts, Residential discounts, discounts on certain events at War and Civic Auditoriums.	Park and save coupons.	Yes. Individual validation between private garages and businesses. Downtown advertising campaign features the availability and ease of parking.	Individually tailored.	Evening and weekend parking validation by stores and restaurants.	Validation - 2 free hours for $15.00 purchase, paid for by merchants. Extensive advertising campaign	
11. Developer parking requirements number of space required?	None.	?	Provision of parking spaces not required downtown. Parking developers must provide some landscaping.	Different zoning requirements.	1 space for 200/sf of office gross floor area.	Developer requirements are minimum to none.	No requirements.	.7 spaces per 1,000 sf of net building area. 1 space per each residential unit.	Office space - 2 spaces per 1,000 sf. 65% replacement of spaces replaced by construction. Retail - 2 spaces per 1,00 sf. 1-2 spaces per size each residential unit. Hotel - .5 spaces per guest room. Negotiated alternatives include contribution $7,000 per space to City parking development fund or $2,000 per space to a transit fund.
12. How mandated?				Zoning regulations	Zoning ordinance	Zoning ordinance.	No zoning requirements.	Zoning Code.	
13. Any measure taken of consumer satisfaction?	Occasional return postcard survey.		Occasional task force study or focus group report.	Yes, occasional surveys of exiting or monthly parkers.					
Revenues and financing: 1a. Parking revenues to City general fun or to parking system?	CIVIC: No payment until maintenance reserve accumulates $1.5 million, then 50/50 split until $3 million and then 100% to City. BURA: Revenues to BURA general fund. City: Revenues split with NYS. City share to general fund.	Enterprise fund. 8% parking tax goes to the City	Revenues go to the parking system; however there are no excess funds.	Off street revenues go into parking system fund. Meter revenues go into meter fund. Fines revenue split 50-50 with County with City's 50% going into general fund. 50% City; 50% County	On-street revenues go to the general fund.	Parking board.	26% parking tax goes to City general fund. The rest goes into the parking system.	Parking System.	To the City general fund.
1b. Parking fee set to break even, make revenues or below actual expenses?	CIVIC : Fees are set to break even. City/BURA: Fees are set to make revenues.	Fees are set to break even with expenses.	Fees are set low to encourage parking.	Fees are set to cover operating expenses and earn extra to cover future capital expenses.	Parking meter fees and violation fees are set to balance economic development requirements.	As much as the market will bear.		Fees are set to cover operation expenses and future capital needs.	
2. Does the City subsidize parking?	No.	No.	Yes to pay debt service on new facilities beyond parking revenues.	No	System pays for itself.	Subsidies are expected.	No for operation. Yes if revenues and meter revenues don't cover debt series.	No. The system is self sustaining	Generally, no.
3. Does the private sector subsidize parking?	No.	No.	No.	No	No.	No.	No	No.	No.
4. How is facility construction financed?	Sale of bonds.	General Obligation bonds.	Bonds. Some private donations may be made in return for dedicated spaces for employees.	General obligation bonds paid from parking funds.	Doesn't apply.	General obligation debt.	Through parking revenue or from sale of revenue bonds.	Parking Revenue Bonds.	Sale of parking revenue bonds, and City subsidy if needed.

APPENDIX EXHIBIT G-1

FREDRICK PARKING DIVISION

Church Street Garage Operating Expenses

393 Garage Spaces		**Actual**			**Unaudited**
	1998	**1999**	**2000**	**2001**	**2002**
Salaries	$48,222	$53,437	$60,066	$64,631	$63,677
Workman's Compensation	$590	$1,192	$1,241	$1,402	$1,607
FICA	$3,973	$4,349	$4,980	$5,316	$5,249
Benefits	$1,714	$3,391	$2,891	$4,407	$4,711
Supplies	$4,759	$4,164	$2,178	$2,094	$3,562
Energy	$17,513	$14,478	$17,127	$14,828	$14,843
Repair & Maintenance	$4,452	$8,537	$11,219	$3,298	$2,960
Professional Services	$0	$0	$600	$18,839	$314
Cleaning Services	$0	$0	$0	$0	$0
Repair & Maintenance Services	$30,230	$6,093	$47,637	$4,834	$2,269
Rentals	$129	$0	$0	$0	$0
Communications	$722	$1,016	$1,410	$1,732	$1,679
Travel	$0	$0	$0	$0	$0
Advertising	$111	$0	$0	$0	$0
Printing & Binding	$0	$0	$0	$0	$0
Insurance	$2,287	$3,032	$2,772	$3,188	$4,106
Bldg Improvements	$0	$0	$0	$0	$0
Machinery & Equipment	$0	$21,730	$0	$0	$0
Total Operating Expenses	**$118,422**	**$124,834**	**$156,594**	**$129,840**	**$110,778**
Oper.Costs/Per Space	$301	$318	$398	$330	$282
Parking Revenue	**$277,381**	**$309,718**	**$316,378**	**$323,584**	**$328,809**
Revenue/Per Space	$706	$788	$805	$823	$837

APPENDIX EXHIBIT G-2

FREDRICK PARKING DIVISION

Court Street Garage Operating Expenses

531 Garage Spaces		**Actual**			**Unaudited**
	1998	**1999**	**2000**	**2001**	**2002**
Salaries	$43,549	$46,985	$53,912	$60,173	$59,187
Overtime	$406	$0	$70	$54	$47
Workman's Compensation	$899	$908	$872	$1,205	$1,378
FICA	$3,362	$3,594	$4,129	$4,576	$4,472
Benefits	$1,865	$1,831	$1,932	$4,088	$9,176
Supplies	$2,335	$2,917	$2,113	$2,013	$3,915
Energy	$21,381	$20,282	$23,103	$19,044	$19,355
Repair & Maintenance	$4,102	$5,552	$4,170	$6,734	$3,389
Professional Services	$0	$0	$12	$12	$7,856
Cleaning Services	$0	$0	$0	$0	$0
Repair & Maintenance Services	$6,212	$4,885	$16,617	$16,857	$21,664
Rentals	$0	$0	$0	$0	$0
Communications	$3,160	$3,280	$3,544	$3,835	$3,590
Travel	$0	$0	$0	$0	$0
Advertising	$0	$0	$0	$0	$0
Printing & Binding	$0	$0	$0	$0	$0
Insurance	$4,852	$3,434	$3,227	$3,587	$3,565
Bldg Improvements	$0	$0	$0	$0	$0
Machinery & Equipment	$16,055	$25,400	$0	$0	$0
Total Operating Expenses	**$108,178**	**$119,068**	**$113,701**	**$122,178**	**$137,594**
Oper.Costs/Per Space	$204	$224	$214	$230	$259
Parking Revenue	**$358,833**	**$369,818**	**$392,550**	**$389,672**	**$423,711**
Revenue/Per Space	$676	$696	$739	$734	$798

APPENDIX EXHIBIT G-3

FREDRICK PARKING DIVISION

Carroll Creek Garage Operating Expenses

545 Garage Spaces	**Actual**				**Unaudited**
	1998	**1999**	**2000**	**2001**	**2002**
Salaries	$29,769	$31,901	$34,485	$42,029	$42,159
Overtime	$267	$24	$0	$0	$457
Workman's Compensation	$672	$636	$620	$802	$917
FICA	$2,297	$2,442	$2,638	$3,215	$3,260
Benefits	$2,046	$0	$0	$0	$2,226
Supplies	$1,779	$2,667	$4,641	$1,705	$2,175
Energy	$18,835	$17,880	$22,429	$19,054	$20,693
Repair & Maintenance	$1,710	$1,363	$2,011	$2,074	$3,283
Professional Services	$0	$0	$0	$0	$0
Cleaning Services	$0	$0	$0	$0	$0
Repair & Maintenance Services	$3,719	$2,843	$3,750	$3,736	$3,262
Rentals	$0	$0	$0	$0	$0
Communications	$1,082	$1,391	$1,476	$1,632	$1,601
Travel	$0	$0	$0	$0	$0
Advertising	$0	$0	$0	$0	$0
Printing & Binding	$0	$0	$0	$0	$0
Insurance	$4,328	$4,816	$4,518	$5,038	$4,862
Bldg Improvements	$0	$0	$0	$0	$0
Machinery & Equipment	$16,055	$26,250	$0	$0	$0
Total Operating Expenses	**$82,559**	**$92,213**	**$76,568**	**$79,285**	**$84,895**
Oper.Costs/Per Space	$151	$169	$140	$145	$156
Parking Revenue	**$115,202**	**$154,580**	**$188,080**	**$214,639**	**$241,107**
Revenue/Per Space	$211	$284	$345	$394	$442

Appendix Exhibit H-1
Delphy's/Courthouse Site
Space Count and Construction Cost Estimate
All Costs Projected to FY 2003 (Annual 1.04 Cost Index)

Area / Car Count

Level	Area / Car Count Spaces	Area (Sq.Ft.)	Sq.Ft./Space
Roof	126	35,400	281
Five	0	0	0
Four	126	35,400	0
Three	126	35,400	281
Two	126	35,400	281
One			
Retail	---	10,800	---
Parking	110	35,400	322
Below Grade	100	32,500	325
Total	**714**	**220,300**	**309**

Building Area Summary & Construction Cost Estimate

Total Parking Area =	220,300	sf
Total Retail Area =	10,800	sf
Total Area =	**231,100**	**sf**

Per Unit Construction Cost Figures (per Square Foot)

Parking Cost =	$36	sf
Retail (Shell) Cost =	$94	sf

Total & Per Space Construction Costs

Total Parking Area =	$8,018,920
Total Retail Area =	$1,010,880
Total Construction Cost =	**$9,029,800**
Per Space Construction Cost =	**$11,231**

Appendix Exhibit H-2

Delphy's/Courthouse Site

Parking Development Cost Calculation

All Costs Projected to FY 2003 (Annual 1.04 Cost Index)

PROJECT COST CALCULATION	
Construction (1)	$9,029,800
Land Acquisition Costs (2)	$2,000,000
Professional Services (3)	$902,980
Total Development Cost	$11,932,780
Financing Costs	
Cost of Issuance and Other Fees (4)	$435,800
Debt Service Reserves (5)	$1,136,200
Net Interest During Construction (6)	$1,019,610
Subtotal:	$2,591,610
Total Project Cost	$14,524,390
LOAN CALCULATION (7)	
Principal	$14,524,390
Interest Rate	6.0%
Term (years)	25
Annual Debt Service	$1,136,200

NOTE:

(1)For purposes of comparing parking development costs, these figures exclude any retail space construction costs.

(2) Land Acquisition Cost Estimate provided by City of Frederick, Dept. of Public Works

(3) Professional Services include architectual/engineering fees, survey, soil reporting and testing, P.E. inspection, and legal services and is approximately 10% of construction costs.

(4) Approximately 3% of total project cost.

(5) Equal to one year annual debt service.

(6) Capitalized interest during first 14 mo minus interest earned on construction budget during periodicdrawdowns.

(7) The loan calculation was illustrated for comparative purposes only as significant financial information is required from the City.

Appendix Exhibit H-3

Delphy's/Courthouse Site

Annual Parking Revenue and Operating Cost Estimates

All Costs Projected to FY 2003 (Annual 1.04 Cost Index)

Monthly Permits (1)	$569,184
*(560 spaces * 1.1 oversell * $77/mo.)*	
Weekday Transients (1)	$330,330
*(154 spaces *2.5 car turnover * $3.3 avg ticket)*	
Weekend Transients (2)	$62,400
*(100 spaces * 1.5 car turnover * $4 flat rate * 104 days)*	
Total Annual Parking Revenue	$961,914
Annual Operating Expenses	
($420 per space per year)	$285,600
Resulting Annual Profit or Loss	**$676,314**
(Before Debt Service Payment)	

NOTE:

(1) Ratio of monthly permits to transients is based on a 80%/20% split and may be deemed conservative. In reality, parking operators adjust this ratio on a monthly basis in an effort ot maximize revenues.

(2) Assumes average of 15% occupancy (100 spaces) over 52 weekends (104 days).

Appendix Exhibit H-4

Delphy's/Courthouse Site

PROFORMA: Statement of Operations and Debt Service Coverate

	FY 2004(1) Year 1	FY 2008 Year 2	FY 2006 Year 3	FY 2007 Year 4	FY 2008 Year 5	FY 2009 Year 6	FY 2010 Year 7	FY 2011 Year 8	FY 2012 Year 9	FY 2013 Year 10	FY 2014 Year 11	FY 2015 Year 12	FY 2016 Year 13	FY 2017 Year 14	FY 2018 Year 15
Parking Income (2)	$673,337	$961,910	$1,058,101	$1,058,101	$1,163,910	$1,163,910	$1,280,300	$1,280,300	$1,408,330	$1,408,330	$1,549,160	$1,549,160	$1,704,080	$1,704,080	$1,874,490
Interest on Reserve (3)	$68,170	$68,170	$68,170	$68,170	$68,170	$68,170	$90,896	$90,896	$90,896	$90,896	$90,896	$90,896	$90,896	$90,896	$90,896
Total Operating Income	$741,507	$1,030,080	$1,126,271	$1,126,271	$1,232,080	$1,232,080	$1,371,196	$1,371,196	$1,499,226	$1,499,226	$1,640,056	$1,640,056	$1,794,976	$1,794,976	$1,965,386
Total Operating and Maintenance Expenses (4)	$285,600	$295,600	$305,950	$316,660	$327,740	$339,210	$351,080	$363,370	$376,090	$389,250	$402,870	$416,970	$431,560	$446,660	$462,290
Net Income (before Debt Service)	$455,907	$734,480	$820,321	$809,611	$904,340	$892,870	$1,020,116	$1,007,826	$1,123,136	$1,109,976	$1,237,186	$1,223,086	$1,363,416	$1,348,316	$1,503,096
Debt Service (3)	$1,136,200	$1,136,200	$1,136,200	$1,136,200	$1,136,200	$1,136,200	$1,136,200	$1,136,200	$1,136,200	$1,136,200	$1,136,200	$1,136,200	$1,136,200	$1,136,200	$1,136,200
Net Income (Loss)	($680,293)	($401,720)	($315,879)	($326,589)	($231,860)	($243,330)	($116,084)	($128,374)	($13,064)	($26,224)	$100,986	$86,886	$227,216	$212,116	$366,896
Cummulative	($680,293)	($1,082,013)	($1,397,892)	($1,724,481)	($1,956,341)	($2,199,671)	($2,315,755)	($2,444,129)	($2,457,193)	($2,483,417)	($2,382,431)	($2,295,545)	($2,068,329)	($1,856,213)	($1,489,317)
Debt Service Coverage	0.40	0.65	0.72	0.71	0.80	0.79	0.90	0.89	0.99	0.98	1.09	1.08	1.20	1.19	1.32

Notes:

(1) Assumes all previously submitted construction costs, issuance, and revenue estimates are based on Year 2004 figures.
Assumes first year parking revenue reflects 70% of potential full year, full utilization condition

(2) Assumes permit and hourly rate increases every 2nd year of on average 10%.

(3) APR = 7% (0.58/mo) for years 1-5, 8% (0.667/mo.)for years 6-15. The 7% was also utilized in assessing interest income and interest expense.

(4) The 2002 fiscal estimates for operating and maintenance expenses were projected to
the Year 2003 by applying an annual 3.5% inflation factor. Annual increases in O&M
expenses reflect the same 4% annual increase as applied to parking

Appendix Exhibit I-1
Post Office Site
Space Count and Construction Cost Estimate
All Costs Projected to FY 2006 (Annual 1.04 Cost Index)

Area / Car Count

Level	Area / Car Count Spaces	Area (Sq.Ft.)	Sq.Ft./Space
Roof	220	64,500	293
Five	0	0	0
Four	220	64,500	293
Three	220	64,500	293
Two	220	64,500	293
One			
Retail	---	0	---
Parking	205	64,500	315
Total	**1,085**	**322,500**	**297**

Building Area Summary & Construction Cost Estimate

Total Parking Area =	322,500	sf
Demolish Existing Building	62,000	sf
Total Area =	**384,500**	**sf**

Per Unit Construction Cost Figures (per Square Foot)

Parking Cost =	$42	sf
Demolition Cost =	$4	sf

Total & Per Space Construction Costs

Total Parking Area =	$13,545,000
Demolition Cost =	$248,000
Total Construction Cost =	**$13,793,000**
Per Space Construction Cost =	**$12,712**

Appendix Exhibit I-2

Post Office Site

Parking Development Cost Calculation

All Costs Projected to FY 2006 (Annual 1.04 Cost Index)

PROJECT COST CALCULATION	
Construction (1)	$13,793,000
Land Acquisition Costs (2)	$2,000,000
Professional Services (3)	$1,379,300
Total Development Cost	$17,172,300
Financing Costs	
Cost of Issuance and Other Fees (4)	$627,100
Debt Service Reserves (5)	$1,635,100
Net Interest During Construction (6)	$1,467,310
Subtotal:	$3,729,510
Total Project Cost	$20,901,810
LOAN CALCULATION (7)	
Principal	$20,901,810
Interest Rate	6.0%
Term (years)	25
Annual Debt Service	$1,635,100

NOTE:

(1)For purposes of comparing parking development costs, these figures exclude any retail space construction costs.

(2) Professional Services include architectual/engineering fees, survey, soil reporting and testing, P.E. inspection, and legal services and is approximately 10% of construction costs.

(3) Approximately 3% of total project cost.

(4) Equal to one year annual debt service.

(5) Capitalized interest during first 14 mo minus interest earned on construction budget during periodicdrawdowns.

(6) The loan calculation was illustrated for comparative purposes only as significant financial information is required from the City.

Appendix Exhibit I-3

Post Office Site

Parking Revenue and Operating Expense Estimates

All Costs Projected to FY 2006 (Annual 1.04 Cost Index)

Monthly Permits (1)	$554,400
*(700 spaces * 1.1 oversell * $70/mo.)*	
Weekday Transients (1)	$450,450
*(385 spaces *1.5 car turnover * $3 avg ticket)*	
Weekend Transients (2)	$124,800
*(200 spaces * 1.5 car turnover * $4 flat rate * 104 days)*	
Total Annual Parking Revenue	$1,129,650
Annual Operating Expenses	
($470 per space per year)	$509,950
Resulting Annual Profit or Loss	**$619,700**
(Before Debt Service Payment)	

NOTE:

(1) Ratio of monthly permits to transients is based on a 80%/20% split and may be deemed conservative. In reality, parking operators adjust this ratio on a monthly basis in an effort ot maximize revenues.

(2) Assumes average of 20% occupancy (200 spaces) over 52 weekends (104 days).

Appendix Exhibit I-4

Post Office Site

PROFORMA: Statement of Operations and Debt Service Coverage

	FY 2006 (1) Year 1	FY 2007 Year 2	FY 2008 Year 3	FY 2009 Year 4	FY 2010 Year 5	FY 2011 Year 6	FY 2012 Year 7	FY 2013 Year 8	FY 2014 Year 9	FY 2015 Year 10	FY 2016 Year 11	FY 2017 Year 12	FY 2018 Year 13	FY 2019 Year 14	FY 2020 Year 15
Parking Income (2)	$790,755	$1,129,650	$1,242,615	$1,242,615	$1,366,880	$1,366,880	$1,503,570	$1,503,570	$1,653,930	$1,653,930	$1,819,320	$1,819,320	$2,001,250	$2,001,250	$2,201,380
Interest on Reserve (3)	$98,110	$98,110	$98,110	$98,110	$98,110	$98,110	$130,808	$130,808	$130,808	$130,808	$130,808	$130,808	$130,808	$130,808	$130,808
Total Operating Income	$888,865	$1,227,760	$1,340,725	$1,340,725	$1,464,990	$1,464,990	$1,634,378	$1,634,378	$1,784,738	$1,784,738	$1,950,128	$1,950,128	$2,132,058	$2,132,058	$2,332,188
Total Operating and Maintenance Expenses (4)	$509,950	$509,950	$527,800	$546,270	$565,390	$585,180	$605,660	$626,860	$648,800	$671,510	$695,010	$719,340	$744,520	$770,580	$797,550
Net Income (before Debt Service)	$378,915	$717,810	$812,925	$794,455	$899,600	$879,810	$1,028,718	$1,007,518	$1,135,938	$1,113,228	$1,255,118	$1,230,788	$1,387,538	$1,361,478	$1,534,638
Debt Service (3)	$1,635,100	$1,635,100	$1,635,100	$1,635,100	$1,635,100	$1,635,100	$1,635,100	$1,635,100	$1,635,100	$1,635,100	$1,635,100	$1,635,100	$1,635,100	$1,635,100	$1,635,100
Net Income (Loss)	($1,256,185)	($917,290)	($822,175)	($840,645)	($735,500)	($755,290)	($606,382)	($627,582)	($499,162)	($521,872)	($379,982)	($404,312)	($247,562)	($273,622)	($100,462)
Cummulative	($1,256,185)	($917,290)	($1,739,465)	($2,580,110)	($3,315,610)	($4,070,900)	($4,677,282)	($5,304,864)	($5,804,026)	($6,325,898)	($6,705,880)	($7,110,192)	($7,357,754)	($7,631,376)	($7,731,838)
Debt Service Coverage	0.23	0.44	0.50	0.49	0.55	0.54	0.63	0.62	0.69	0.68	0.77	0.75	0.85	0.83	0.94

Notes:

(1) Assumes all previously submitted construction costs, issuance, and revenue estimates are based on Year 2006 figures.
Assumes first year parking revenue reflects 70% of potential full year, full utilization condition

(2) Assumes permit and hourly rate increases every 2nd year of on average 10%.

(3) APR = 7% (0.58/mo) for years 1-5, 8% (0.667/mo.)for years 6-15. The 7% was also utilized in assessing interest income and interest expense.

(4) The 2002 fiscal estimates for operating and maintenance expenses were projected to the Year 2003 by applying an annual 3.5% inflation factor. Annual increases in O&M expenses reflect the same 4% annual increase as applied to parking

Appendix Exhibit J-1
Church Street Development Project
Space Count and Construction Cost Estimate
All Costs Projected to FY 2008 (Annual 1.04 Cost Index)

Area / Car Count

Level	Area / Car Count Spaces	Area (Sq.Ft.)	Sq.Ft./Space
Roof	29	11,400	393
Five	100	30,100	301
Four	100	30,100	301
Three	96	30,100	314
Two	100	30,100	301
One			
Parking	96	30,100	314
B elow Grade	72	27,100	376
Total	**593**	**189,000**	**319**

Building Area Summary & Construction Cost Estimate

Total Parking Area =	189,000	sf
Excavation Area =	30,000	sf
Demolish Existing Garage =	133,000	sf
Total Area =	**219,000**	**sf**

Per Unit Construction Cost Figures (per Square Foot)

Parking Cost =	$45	sf
Excavation Cost =	$6	sf
Demolition Cost =	$4	sf

Total & Per Space Construction Costs

Parking Cost =	$8,505,000
Excavation Cost =	$180,000
Foundation Wall Cost =	$279,000
Demolition Cost =	$532,000
Total Construction Cost =	**$9,496,000**
Per Space Construction Cost =	**$16,013**

Appendix Exhibit J-2

Church Street Development Project

Parking Development Cost Calculation

All Costs Projected to FY 2008 (Annual 1.04 Cost Index)

PROJECT COST CALCULATION	
Construction (1)	$9,496,000
Land Acquisition Costs (2)	$0
Professional Services (3)	$949,600
Total Development Cost	$10,445,600
Financing Costs	
Cost of Issuance and Other Fees (4)	$381,500
Debt Service Reserves (5)	$994,600
Net Interest During Construction (6)	$892,540
Subtotal:	$2,268,640
Total Project Cost	$12,714,240
LOAN CALCULATION (7)	
Principal	$12,714,240
Interest Rate	6.0%
Term (years)	25
Annual Debt Service	$994,600

NOTE:

(1)For purposes of comparing parking development costs, these figures exclude any retail space construction costs.

(2) Land Acquisition Cost Estimate provided by City of Frederick, Dept. of Public Works

(3) Professional Services include architectual/engineering fees, survey, soil reporting and testing, P.E. inspection, and legal services and is approximately 10% of construction costs.

(4) Approximately 3% of total project cost.

(5) Equal to one year annual debt service.

(6) Capitalized interest during first 14 mo minus interest earned on construction budget during periodicdrawdowns.

(7) The loan calculation was illustrated for comparative purposes only as significant financial information is required from the City.

Appendix Exhibit J-3

Church Street Development Project

Parking Revenue and Expense Estimates

All Costs Projected to FY 2008 (Annual 1.04 Cost Index)

Monthly Permits (1)	$376,200
*(300 spaces * 1.1 oversell * $95/mo.)*	
Weekday Transients (1)	$1,066,520
*(293 spaces *3.5 car turnover * $4 avg ticket)*	
Weekend Transients (2)	$249,600
*(270 spaces * 2.0 car turnover * $4 avg ticket * 104 days)*	
Total Annual Parking Revenue	$1,692,320
Annual Operating Expenses	
($630 per space per year reflects weekend operaitons)	$373,590
Resulting Annual Profit or Loss	**$1,318,730**
(Before Debt Service Payment)	

NOTE:

(1) Ratio of monthly permits to transients is based on a 50%/50% split and may be deemed conservative. In reality, parking operators adjust this ratio on a monthly basis in an effort ot maximize revenues.

(2) Assumes average of 45% occupancy (270 spaces) over 52 weekends (104 days).

Appendix Exhibit J-4

Church Street Development Project

PROFORMA: Statement of Operations and Debt Service Coverage

	FY 2009 (1) Year 1	FY 2010 Year 2	FY 2011 Year 3	FY 2012 Year 4	FY 2013 Year 5	FY 2014 Year 6	FY 2015 Year 7	FY 2016 Year 8	FY 2017 Year 9	FY 2018 Year 10	FY 2019 Year 11	FY 2020 Year 12	FY 2021 Year 13	FY 2022 Year 14	FY 2023 Year 15
Parking Income (2)	$1,184,624	$1,692,320	$1,861,552	$1,861,552	$2,047,710	$2,047,710	$2,252,480	$2,252,480	$2,477,730	$2,477,730	$2,725,500	$2,725,500	$2,998,050	$2,998,050	$3,297,860
Interest on Reserve (3)	$22,890	$22,890	$22,890	$22,890	$22,890	$22,890	$30,520	$30,520	$30,520	$30,520	$30,520	$30,520	$30,520	$30,520	$30,520
Total Operating Income	$1,207,514	$1,715,210	$1,884,442	$1,884,442	$2,070,600	$2,070,600	$2,283,000	$2,283,000	$2,508,250	$2,508,250	$2,756,020	$2,756,020	$3,028,570	$3,028,570	$3,328,380
Total Operating and Maintenance Expenses (4)	$373,590	$386,670	$400,200	$414,210	$428,710	$443,710	$459,240	$475,310	$491,950	$509,170	$526,990	$545,430	$564,520	$584,280	$604,730
Net Income (before Debt Service)	$833,924	$1,328,540	$1,484,242	$1,470,232	$1,641,890	$1,626,890	$1,823,760	$1,807,690	$2,016,300	$1,999,080	$2,229,030	$2,210,590	$2,464,050	$2,444,290	$2,723,650
Debt Service (3)	$994,600	$994,600	$994,600	$994,600	$994,600	$994,600	$994,600	$994,600	$994,600	$994,600	$994,600	$994,600	$994,600	$994,600	$994,600
Net Income (Loss)	($160,676)	$333,940	$489,642	$475,632	$647,290	$632,290	$829,160	$813,090	$1,021,700	$1,004,480	$1,234,430	$1,215,990	$1,469,450	$1,449,690	$1,729,050
Cummulative	($160,676)	$173,264	$662,906	$1,138,538	$1,785,828	$2,418,118	$3,247,278	$4,060,368	$5,082,068	$6,086,548	$7,320,978	$8,536,968	$10,006,418	$11,456,108	$13,185,158
Debt Service Coverage	0.84	1.34	1.49	1.48	1.65	1.64	1.83	1.82	2.03	2.01	2.24	2.22	2.48	2.46	2.74

Notes:

(1) Assumes all previously submitted construction costs, issuance, and revenue estimates are based on Year 2002 figures.
Assumes first year parking revenue reflects 70% of potential full year, full utilization condition

(2) Assumes permit and hourly rate increases every 2nd year of on average 10%.

(3) APR = 7% (0.58/mo) for years 1-5, 8% (0.667/mo.)for years 6-15. The 7% was also utilized in assessing interest income and interest expense.

(4) The 2002 fiscal estimates for operating and maintenance expenses were projected to the Year 2003 by applying an annual 3.5% inflation factor. Annual increases in O&M expenses reflect the same 4% annual increase as applied to parking