Garrahy Courthouse Parking Garage
Conceptual Analysis

Providence, Rhode Island

Special Legislative Commission to Study Building Structured Parking at the Garrahy Judicial Complex

February 2014

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Table of Contents

Garrahy Courthouse Parking Garage Conceptual Analysis

Table of Contents

Garrahy Courthouse Parking Garage Conceptual Analysis

Attachments

End of Report

Editorial Note: The document presented herein represents the results of a collaborative effort between multiple firms working in conjunction with the I-195 Redevelopment District Commission. The following four firms participated in the preparation of the materials presented. A brief summary of the focus and qualifications of each firm is included in *Attachment E*.

- Fuss & O'Neill: Deliverable compilation, site feasibility, concept design, judiciary commitments and security
- DESMAN Associates: Garage operation alternatives and financial analysis
- Goody Clancy: The LINK development framework, parcel development scenarios, and garage siting assessment
- Nelson\Nygaard: The LINK parking demand analysis and parking management recommendations

1 Executive Summary

Senate Resolution 2013 S-993 and House Resolution 2013 H-6228 created an eleven-member joint commission to conduct a comprehensive study and issue findings about building structured parking at the Garrahy Judicial Complex in Providence.

The transformation of the current surface parking lot at the Garrahy Courthouse into a structured parking garage represents a unique opportunity to address current parking capacity deficiencies and provide a mechanism to promote economic development through highest and best use development of the nearby LINK parcels. Given the prime geographic location of the Garrahy site, this property has been identified as a key location for structured parking to support existing and future development driven demand in the LINK area.

Given the Garrahy site's physical attributes and prospective parking demand, a proposed concept has been developed including an approximately 1,250 space parking garage of seven levels. To activate the street level environment, enhance economic development, and comply with zoning requirements, the ground level of the garage along Clifford and Richmond Streets would include approximately 13,800 ft2 of retail storefronts.

The conceptual cost of the garage has been estimated to be approximately $43 Million using generalized industry guidelines ($31,250 per parking space plus approximate retail build out costs). The parking market generated by the Garrahy Courthouse and surrounding institutions is quite robust as it currently exists, and the overall demand will grow substantially stronger with the development of the nearby LINK parcels. However, initial projections indicate that the structure would operate at a loss in the early years, but would become solvent and moderately profitable before the end of the first decade of operation.

The most efficient manner of operation for the proposed structure when completed would be as a central cashiered, pay-on-foot gated facility, which would facilitate the use of automation and limit labor costs. Management of the facility is recommended to be under contract with a professional parking asset management firm, rather than a municipal agency, to encourage smooth service delivery from the outset of operations

1.1 Recommendation

This special legislative commission recommends that the House and Senate Finance Committees may use the findings in this report as they consider Governor Chafee's budget proposal which includes funding for a multi-level parking garage at the Garrahy Judicial Complex.

2 Unique Development Opportunity

2.1 Geographic Opportunity

Upon study of the potential development and transportation opportunities within The LINK and surrounding neighborhoods conducted by Goody Clancy, the Garrahy site was found to offer distinct benefits as a public parking facility to serve both existing demand as well as other important redevelopment opportunities nearby.

- The site is within a five-minute walk of well over 1.25 million square feet of potential development capacity in The LINK, about a third of overall LINK capacity in the area west of the Providence River. These nearby parcels are also among those with the greatest assets supporting near-term development, including adjacency to Brown and Johnson & Wales campus facilities and new Providence River edge parkland. No other potential parking structure site of comparable size offers such convenient proximity to such near-term development potential.

- Locating parking on the Garrahy site would significantly improve suitability of nearby LINK parcels for research and office uses with high economic development value. Research and office tenants typically value broad building floorplates that enable interaction among many staff. Locating a parking structure on a LINK parcel would significantly reduce available floorplate dimensions and options. Locating parking on the Garrahy site instead would keep LINK parcels available and competitive for a variety of high-value job-intensive uses.

- Parking on the Garrahy site could be intensively used 24/7 by a variety of users. Existing and potential new land uses around the Garrahy site include not only office and research, but also academic, hotel, retail, entertainment and residential space. The different demand peaks among these uses means a Garrahy garage could serve multiple uses over the course of a typical day and week, maximizing usefulness of the parking investment as well as potential parking revenue.

- The Garrahy site's rectangular shape and dimensions enable it to efficiently accommodate the constrained range of floorplates suitable for parking. Most other sites in the area lack such appropriate size and shape.

2.2 Street Level Retail Opportunity and Importance

A Garrahy site parking structure should include ground level retail storefronts to maximize its economic development benefit, avoid making detrimental impacts, as well as comply with applicable zoning requirements. One of Downcity's greatest assets is the appeal and safety of walking there, and the area will have greater appeal to potential tenants if it is part of a highly walkable street environment. While ground level parking and blank walls are commonly an important barrier to walkability, active ground floor retail greatly enhances walkability by attracting activity and interest. This will in turn benefit economic development opportunities in a variety of ways:

- Presence of "eyes on the street" from transparent retail storefronts will help maintain safe, attractive development addresses.

- Walkable streets are fundamental to the range of transportation choices needed to serve high-value development. While the Garrahy site's parking supply will provide vital transportation access to nearby parcels, it needs to also support the good walking, transit and biking access options that LINK development investors will also seek.

- The retail tenants themselves will be valuable amenities attracting commercial and residential development alike. The surrounding area has relatively little existing retail, so the Garrahy site's accessibility to multiple parcels means its retail would be easily accessible.

- The combination of safety, transportation choices and retail amenity will together enhance the LINK parcels as attractive development investments.

- Finally, the Garrahy site has the benefit of retail edges with good potential marketability. Retail businesses typically seek sites that are highly visible and accessible, and that also cluster with other retail. The Garrahy site offers these benefits, as adjacent Richmond and Clifford Streets are both emerging as prime walking streets. The City zoning ordinance and The LINK parcel development framework both recognize this by designating both streets as priority corridors for retail or alternative active ground floor uses.

2.3 Transit Opportunity

The Garrahy site can add additional value as a strategic location for a transit center. Making transit services more accessible will increase development potential and value by adding convenient transportation choices. Making Garrahy a central location serving multiple transit routes would make a variety of services much more conveniently accessible than they are today at the current Kennedy Plaza hub, another five to ten minutes' walk away. Active presence of transit will also, like retail, enhance safety by keeping people in the area more of the day and week. Conceptually, the Garrahy site could support RIPTA transit services in several ways, whether within the structure itself and/or at adjacent curbside stops.

The site's potential for co-locating transit with structured parking, preferably including bike parking and shared car services (e.g. Zipcar), mean it would be especially effective in providing an expanded range of convenient transportation choices.

3 Feasibility and Conceptual Site Layout

Fuss and O'Neill conducted a review of site conditions and prepared a conceptual layout of a parking garage structure for the Garrahy site to address high level site development items such as layout, parking space count, number of parking levels, conformance with zoning, site access, utilities, and environmental considerations. Below is a narrative outlining these items.

3.1 Concept Plan

A conceptual plan for the Garrahy Courthouse Site included as *Attachment A* depicts a multi-story parking garage. The first (ground) level of the garage will accommodate approximately 112 vehicles; site access will be via Friendship Street. Each upper level of the garage will accommodate approximately 190 spaces. To conform to zoning requirements, attract new business, and activate the street level environment, the ground level of the garage, adjacent to Clifford and Richmond Streets, will be screened by 30 foot deep store-fronts. These liner structures will result in approximately 13,800 ft^2 of retail space.

Based on the evaluation of parking needs, it is anticipated that a new garage will contain 7 levels totaling approximately 85 ft. in height which will net approximately 1,250 parking spaces. This height would blend with the Garrahy Courthouse and existing buildings on Friendship Street. To preserve the Courthouse operations, the plan anticipates no adverse impact to the sally port or loading dock areas. Modification of the current judges parking area will be necessary and alternatives for provision of separate designated judges parking will be necessary during design. Other than displaced parking and construction noise during the project, impacts to the Garrahy Courthouse should be minimal.

Construction of the parking garage is anticipated to be precast concrete or cast in place concrete. Depending on soil conditions (structural and environmental), spread footings and/or piles will be used for the garage foundation. It should be noted that as the height of the garage increases, the size of the foundation and structure will increase, which will impact the project budget. Maximum height for the garage per zoning is 120 feet which equates to approximately ten stories. A ten story garage would net approximately 1,800 spaces. This height is not recommended at this time due to the additional cost and intention to conform in scale to other structures in the area.

3.2 Existing Site Layout

The Garrahy site is bounded by Dorrance, Clifford, Richmond, and Friendship Streets, all of which are one-way, except Dorrance Street. The site, located in the D1-120 (Downtown) Zoning District, contains the Garrahy Courthouse and an adjacent paved parking lot. This 3-acre site is located on the fringe of The LINK with proximal access to I-95 and I-195. The development of a multi-level parking garage on this site would help alleviate parking demand in the area and would help attract other development in The LINK.

3.3 Zoning Considerations

As noted above, the site is located within the D1-120 zone and is bounded by 3 "A" Streets (Clifford St, Richmond St, and Dorrance St) and 1 "B" Street (Friendship St). The table below outlines the zoning requirements as they pertain to a parking garage at this site. The attached conceptual plans conform to these requirements.

Item	Requirements	Comments
Maximum Height	120 Feet	
"A" Street Setback	20 Feet to parking garage	0 Feet for a building screening garage
"B" Street Setback	0 Feet	
"A" Street Driveway Access	Not permitted	May be waived by the city engineer
"B" Street Driveway Access	Permitted	

3.4 Driveway Access

City of Providence Zoning Regulations permit access to this site from "B" Streets only. This limits site access to Friendship St only (both Richmond and Clifford Streets are "A" Streets). The current concept plan depicts a single two-way driveway on Friendship Street across from Page Street. As the concept develops and evolves, this driveway may be broken into two one-way driveways, one for ingress and one for egress, with the egress drive across from Page Street and the ingress drive closer to Richmond Street. With the exception of Dorrance Street, the streets adjacent to the site are one-way around the site is in a clockwise rotation. The one-way circulation will help reduce the number of conflicting movements in and out of the garage and should help reduce potential increased traffic congestion that may result with the garage development.

3.5 Utilities

The streets adjacent to the site are typical urban streets and as such contain underground utilities including, at a minimum, electric, storm sewer, water, gas, telecommunication, and sanitary sewer. An electric duct bank runs through the site (an extension of Page Street). It is suggested that this duct bank remain and be incorporated into the site design rather than be relocated, at a considerable cost. No overhead utilities exist in the area with the exception of traffic signals and street lights. Capacity of existing utilities located within the adjacent streets should be adequate for the development of a garage, although utility capacities will need further study as the design develops.

3.6 Stormwater

The area of the site planned for the parking garage currently contains a paved parking lot. Since the impervious area of the site will remained unchanged pre- and post-development, no increase in runoff is anticipated from the site. It is assumed that storm (roof) drains from the new garage will connect to or maintain existing connection(s) to the drainage system located in the adjacent street(s). However, storm drain connections may be subject to additional Narragansett Bay Commission (NBC) permit conditions,

which may require mitigation of runoff (rate and volume) to any combined sewer under its jurisdiction. Appropriate Best Management Practices (BMPs) should be incorporated into the design to conform to the City of Providence's Post-Construction Stormwater Control Ordinance (Chapter 5 Article VI), the NBC's Rules and Regulations (Article 4.4), and Rhode Island Department of Environmental Management (DEM) and Coastal Resources Management Council (CRMC) requirements.

3.7 Soils

Although there have been no formal soil investigations preformed at the site that we are aware of, it is assumed that the site will contain typical Urban Fill (i.e. shallow subsurface soil containing anthropogenic contaminants such as metals and petroleum hydrocarbons) as found on the surrounding parcels. It is anticipated that there will be some level of impacted soils encountered during development of the parcel, as such; development will need to follow the DEM regulatory process for impacted sites. Prior to proceeding with full development plans for the site, environmental due diligence should be performed to determine the level of impacted soil and how to manage soil disturbances appropriately. Typically environmental remediation of Urban Fill materials requires capping the site, which will be primarily accomplished by the construction of the garage itself.

3.8 Conceptual Cost Estimate

The parking garage site is currently covered with a paved parking lot. Based on this existing condition and the assumption that there will be no major environmental, utility relocation, or rock excavation required, a per-space conceptual estimate of $31,250 (comprised of $25,000 construction cost plus 25% for soft costs) was used to determine an order of magnitude cost for the garage. Assuming 1,250 spaces with a per-space cost of $31,250, the total cost of a garage only is anticipated to be approximately $39 million. An additional $3 to $4 million ($200 to $300 per square foot) was estimated for the shell cost of the retail use planned on the first level of the garage on Richmond and Clifford Streets.

3.9 Conclusion

Based on the above discussion and conceptual designs, it is our conclusion that a multi-level parking garage could be constructed on the Garrahy Courthouse site in an efficient manner. The use and anticipated mass of the structure could conform to the underlying zoning requirements and could be consistent with other structures in the area. Environmental due diligence would be necessary to confirm that environmental issues will not substantially impact development or add substantial cost to the project. Site access and the road network in the area is good as is access to I-95 and I-195. A parking garage on this site can provide parking for 1,250 vehicles with a seven story structure (and as many as 1,800 vehicles in up to 10 levels), efficiently and in conformance to zoning regulations and the character of the surrounding neighborhood.

4 Parking Commitments and Security Considerations

Maintenance of existing operational, supply, and security considerations for the judicial and executive branch operations at the Garrahy Courthouse are important factors in the analysis of the physical and financial aspects of the program. To evaluate existing requirements and concerns, Fuss & O'Neill requested and compiled information provided by the facilities and security division of the Judiciary

4.1 Existing Parking Commitments

Based on figures provided by the Judiciary, there is currently an on-site parking deficit for employees based at the Garrahy Courthouse. The following table summarizes the existing parking commitments granted by contract, agreement, or current expectation to existing employees.

	Employees	Committed Spaces
Existing Parking Commitments	Judicial Employees	348
	Sheriff's Department	60
	Judges	37
	Probation and Parole	30
	Public Defenders	26
	Attorney General	10
	Capitol Police	6
	Total	517

These parking spaces are currently provided by a combination of on-site and off-site parking, as, depicted in the table below.

	Location	Provided Spaces
Existing Parking Supply	Existing Garrahy Surface Lot	210
	Off-site	320
	Total	530

The 320 off-site parking spaces are provided at a cost to the state of $32,000 per month.

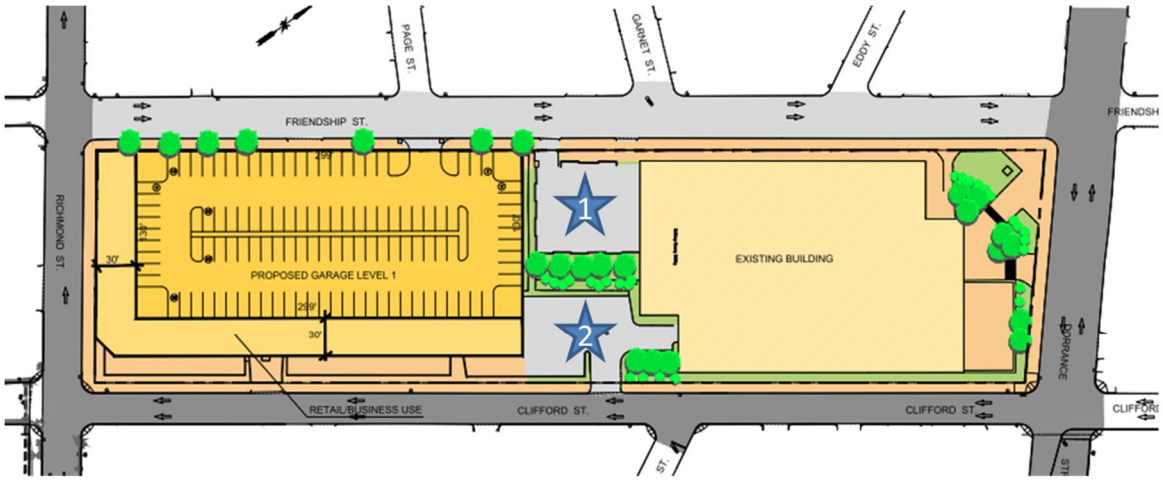
4.2 Security Considerations

Two particular areas of concern regarding security were identified by the Judiciary that would need to be addressed during design of the garage. These concerns included the following:

1. Sally Port Configuration: The existing sally port is comprised of a secure open-air paved area surrounded by a brick wall. The existing sally port configuration would need to be maintained, or modified to operate consistent with current practices. However, line-of-sight into the sally

port area from the upper levels of the garage would need to be avoided. This requirement could be addressed either through garage design or sally port reconfiguration.

2. Designated Judge Parking: A designated 37-space judge parking area with a separate controlled entrance currently exists within the Garrahy surface lot. Any new site/garage configuration would need to accommodate a similar number of designated secure spaces for judges. Line-of-sight into this area would also need to be avoided from the garage or other structures. In the conceptual layout depicted below, a portion of the existing judge parking area has been lost to accommodate the garage. This lost capacity would need to be addressed during facility design.



1 Maintain existing sally port security and avoid line-of-sight from garage

2 Provide separate judge parking and avoid line-of-sight from garage

5 Ownership and Operational Considerations

As part of this assessment, DESMAN Associates conducted a preliminary analysis of the operational alternatives of a garage at the Garrahy site. The results of this analysis, including an evaluation of several of the alternatives, is included in *Attachment B*, and summarized below.

There have been multiple past initiatives to develop the existing surface parking lot adjacent to the Garrahy Courthouse into structured parking. Various public agencies, as well as private entities have examined redeveloping the surface lot into a parking structure as a financial investment or part of a larger economic development initiative.

Many municipalities champion a hybrid structure where the municipality or some other public agency develops and owns a facility and subcontracts operation and management to private operators. This type of "public-private partnership" has been used effectively by public parking authorities in Springfield (MA), Norwalk (CT), Hartford (CT) and public agencies like the Massachusetts Port Authority, the Massachusetts Bay Transportation Authority and the Connecticut Capital Region Development

Authority. These partnerships often leverage a public agency's access to inexpensive financing with a private operator's expertise in management.

DESMAN recommends that any parking structure developed at this site be incorporated as a public-private venture, with the public agency being the primary partner for securing financing and permitting for the project. DESMAN would recommend that the project, when complete, should be managed by a private firm operating under a management agreement structure. DESMAN advocates for a closed system design incorporating pay-on-foot ticket processing at central cashier stations, to minimize staffing requirements and overhead. In addition to central cashiers, DESMAN recommends installation of automated pay stations adjacent to the central cashier stations and at exits to allow the facility to operate under automation when it is not cost effective to staff cashier positions.

Additional detail regarding the specifics of potential operating formats and operating contract alternatives is included in *Attachment B*.

6 The LINK - Prospective Parking Demand and Management Strategies

Nelson\Nygaard conducted a parking analysis to evaluate parking needs based on the current land uses and anticipated development of the LINK parcels. The details of the methodology, results, and recommendations of this analysis are included in the report included as *Attachment C*, and summarized below.

The analysis included the geographic evaluation of parking demand through the identification of five-minute walk radii from four anticipated structured garage locations, including the Garrahy garage site. These parking capture radii were then evaluated based on two separate future development scenarios. These models were then used to generate future shared parking demand and needed future supply numbers, and the development of recommended parking management strategies.

Nelson\Nygaard concluded that The LINK's success depends largely on its prime location in the heart of the growing downtown. Adjacencies to existing uses and transportation networks will enable valuable transportation and parking efficiencies to be realized. This allows more resources to be spent on making quality placemaking improvements in the LINK that will attract users and investment to the downtown as a whole.

Central to this concept is shared parking, a characteristic already identified to be naturally prevalent in the downtown, where the mix of occupied buildings demonstrates substantially lower parking utilization than typical disconnected suburban counterparts. Not only will The LINK continue and accelerate these efficiencies by not overbuilding private parking within it's borders, it will take advantage of adjacent facilities and planned expansions such as the Garrahy garage to maximize the mix of different users sharing any one facility, scattering parking peaks across many hours of the day as part of creating a 24/7 community.

Facilities such as the Garrahy garage can also serve as prime points for transit access and future remote bus hubs that bring alternate means of transportation access directly to the LINK, while greatly

benefitting the adjacent districts at the same time. This shared approach to parking and transportation has proven highly successful in similar districts nationally, and the potential for nearby businesses and institutions to make the LINK and the broader downtown a prime place to locate is very high.

7 Conceptual Economic Analysis

7.1 Parking Rate Schedule

The existing market surrounding the Garrahy Courthouse is dominated by commercial surface parking lots collecting flat rates between $11.00 and $15.00 per day. These facilities cater to Courthouse employees and visitors primarily, although these facilities also support downtown workers parking in the district and walking into the business district aligned along Westminster and Weybosset Streets. Ranging out from these facilities, DESMAN finds a collection of commercial parking garages and surface lots collecting hourly, daily and monthly parking rates. These facilities collect between $3.00 and $25.00 per transient depending on length of stay, flat rates between $10.00 and $20.00 for weekend, evening or special event parkers and lease rates between $160.00 and $250.00 per month for contract parkers.

DESMAN developed the proposed rate structure for the conceptual garage based off these current rates. There are three general categories: *hourly, flat rate* and *monthly leases* (contracts).

The hourly rates are based on half-hour increments up to a stay of 4.5 hours; stays over this default to the maximum daily rate. This structure is based on an understanding of the average length of stay for the area and designed to maximize income within the boundaries of the current market. DESMAN has assumed rate escalation at $0.25 to $0.50 per increment per year to keep pace with inflation.

The only flat rate assumed within the proposed rate structure was an 'Early Bird' special designed to capture existing Courthouse visitors and employees and provide the majority of income for the proposed structure. It is set at the market median ($13.00) and escalates at $0.50 per year through the first ten years of operation.

There are four categories of monthly leases designed to appeal to different market sectors.

- Overnight Monthly leaseholders are typically local residents; this lease will allow holders to enter the garage after 5:00 PM on weekdays with the provision that they exit the following morning no later than 8:00 AM. The lease allows holders to park in the garage outside these limits on weekends and major holidays.

- Limited Monthly contracts allow parkers to park in the facility from 7:00 AM to 7:00 PM on weekdays only, with no evening or weekend access rights.

- General Monthly leaseholders can access the facility on a 24/7 basis, but does not guarantee the holder a certain parking space.

- Reserve Monthly leases allow parkers to have exclusive use of a specific parking space. Rates escalate at a rate of $2.50 to $6.00 per year through the first ten years of operation to keep pace with inflation.

Proposed rates and an escalation schedule are shown below:

RATES	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5	YEAR 6	YEAR 7	YEAR 8	YEAR 9	YEAR 10
Up to 0.5 hours	$ 8.00	$ 8.25	$ 8.50	$ 8.75	$ 9.00	$ 9.25	$ 9.50	$ 9.75	$ 10.00	$ 10.25
0.5 to 1.0 hour	$ 10.00	$ 10.25	$ 10.50	$ 10.75	$ 11.00	$ 11.25	$ 11.50	$ 11.75	$ 12.00	$ 12.25
1.0 to 1.5 hours	$ 12.00	$ 12.25	$ 12.50	$ 12.75	$ 13.00	$ 13.25	$ 13.50	$ 13.75	$ 14.00	$ 14.25
1.5 to 2.0 hours	$ 13.00	$ 13.50	$ 14.00	$ 14.50	$ 15.00	$ 15.50	$ 16.00	$ 16.50	$ 17.00	$ 17.50
2.0 to 2.5 hours	$ 14.00	$ 14.50	$ 15.00	$ 15.50	$ 16.00	$ 16.50	$ 17.00	$ 17.50	$ 18.00	$ 18.50
2.5 to 3.0 hours	$ 15.00	$ 15.50	$ 16.00	$ 16.50	$ 17.00	$ 17.50	$ 18.00	$ 18.50	$ 19.00	$ 19.50
3.0 to 3.5 hours	$ 16.00	$ 16.50	$ 17.00	$ 17.50	$ 18.00	$ 18.50	$ 19.00	$ 19.50	$ 20.00	$ 20.50
3.5 to 4.0 hours	$ 17.00	$ 17.50	$ 18.00	$ 18.50	$ 19.00	$ 19.50	$ 20.00	$ 20.50	$ 21.00	$ 21.50
4.0 to 4.5 hours	$ 18.00	$ 18.50	$ 19.00	$ 19.50	$ 20.00	$ 20.50	$ 21.00	$ 21.50	$ 22.00	$ 22.50
Daily Maximum	$ 20.00	$ 20.50	$ 21.00	$ 21.50	$ 22.00	$ 22.50	$ 23.00	$ 23.50	$ 24.00	$ 24.50
Early Bird [1]	$ 13.00	$ 13.50	$ 14.00	$ 14.50	$ 15.00	$ 15.50	$ 16.00	$ 16.50	$ 17.00	$ 17.50
Overnight Monthly [2]	$ 80.00	$ 82.50	$ 85.00	$ 87.50	$ 90.00	$ 92.50	$ 95.00	$ 97.50	$ 100.00	$ 102.50
Limited Monthly [3]	$ 110.00	$ 113.50	$ 117.00	$ 120.50	$ 124.00	$ 127.50	$ 131.00	$ 134.50	$ 138.00	$ 141.50
General Monthly [4]	$ 140.00	$ 144.00	$ 148.00	$ 152.00	$ 156.00	$ 160.00	$ 164.00	$ 168.00	$ 172.00	$ 176.00
Reserved Monthly [5]	$ 200.00	$ 206.00	$ 212.00	$ 218.00	$ 224.00	$ 230.00	$ 236.00	$ 242.00	$ 248.00	$ 254.00

Notes:

1. Daily transients arriving before 8:01 AM and exiting before 6:00 PM.

2. Overnight parkers can only enter the facility after 5:00 PM and and must leave by 8:00 AM on the following weekdays; 24/7 on Saturdays, Sundays and holidays.

3. Limited monthly parkers will have access to the facility only between the hours of 7:00 AM and 7:00 PM on weekdays only; not holidays or weekends.

4. General monthly parkers will have 24/7 access to the facility.

5. Reserved monthly parkers will have a parking space set aside for their exclusive use.

7.2 Financial Projections

There are a number of pre-existing user groups in the area that will have immediate need for the proposed facility, if developed. As already presented, there are approximately 517 Courthouse employees that would park in the proposed facility, albeit at below market rates. (The base analysis described herein assumes that these users will transfer into the facility generating a revenue of $32,000 per month. See the end of this section for a discussion of a non-fee alternative financial analysis of this user group.)

Administrators at the courthouse estimate the building attracts roughly 2,500 visitors per day that will also consider the facility as first choice when conducting business in the area. DESMAN projects this will drive roughly 660 vehicles per day into the facility at the Early Bird rate at the outset.

The Providence Performing Arts Center (PPAC), a 3,000-seat venue, hosts over 100 events annually, including touring productions, musicals, comedians, musicians and special interest speakers of national standing. A sold out performance can attract as many as a 1,000 cars to the area, spilling into the lots surrounding the Garrahy Courthouse. These users would be captured as Evening Transients.

Brown University has recently developed a medical school near the site. The employees from this building may be captured as Limited or General Monthly leaseholders; the visitors may be captured as Day Transients.

In addition to these existing users, there is significant potential to capture new users in the form of office workers, retail patrons and residents arising from redevelopment of The LINK. As Nelson\Nygaard outlined in their analysis (*Attachment C*), the demand from these developments could be substantial and is likely to overwhelm the limited parking planned to support each parcel. For this analysis, DESMAN chose to focus on the parcels closest to the proposed parking facility (i.e. Parcels 22, 25, 27 and 28).

Utilizing the base development data included in Goody Clancy's projections of future development, DESMAN applied base parking demand ratios recommended by the Urban Land Institute and the Institute of Transportation Engineers to generate an 'order of magnitude' projection of future area parking demand. Even factoring in the reductions afforded by planned parking supplies associated with some of parcels and scenarios, DESMAN still found the potential to capture between 2,858 and 3,387 vehicles from new development, depending on the scenario. It is assumed that the demand captured from these projects would translate into initial demand and growth across all sectors of the market for the proposed facility.

Estimated demand projections from new development in the targeted LINK parcels are shown below: The two alternative scenarios account for differing ratios of residential to commercial development, as described in the draft development framework document published by Goody Clancy, on behalf of the I-195 Redevelopment District Commission.

SCENARIO 1

	RESEARCH/OFFICE			RETAIL/ACTIVE			RESIDENTIAL		
	Average	*Parking*	*Projected*	*Average*	*Parking*	*Projected*	*Average*	*Parking*	*Projected*
Parcel	*Program (SF)*	*Ratio (sp/KSF)*	*Demand*	*Program (SF)*	*Ratio (sp/KSF)*	*Demand*	*Program (Units)*	*Ratio (sp/unit)*	*Demand* [1]
22	447,500	2.85	1,275	20,000	4.05	81	-	1.5	0
25	305,000	2.85	869	12,500	4.05	51	-	1.5	0
27	129,500	2.85	369	7,500	4.05	30	-	1.5	0
28	144,000	2.85	410	15,000	4.05	61	160	1.5	240
Total	1,026,000		2,924	55,000		223	160		240

SCENARIO 2

	RESEARCH/OFFICE			RETAIL/ACTIVE			RESIDENTIAL		
	Average	*Parking*	*Projected*	*Average*	*Parking*	*Projected*	*Average*	*Parking*	*Projected*
Parcel	*Program (SF)*	*Ratio (sp/KSF)*	*Demand*	*Program (SF)*	*Ratio (sp/KSF)*	*Demand*	*Program (Units)*	*Ratio (sp/unit)*	*Demand* [2,3]
22	-	2.85	0	12,500	4.05	51	675	1.5	813
25	380,000	2.85	1,083	15,000	4.05	61	-	1.5	0
27	136,000	2.85	388	7,500	4.05	30	-	1.5	0
28	-	2.85	0	12,500	4.05	51	375	1.5	383
Total	516,000		1,471	47,500		192	1,050		1,195

Notes:

1. No parking planned to support P28 residential building.

2. Reflects demand after planned 200-space parking structure to partially support residential units on P22.

3. Reflects demand after planned 180-space parking structure to partially support residential units on P28.

It should be noted that these projections are 'order of magnitude' and do not reflect the impact of alternative transportation modes and 'sharing' between uses. As such, the projections developed by Nelson\Nygaard should be considered authoritative on this topic, when considering interactions with other developments.

When reasonable assumptions regarding user capture (by market segment) and growth were paired with proposed rates and escalation factors, DESMAN was able to produce a conceptual revenue stream for the proposed garage through the first ten years of operation. These projections were developed through application of the following assumptions:

1. It is assumed that all existing Garrahy employees (517 spaces) would transfer into the new facility and the current contribution of $32,000/month would continue for the first decade of

operation. It should be noted that this commitment represents roughly 41% of the designed capacity of the facility for only roughly 13% of total gross revenues.

2. Existing courthouse visitors would account for use of roughly 600 spaces per weekday at opening, with 10% of these spaces turning over on a typical day. This use would be realized as Early Bird parkers. DESMAN anticipates this demand will grow through the first four years of operation before starting to decline, due to lack of available capacity.

3. Initially, PPAC events will account for the majority of Evening Transient demand, resulting in a capture of roughly 50 vehicles per performance for 30 performances per year. Growth in this segment will initially be driven by additional capture from PPAC events, but will eventually be supplemented by demand from new retail development in the area.

4. Day Transients (50 spaces/weekday) will be made up of courthouse visitors (outside the boundaries of the Early Bird rate) and visitors to Brown University Medical School and other area businesses. In the longer term, demand will also come from new office development.

5. Overnight Monthly parkers (10 spaces/night) are expected to come for existing and new residential development in the area.

6. Limited (20 spaces/weekday) and General Monthly (35 spaces/day) parkers will be existing and new office workers in the area.

7. Early Bird and Day Transient users are calculated over 250 weekdays per year.

8. Assumptions regarding turnover and/or oversell were developed from existing commercial parking operations in the Providence market.

9. Average rates were based on recommended rate structures and/or anticipated length of stay for different user groups.

It is important to note that the financial analysis summarized here and included in *Attachment D* does not include the construction cost or revenues associated with the proposed street level retail to be incorporated into the garage.

Projected revenues for the first ten years of operation are shown in the following table.

ESCALATION:	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
Garrahy Employees (Contract)	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Garrahy Visitors [1]	$ -	$ 0.50	$ 1.00	$ 1.50	$ 2.00	$ 2.50	$ 3.00	$ 3.50	$ 4.00	$ 4.50
PPAC Patrons [2]	$ -	$ 0.50	$ 1.00	$ 1.50	$ 2.00	$ 2.50	$ 3.00	$ 3.50	$ 4.00	$ 4.50
General Transients [3]	$ -	$ 0.50	$ 1.00	$ 1.50	$ 2.00	$ 2.50	$ 3.00	$ 3.50	$ 4.00	$ 4.50
Overnight Monthly	$ -	$ 2.50	$ 5.00	$ 7.50	$ 10.00	$ 12.50	$ 15.00	$ 17.50	$ 20.00	$ 22.50
Limited Monthly	$ -	$ 3.50	$ 7.00	$ 10.50	$ 14.00	$ 17.50	$ 21.00	$ 24.50	$ 28.00	$ 31.50
General Monthly	$ -	$ 4.00	$ 8.00	$ 12.00	$ 16.00	$ 20.00	$ 24.00	$ 28.00	$ 32.00	$ 36.00
GROWTH/CHANGE:										
Garrahy Employees (Contract)	-	-	-	-	-	-	-	-	-	-
Garrahy Visitors/ Early Bird Parkers [4]	-	25	50	75	65	50	40	(20)	(40)	(60)
PPAC Patrons/ Evening Transient [5]	-	5	10	15	15	15	25	40	60	70
General Transients [6]	-	2	4	6	8	10	20	40	50	60
Overnight Monthly [7]	-	2	4	6	8	10	110	125	150	200
Limited Monthly [8]	-	3	6	9	12	18	30	42	60	72
General Monthly [9]	-	5	10	15	20	25	50	100	150	200

REVENUES:

User Type	*Avg. Users/ Day*	*Oversell/ Turnover*	*Operating Days/Year*	*Average Ticket/Rate*	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
Garrahy Employees (Contract)	517	0%	12	$ -	$ 384,000	$ 384,000	$ 384,000	$ 384,000	$ 384,000	$ 384,000	$ 384,000	$ 384,000	$ 384,000	$ 384,000
Early Bird Parkers	600	10%	250	$ 13.00	$ 2,145,000	$ 2,311,875	$ 2,485,000	$ 2,664,375	$ 2,718,750	$ 2,751,250	$ 2,800,000	$ 2,640,000	$ 2,635,000	$ 2,625,000
Evening Transients	50	-	30	$ 14.00	$ 21,000	$ 23,925	$ 27,000	$ 30,225	$ 31,200	$ 32,175	$ 38,250	$ 47,250	$ 59,400	$ 66,600
Day Transients	50	10%	250	$ 15.00	$ 206,250	$ 220,875	$ 236,000	$ 251,625	$ 267,750	$ 284,375	$ 337,500	$ 439,375	$ 498,750	$ 560,625
Overnight Monthly	10	-	12	$ 80.00	$ 9,600	$ 11,880	$ 14,280	$ 16,800	$ 19,440	$ 22,200	$ 136,800	$ 157,950	$ 192,000	$ 258,300
Limited Monthly	20	20%	12	$ 110.00	$ 31,680	$ 36,774	$ 42,120	$ 47,718	$ 53,568	$ 64,260	$ 84,888	$ 106,524	$ 139,104	$ 163,008
General Monthly	35	20%	12	$ 140.00	$ 70,560	$ 81,216	$ 92,352	$ 103,968	$ 116,064	$ 128,640	$ 181,056	$ 286,272	$ 396,288	$ 511,104
TOTAL					$ 2,868,090	$ 3,070,545	$ 3,280,752	$ 3,498,711	$ 3,590,772	$ 3,666,900	$ 3,962,494	$ 4,061,371	$ 4,304,542	$ 4,568,637
Revenue/Space					*$ 2,294.47*	*$ 2,456.44*	*$ 2,624.60*	*$ 2,798.97*	*$ 2,872.62*	*$ 2,933.52*	*$ 3,170.00*	*$ 3,249.10*	*$ 3,443.63*	*$ 3,654.91*

Notes:
1. Garrahy Visitor median rate is equivalent to an average 2 hour length of stay and/or Early Bird rate.
2. PPAC/Evening Patron rate is equivalent to an average 2.5 hour length of stay.
3. Day Transient rate is equivalent to an average 3.0 hour length of stay.
4. Judicial service estimates there are 2,500 visitors/day to the Garrahy Courthouse currently; the majority of these are accounted for in revenue modelling as Early Birds. Volumes will increase with area development until Year 8, at which time numbers will decrease due to limited capacity after monthly pass sales.
5. Early growth will come from "word of mouth" capture of PPAC patrons; later growth will be driven by development of retail/active uses on parcels.
6. Early growth will come from Brown Medical School visitors; later growth will be driven by development of retail/active and research/office uses on parcels.
7. Growth will come from development of residential units in and around the area.
8. Early growth will come from Brown Medical School staff; later growth will be driven by development of retail/active and research/office uses on parcels.
9. Early growth will come from Brown Medical School staff; later growth will be driven by development of retail/active and research/office uses on parcels.

Staffing for the proposed structure will be limited, due to the recommended operating format (i.e. central cashiering). The facility will need a General Manager, supported by a bookkeeper to manage Accounts Receivable, Accounts Payable and Payroll. The facility will need a full-time maintenance worker to handle basic janitorial duties and two full-time cashiers to process payments and provide customer service during peak hours of use on weekdays and weekends. (Outside these hours, the facility will process payment through automated pay stations.) Actual pay and compensation rates were based on data from the U.S. Bureau of Labor Statistics for the Providence-Warwick-Fall River MSA as of May 2013. Projected costs are shown below:

POSITION	#	PAY RATE	HRS/ WK	ANNUAL PAYROLL	TAXES	BENEFITS	WORKER'S COMP	UNIFORMS
General Manager	1	$48,200 /year	40	$ 48,200	$ 5,302	$ 4,338	$ 1,205	$ 723
Bookkeeper	1	$ 18.10 /hour	40	$ 37,648	$ 4,141	$ 3,388	$ 941	$ 565
Maintenance Worker	1	$ 11.92 /hour	40	$ 24,794	$ 2,727	$ 2,231	$ 620	$ 372
Cashier/Attendants	2	$ 9.84 /hour	40	$ 40,934	$ 4,503	$ 3,684	$ 1,023	$ 614
TOTAL				$ 151,576	$ 16,673	$ 13,642	$ 3,789	$ 2,274

Other operating expenses were developed from historical operating statements from comparably-sized commercial parking structures. DESMAN did not include costs associated with property taxes or security as this was assumed to be a publicly-owned facility. Debt service on the facility was calculated assuming a base construction (hard) cost of $25,000/space, plus a 25% factor for soft costs (financing, permitting, insurance, design fees, etc.), amortized over 25 years at 4.5% APR and was assumed to be tax-exempt.

Under these assumptions, the proposed structure would operate at a net loss through the first three years of operation with a total loss of roughly $640,000 in this period.

Capacity:	*1250*									
YEAR:		1	2	3	4	5	6	7	8	9	10
REVENUES											
Garrahy Employees (Contract)		384,000	384,000	384,000	384,000	384,000	384,000	384,000	384,000	384,000	384,000
Early Bird Parkers		2,145,000	2,311,875	2,485,000	2,664,375	2,718,750	2,751,250	2,800,000	2,640,000	2,635,000	2,625,000
Evening Transients		21,000	23,925	27,000	30,225	31,200	32,175	38,250	47,250	59,400	66,600
Day Transients		206,250	220,875	236,000	251,625	267,750	284,375	337,500	439,375	498,750	560,625
Overnight Monthly		9,600	11,880	14,280	16,800	19,440	22,200	136,800	157,950	192,000	258,300
Limited Monthly		31,680	36,774	42,120	47,718	53,568	64,260	84,888	106,524	139,104	163,008
General Monthly		70,560	81,216	92,352	103,968	116,064	128,640	181,056	286,272	396,288	511,104
Total Gross Revenues		$ 2,868,090	$ 3,070,545	$ 3,280,752	$ 3,498,711	$ 3,590,772	$ 3,666,900	$ 3,962,494	$ 4,061,371	$ 4,304,542	$ 4,568,637
Rev/Space		*$ 4,097*	*$ 4,386*	*$ 4,687*	*$ 4,998*	*$ 5,130*	*$ 5,238*	*$ 5,661*	*$ 5,802*	*$ 6,149*	*$ 6,527*
EXPENSES:											
Payroll	$ 121.26 /space	151,576	156,123	160,807	165,631	170,600	175,718	180,990	186,419	192,012	197,772
Payroll Taxes	$ 13.34 /space	16,673	17,174	17,689	18,219	18,766	19,329	19,909	20,506	21,121	21,755
Benefits	$ 10.91 /space	13,642	14,051	14,473	14,907	15,354	15,815	16,289	16,778	17,281	17,800
Worker's Comp	$ 3.03 /space	3,789	3,903	4,020	4,141	4,265	4,393	4,525	4,660	4,800	4,944
Uniforms	$ 1.82 /space	2,274	2,342	2,412	2,484	2,559	2,636	2,715	2,796	2,880	2,967
Utilities	$ 92.67 /space	115,838	119,313	122,892	126,579	130,376	134,287	138,316	142,466	146,739	151,142
Insurance	$ 18.33 /space	22,913	23,600	24,308	25,037	25,788	26,562	27,359	28,179	29,025	29,896
Supplies	$ 6.53 /space	8,163	8,407	8,660	8,919	9,187	9,463	9,746	10,039	10,340	10,650
Postage	$ 0.77 /space	963	991	1,021	1,052	1,083	1,116	1,149	1,184	1,219	1,256
Contracted Services	$ 4.67 /space	5,838	6,013	6,193	6,379	6,570	6,767	6,970	7,179	7,395	7,617
Elevator Maintenance	$ 600.00 /shaft	4,800	4,944	5,092	5,245	5,402	5,565	5,731	5,903	6,080	6,263
Snow Removal	$ 1.69 /space	2,113	2,176	2,241	2,308	2,378	2,449	2,522	2,598	2,676	2,756
Credit Card Fees [1]	$ 51.63 /space	64,532	66,468	68,462	70,516	72,631	74,810	77,055	79,366	81,747	84,200
Repairs & Maintenance	$ 87.80 /space	109,750	113,043	116,434	119,927	123,525	127,230	131,047	134,979	139,028	143,199
Sinking Fund	$ 75.00 /space	93,750	96,563	99,459	102,443	105,516	108,682	111,942	115,301	118,760	122,322
Management Fee [2]	$ 34.94 /space	43,681	44,991	46,341	47,731	49,163	50,638	52,157	53,722	55,334	56,994
Miscellaneous	$ 0.63 /space	788	811	835	861	886	913	940	969	998	1,028
Total Operating Expenses		$ 661,080	$ 680,912	$ 701,339	$ 722,380	$ 744,051	$ 766,373	$ 789,364	$ 813,045	$ 837,436	$ 862,559
Exp/Space		*$ 944*	*$ 973*	*$ 1,002*	*$ 1,032*	*$ 1,063*	*$ 1,095*	*$ 1,128*	*$ 1,161*	*$ 1,196*	*$ 1,232*
Net Operating Income		$ 2,207,010	$ 2,389,633	$ 2,579,413	$ 2,776,331	$ 2,846,721	$ 2,900,527	$ 3,173,130	$ 3,248,326	$ 3,467,106	$ 3,706,078
NOI/Space		*$ 3,153*	*$ 3,414*	*$ 3,685*	*$ 3,966*	*$ 4,067*	*$ 4,144*	*$ 4,533*	*$ 4,640*	*$ 4,953*	*$ 5,294*
Debt Service [3]		$ 2,605,465	$ 2,605,465	$ 2,605,465	$ 2,605,465	$ 2,605,465	$ 2,605,465	$ 2,605,465	$ 2,605,465	$ 2,605,465	$ 2,605,465
Coverage Ratio [4]		*0.85*	*0.92*	*0.99*	*1.07*	*1.09*	*1.11*	*1.22*	*1.25*	*1.33*	*1.42*
Net Cash Flow		$ (398,454)	$ (215,832)	$ (26,052)	$ 170,867	$ 241,256	$ 295,063	$ 567,666	$ 642,862	$ 861,641	$ 1,100,613
Net/Space		*$ (318.76)*	*$ (172.67)*	*$ (20.84)*	*$ 136.69*	*$ 193.01*	*$ 236.05*	*$ 454.13*	*$ 514.29*	*$ 689.31*	*$ 880.49*

Notes:

1. Assumes 75% of all users will pay by credit card, debit card or direct account withdrawl at a rate of 3.0% of total transaction value.

2. Assumes a base management fee of $1,250/month plus incentives equivalent to 1.0% of total gross revenues.

3. Debt service calculated on a base of $25,000/space in hard costs + 25% in soft costs, amortized at 4.5% APR over a 25-year term with no initial capital contribution.

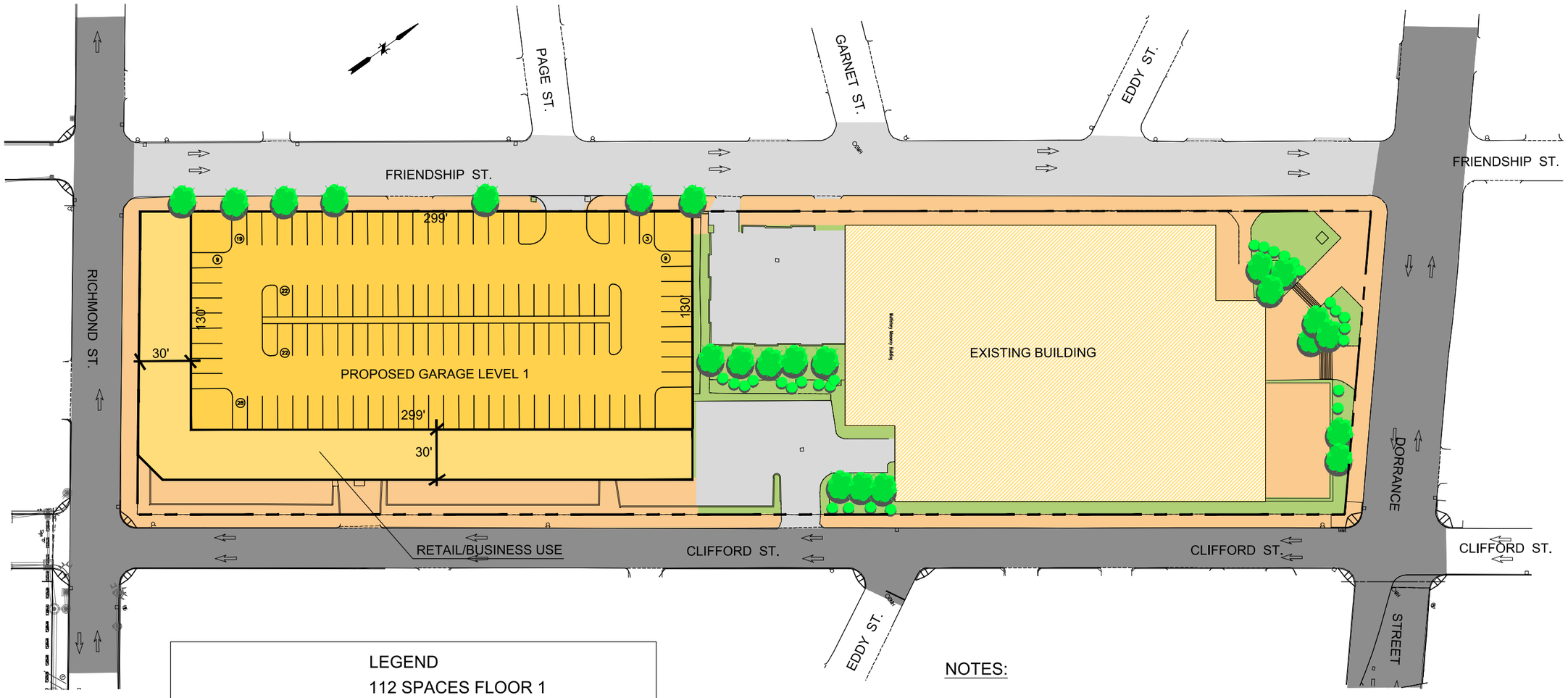
4. Most lenders require NOI to be equivalent to 120% of annual debt service. Failure to meet this requirement will not necessarily negate underwriting, but may require the borrower to present evidence of adequate capital reserves to guarantee the debt.

It should be noted that in traditional terms of finance, a lender will typically require a project demonstrate the ability to generate Net Operating Income (NOI) equivalent to 120% of annual debt service requirements. As such, a lender might not consider the project solvent until the seventh year of operation. Under these terms, the project's total loss would actually be calculated at roughly $3.1M to supplement NOI through the first ten years to meet the mandated 1.2 debt service coverage ratio.

If the developer were to waive completely any obligation for payment for services by courthouse employees, including the $32,000 currently paid for off-site parking, the financial model discussed above would realize an annual loss of $384,000 in gross revenues. This loss would render the project insolvent until the 7th year of operation and result in net operating losses totaling roughly $2.1M in the first six years of operations (assuming a requirement only to meet annual debt service) or $5.9M in the first nine years (assuming a 1.2 debt service coverage requirement). This alternative financial analysis is included as an "Alternate Pro Forma" in the attached financial calculation details in *Attachment D*.

Attachment A

Fuss & O'Neill: Garrahy Garage Concept Plans



LEGEND
112 SPACES FLOOR 1
190 SPACES FLOOR 2 - >

A-STREET
B-STREET
PROPOSED PARKING GARAGE
SIDEWALK

NOTES:

1. SITE IS LOCATED IN DI-120 ZONE
2. MAXIMUM NUMBER OF PARKING DECKS PER ZONING IS 10.

No.	DATE	DESCRIPTION	DESIGNER	REVIEWER
1.			XX/XX	XX

SEAL

SEAL

SCALE:
HORZ.: NTS
VERT.:

DATUM:
HORZ.:
VERT.:

FUSS & O'NEILL
146 HARTFORD ROAD
MANCHESTER, CONNECTICUT 06040
860.646.2469
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SITE PLAN
1st FLOOR
I-195 COMMISSION
GARRAHY COURT HOUSE PARCEL
PARKING GARAGE CONCEPT
PROVIDENCE RHODE ISLAND

PROJ. No.: 20080944.A40
DATE: 10/01/2013

CON-01
LEVEL 1

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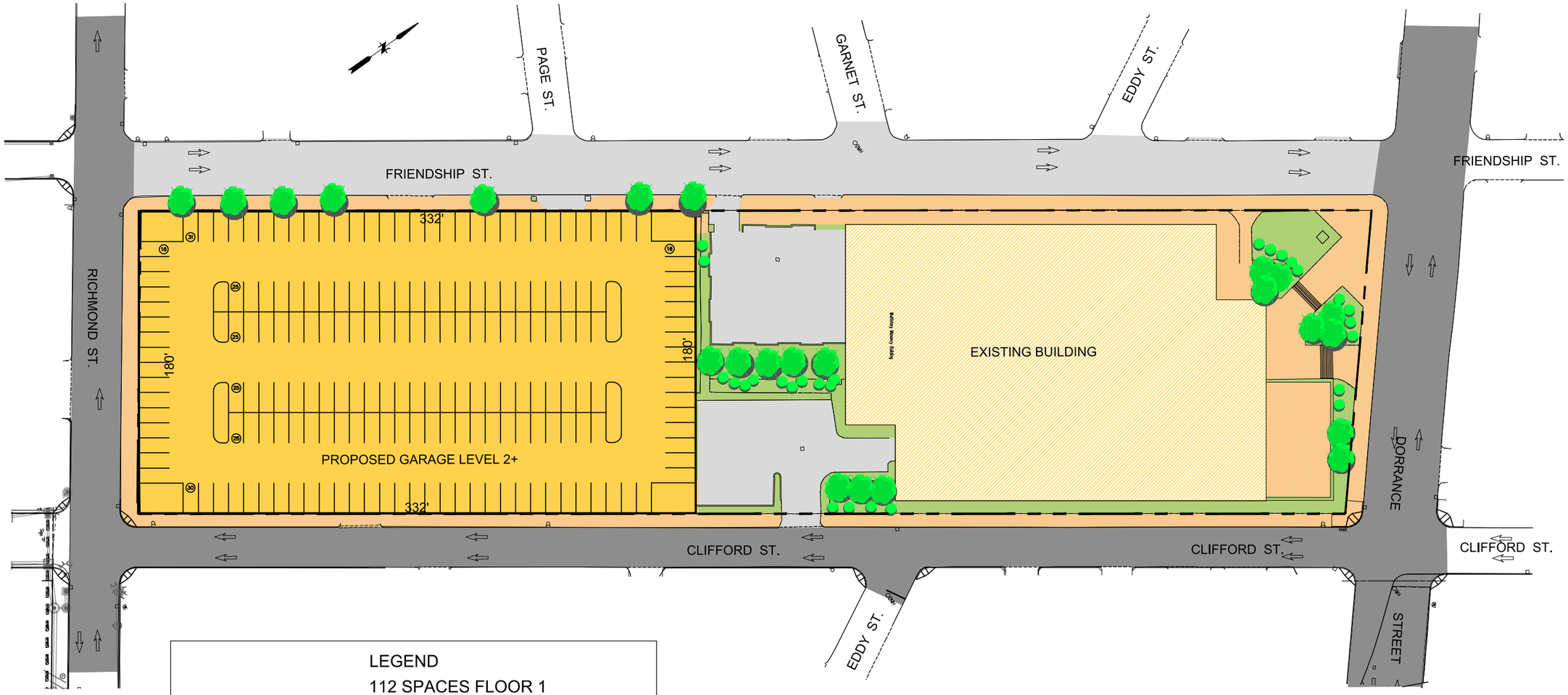

LEGEND
112 SPACES FLOOR 1
190 SPACES FLOOR 2 - >

A-STREET
B-STREET
PROPOSED PARKING GARAGE
SIDEWALK

No.	DATE	DESCRIPTION	DESIGNER	REVIEWER
1.			XX/XX	XX

SEAL

SEAL

SCALE:
HORZ.: NTS
VERT.:
DATUM:
HORZ.:
VERT.:

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SITE PLAN
2nd FLOOR
I-195 COMMISSION
GARRAHY COURT HOUSE PARCEL
PARKING GARAGE CONCEPT
PROVIDENCE RHODE ISLAND

PROJ. No.: 20080944.A40
DATE: 10/01/2013

CON-01
LEVEL 2+

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LAYER STATE:
MS VIEW:

Attachment B

DESMAN Associates: Garrahy Garage Operational Alternatives

MEMORANDUM

TO: Patrick J. Dowling, CPG/ Senior Project Manager – Fuss & O'Neill, Inc.

FROM: Andrew S. Hill/ Senior Consultant – DESMAN Associates

CC: Ted DeSantos – Fuss & O'Neill, Norman Goldman – DESMAN Associates

DATE: January 6, 2014

SUBJECT: Operational Alternatives for the Proposed Garrahy Courthouse Parking Structure

PROJECT #: 40-13148.00-3

DESMAN Associates was retained by Fuss & O'Niell to provide a preliminary analysis and conceptual projections regarding the financial feasibility of developing a 700-space parking structure on the site of the current surface lot adjacent to the Garrahy Courthouse. The following memorandum represents DESMAN's deliverables from this engagement.

OWNERSHIP AND OPERATIONS CONSIDERATIONS

There have been multiple past initiatives to develop the existing 188-space parking lot adjacent to the Garrahy Courthouse into structured parking. Currently, the Garrahy Courthouse is surrounded by privately-held surface lots that vie to capture the parking demand exerted by the Courthouse and adjacent business district. These lots are highly utilized during standard business hours, but are virtually deserted after 5:00 PM on weekdays and all day on weekends and holidays. These surface lots create a large expanse of unoccupied asphalt and inactive space surrounding the Courthouse. The impact on downtown Providence's cityscape has been to create a 'deadzone' between the revitalized downtown core and the redeveloping Jewelry District when court is not in session, which inhibits knitting together these two areas to create a unified Providence.

Various public agencies have examined redeveloping the surface lot into a parking structure as part of a larger economic development initiative. The dominant theory behind these initiatives has been that the owners of the private, commercial parking lots surrounding the Garrahy Courthouse would not consider redeveloping these parcels into higher, better land uses as long as the retained the greatest value as parking facilities. Creating a large reservoir of low cost parking on the Garrahy site would erode the local market and depress both pricing and profits in the privately held lots, forcing the owners of these parcels to consider redevelopment in order to recover lost value. A publicly owned and operated facility could also be leveraged to support redevelopment of nearby parcels in the Jewelry District and along the site of the former I-195 connector. Finally, a publicly owned and operated facility could be tasked to service the Providence Performing Arts Center and other civic assets during non-business hours.

Redevelopment of the lot into structured parking by a private entity has also been championed; in fact, at least two bids have been issued to private developers [in DESMAN's memory] within the last decade. Inviting a private developer in to own and operate a proposed garage offers several advantages to the City. First, no municipal agency has to assume the debt associated with the development, yet the community as a whole gets the benefit of using the structure, albeit for a fee. Second, a private developer may be able to move quicker through the design, financing and construction phases of development faster than a public agency, which would be encumbered by oversight and review at each stage of the process. Finally, economic necessity would require the private owner to still price the facility competitively to attract users and generate adequate revenues to cover operating overhead and debt service. This would also erode the demand for parking in the private facilities surrounding the Courthouse, which may cause some owners to consider redeveloping their parcels.

Many municipalities champion a hybrid structure where the municipality (or some other public agency) develops and owns a facility and subcontracts operation and management to private operators. This type of 'public-private partnership' has been used effectively by public parking authorities in Springfield (MA), Norwalk (CT), Hartford (CT) and public agencies like the Massachusetts Port Authority, the Massachusetts Bay Transportation Authority and the (CT) Capital Region Development Authority. These partnerships often leverage a public agency's access to inexpensive financing with a private operator's expertise in management.

Based on prior work in Providence, DESMAN believes the most effective format for this project would be a public-private partnership, with a public agency responsible for securing the capital needed to finance the project and overseeing the design and development of the asset, but private firms contracted to provide design, construction administration and asset management services. This model would allow the public agency to dictate hours of operation, standard of care and pricing of the proposed structure to facilitate larger community objectives, but still retain the advantages of a private manager's efficiency and operational knowledge.

It should be noted that, a public-private partnership to develop the Garrahy site was considered in a 2009 citywide parking study commissioned by the City of Providence. The analysis found that, while the City took in a substantial revenue stream from a combination of parking violation fines, meter revenues and permit sales, all these funds were already earmarked for deposit into either the City's general fund or another account to cover operating expenses and the City could only fund such a project through the issue of General Obligation bonds, unless:

1. A Tax Increment Finance district was created; - or
2. New municipal parking fees/ fines/ permits were instituted and pledged to an Enterprise Fund created to guarantee any revenue bond issue.

OPERATING FORMATS

All control systems seek to assure absolute collection of fees through some mechanism to compel payment for services. ***Closed systems*** use a gate to assure that proper payment is made; a user can only enter or exit a facility if payment for services is first received. Closed systems

include pay-on-entry, pay-on-exit and pay-on-foot formats and use a wide variety of media to regulate access in or out of the facility. ***Open systems*** use the threat of a punitive fine to ensure payment is made at the time of service. Curbside parking in a municipality operates as an open system, ensuring that users pay for their parking through meters or required permits by posting parking enforcement officers on the street to ensure payment and issue citations to scofflaws who refuse to comply with posted regulations.

Closed Systems

With a closed system, gates are used to control access in and out of the facility. These gates are connected to induction loops buried in the inbound and outbound lanes of the facility. These loops of woven copper cable are charged with an electric current which projects an electromagnetic field in the area above the loop. When a large metallic object breaks the field, a detector unit attached to the loop notes the disruption and activates the equipment mounted in the lane[1].

Many closed systems require some form of credential to either track length of stay or verify that proper payment has been made. For transient parkers, the most common form of credential is a paper ticket with encoded data. Early PARCS systems encoded which entry lane was used, the date the driver entered the facility and the time of entry in print on the ticket. Newer systems encode the same information in print but also include a magnetic stripe on the ticket to store the same data electronically. Other systems use a bar code to encode the information on the ticket. Both technologies are machine readable, making the print coding a redundant second system.

The most advanced systems use plastic "coin" chips with embedded RFID (*R*adio *F*requency *Id*entification) systems that capture the data and can be reused multiple times. These "coin" chips vary in size and thickness, from units the size of a quarter to "coin" chips the dimensions of a common poker chip.

Many systems now allow a user to use their credit card as their credential and their payment method, using the initial read to capture the location, time and date of entry and the second read to capture the time, date and location of departure in addition to assessing payment to card. These type of technologies are often championed as "greener" than ticket based systems because the credentialing media is reusable and does not create any paper waste.

For long-term, repeat users (i.e. permit holders), there is an even wider range of credential options. A limited number of systems still use magnetic stripe insertion cards similar to a credit card in construction and operation. Most PARCS manufacturers offer some form of short-range RFID cards, also called proximity cards, which offer a read range of 6" – 24" between the card and a lane mounted antenna. These are the same systems commonly used for building security. Longer range RFID systems are commonly called AVI (*A*utomated *V*ehicle *I*dentification) systems and use a vehicle-mounted transponder unit and overhead mounted antennas to achieve

[1] A proper system design restricts operation of the lane equipment to only those occasions where a vehicle is present within the lane. Operation of equipment without a vehicle present opens the system to several types of potential fraud and manipulation.

read ranges of up to 30'. The EZ Pass system used to administer payment and user rights on turnpikes across the Northeast is an AVI system.

The latest evolution in credentialing is *L*icense *P*late *R*ecognition (LPR) technology. This system uses advanced video cameras and complex software programs to capture the image of a vehicle's license plate, digitize the image and then compare the digitized data to a database. LPR was originally developed for use in the law enforcement community; digitized plates were compared to a database containing vehicles with outstanding warrants, warnings or other notices against them. When the software found a match, an alert was delivered to the operator, prompting an appropriate response from the public official.

Originally, this technology was applied to the pursuit and apprehension of fleeing criminals, stolen vehicles and the like. It was later adapted to more pedestrian uses by the parking industry when it was found that the same technique could be applied to comparing captured plate data to a database of parking scofflaws, allowing parking enforcement officers to be more efficient in their patrol and ticketing activities.

Most recently, LPR has been adapted to parking industry uses in the following ways:

- For areas with posted time limits, vehicle-mounted LPR systems have been paired with GPS systems to allow for capture and pairing of plate data with GPS coordinates. A passing vehicle records the plate number, location, time and date on the initial pass, creating a database. On a later pass, the captured data from the second set is compared against the database created by the first pass. If a match occurs (e.g. the same vehicle parked in the same location during the second pass), an alert is issued indicating that the vehicle is in violation of the posted time limit and the operator is prompted to issue a citation.

- For areas with permit programs, the permit holder registers their vehicle (including the plate number) with the administrative agency, who grants rights to park in a certain geographic area according to the rules of the program. The patrol vehicle with the mounted LPR system drives through the district, capturing plate data which is matched against a database of authorized parkers. If a vehicle is parked outside their authorized hours, days or geographic area or the plate is simply not matched to the database, an alert is generated.

- For permit holders parking in lots or garages, the fixed mounted LPR camera at the entry and/or exit lane scans the vehicle's plate as the vehicle approaches. If the plate is registered as a valid permit holder, the system signals the gate to lift and allow access to or egress from the facility. If not, the gate stays down the user must be processed by alternate means (as a transient user).

Closed systems operate in one of three formats: *pay-on-entry, pay-at-exit* and *pay-on-foot*.

Pay-on-entry systems require payment to be made before the user can enter the facility. Pay-on-entry is most often used when a flat rate is being charged to users. The station is currently operating under this format, with an attendant stopping each vehicle as it enters and soliciting a fee before allowing the driver to advance and park. Pay-on-entry is also common at sporting contests, concerts and other special events.

Pay-on-entry systems can include or exclude the need for credentialing. If the system is staffed, the staff collecting at entry can visually confirm permit holders[2] and collect cash on entry; the exit lane can be a 'free out' (i.e. a lane equipped with just an induction loop, detector and gate requiring no credential for exit). When credentials are required, they may be insertion cards or RFID devices at entry and exit for permit holders and pre-validated tickets for transients[3].

Pay-on-exit systems require payment to be made before the user can exit the facility. Pay-on-exit is most commonly applied when the system is charging for use by the hour, as it allows the fee to be calculated according the length of stay at the end of the user's visit. The most common form of pay-on-exit operation is to post an attendant in a booth adjacent to the exit lane to calculate the length of stay and associated fee, collect payment and release the driver. With the current state of technology, this process can also be reliably automated.

Pay-on-foot systems require the user to process payment at a central location somewhere along the common path of travel between parking and destination (the train platform) before proceeding back to their vehicle to exit the facility. At the exit, the driver presents some form of credential indicating that payment has been made to a machine that verifies the credential, causing the gate to lift and allow the driver to exit. Pay-on-foot systems can be manual, also known as a central cashier system, or automated.

Pay-on-exit and pay-on-foot systems rely on credentialing to operate. Permit holders use an insertion card or RFID based system to gain access and egress from the facility. Transients pull a ticket at entry, which is coded with the location, date and time of entry; this information is used to calculate the fee due at exit.

The strength of a closed system comes from the gate; it guarantees payment is made before the vehicle is released. When automated, a closed system can operate with very little overhead and supervision. If properly structured, a closed system is easy to audit and difficult to defeat, assuring a high rate of collection. Most modern drivers are acquainted with some form of closed system, so user acceptance and understanding is high and implementation is generally smooth.

Closed systems create queues for payment, either at entry, exit or the designated processing point (for pay-on-foot systems). Even systems that don't require credentials at exit take 5-10 seconds to lift the gate and clear the lane. Systems that require a credential at entry or exit can take 10-20 seconds to check the credential and/or issue it, lift the gate, and clear the lane. Where payment is

[2] Passes may be hangtags, windows stickers or some other form of visual media or may be as simple as checking off names or plate numbers against a list.

[3] The tickets are normally valid for a fixed grace period – normally between 12 and 24 hours for transit stations – to allow for the normal length of stay, but prevent abuses.

being made in the lane, the entire process can increase to 20-30 seconds per transaction or longer. Equipment malfunction can impair flow in and/or out of the facility and/or compromise revenue collections, especially if the system is automated and management personnel are not on site to immediately respond to issues. Pay-on-entry systems are also subject to issues when drivers stay in the lot for more than the day they initially paid for if credentialing is required at exit[4].

With pay-on-foot systems, a significant investment in signage is required to remind drivers to take their tickets with them and process them before returning to their vehicle. Pedestrian comfort and safety must be considered when placing automated pay stations or central cashiers as the queue will occur outside the vehicle with this format. Finally, even when the system is well-designed, redundant hardware may need to be installed in one of the exit lanes or a recirculation lane may need to be added to the facility to accommodate those users who forget to pay on foot.

With all closed systems, a central server is needed to run the system and process all activities. This server requires a secure, clean, dry and environmentally controlled atmosphere to operate within, although with advances in cloud computing, this server does not need to be located on property or even necessarily owned by the public agency financing the project.

Open Systems

Open systems rely on enforcement efforts to assure collection of revenues and compliance with posted policies. Gates are replaced by active patrolling, ticketing and collections which compels users to pay for services as instructed or face punitive actions.

With an open system, credentials are not needed to enter the facility or depart, but are needed to distinguish between valid, paying transient and monthly parkers and scofflaws. Open systems typically require users to pay for their parking before departing the property. Credentialing for permit holders is usually some form of visual media such as paper placard, window sticker or hang-tag. This credential is typically issued periodically, so a patrolling enforcement officer must validate that the user is current for the given month by verifying the permit is the correct color, shape or within the posted expiration date.

For transients, it is rare that a credential is actually issued to the driver or placed on the vehicle. On those occasions when it is, it is normally a ticket stub issued by an attendant collecting fee on entry as drivers arrive or a receipt issued by a meter. Otherwise, users are normally asked to identify the space they parked in that day or the vehicle they drove and pair that identification with payment at a central repository. The patrolling enforcement officer then checks that repository against the vehicles parked on site to verify that all the vehicles parked on site have paid for services.

[4] In these instances, the user has exceeded the 'grace period' for their stay (12-24 hours) and must submit additional payment and receive a new credential to be released from the facility.

Because a patrolling officer must be able to match payment made to a vehicle, many systems use some variation of a *pay-by-space* format. This requires inscribing each parking space with a unique identifier, usually a number. *Honor boxes* are made of sheet metal, mounted on a pole placed in a central location along the common pedestrian path of travel out of the facility. These boxes have slots with each space number inscribed below, with an individual catch basin for each slot. Users place cash payment through the appropriate slot before boarding leaving the facility and the parking enforcement officer collects this payment periodically and verifies all parked vehicles are in good standing by matching the fee collected in each catch basin with an occupied space.

Multi-space meters are refinement on the honor box system. With these units, users enter the number of the space they parked in and then make payment[5]. Multi-space meters are superior to honor boxes in a number of ways. First, all cash payments are entered into a secure vault within the unit and automatically recorded in the system's record keeping software, providing a superior audit trail. Second, the meter allows for cashless (i.e. credit and debit) transactions. Finally, the meter's internal computer can generate a report of all spaces 'sold' for that operating day, expediting collection and enforcement efforts.

A recent evolution of the pay-by-space format is *pay-by-cell* systems. These systems have been piloted by several public agencies including the Massachusetts Bay Transportation Agency and the City of Boston. In a pay-by-cell format, users create a profile on line, registering their vehicle's description and license plate number, the user's cell phone number and submitting a credit card for billing purposes. Once the profile is created, the user can pull into a facility participating in the service, call a central number, enter the identifying number of the facility or space they are parking in, and activate payment. For facilities collecting fees on an hourly basis, they must call back when they leave the facility to stop billing; for facilities collecting daily payments, only the initial call is required. The user's credit card is charged for the parking fee and a report is issued to the patrolling enforcement officer indicating either the spaces occupied and/or the plate numbers of the users paying by cell.

One of the detractions of pay-by-space formats is that the user may not be able to identify which space they are parked in if the lot is covered with snow or ice. *Pay-and-display* formats replace the need to identify each parking space by creating a credential that users can place on their vehicle to indicate they have made payment. At facilities where the operator is collecting a fee at entry, this is often a ticket or receipt hand-issued by the attendant that the parker places on their dashboard.

Pay-and-display meters actually issue a receipt for payment that the user then places on their dash or window. Like multi-space meters, pay-and-display meters accept cash, credit or debit card payments, have secure revenue storage, a robust auditing program in place, and can issue detailed activity reports to expedite collections and enforcement activities. The main detraction for pay-and-display meters is that commuters must make two trips every morning before

[5] Multi-space meters accept cash, credit and debit payment, whereas honor boxes only accept cash and (rarely) personal checks.

proceeding to the platform; once to the meter to make payment and once back the vehicle to display proof of payment.

Many meters now allow a *pay-by-plate* format where the parker enters their license plate number in lieu of a parking space number. This negates the issue of not being able to read a space marking due to snow or ice cover and does not require the parker to return to the vehicle to display proof of purchase. However, it does require the parker to remember and accurately enter their license plate number into the machine every time they park. This system is also more labor intensive to enforce as the patrolling officer must visually check each plate number against the report generated by the meter to verify all users have paid.

Open systems allow for high process rates in and/or out of the facility because users do not have to wait for a gate to lift. The capital costs to install an open system are typically less than those of a closed system because less equipment is needed and the computers needed to drive an open system are normally contained within the apparatus, so no central server is required. Open systems may be perceived as friendlier to some users than an automated gate posted at entry or exit and users are not trapped in the facility if the equipment for an open system fails.

Because open systems require patrolling and enforcement to ensure compliance and collection, they tend to be more labor intensive than closed systems. With open systems, the owner is trading lower capital costs (for equipment) for higher operating expenses (for enforcement and collections). Open systems also sacrifice revenue control for higher vehicular process rates, forgoing the revenue that could be collected by capturing vehicles in a gated system for unimpeded movement in and/or out of the facility.

Using an open system at this lot may not guarantee unimpeded flow, even if gates are not installed. The tidal movement of commuters coming into the facility in the morning or exiting in the evening can still create queues. In addition, while the open system may appear less forbidding due to the omission of gates, the necessity of issuing and collecting on citations will not be any better received by those individuals being ticketed for non-payment.

CONTRACT STRUCTURES

An agreement between an (public) Owner and a (private) Operator is, first and foremost, an instrument for transferring risk. Risk, in this instance, is typically defined as the responsibility for net cash flow associated with the facility. There are three general kinds of agreements normally structure between owners and parking operators:

- ***Lease Agreement***: A lease agreement normally requires the operator to take on the majority of risk with the enterprise. A lease obligates the Operator to pay the Owner a fixed amount of money on a monthly basis in return for use of the facility, regardless of how the facility performs. This agreement favors the Owner by guaranteeing them fixed income from the property on a monthly basis for the duration of the agreement, regardless of how the facility performs. It requires the Operator make the monthly rate payment and covers all operating costs associated with the facility. However, it also

accords the Operator wide privilege when it comes to all aspects of managing the facility. The lease allows the Operator to solely define how the facility is operated, including hours of operation, rates, staffing schedules, and maintenance tasks and schedules, without input from the owner. The lease also allows the Operator to collect and keep all operating revenues during the term of the agreement. Most lease agreements are at least five (5) years in length, with options for extension up to a total of ten (10) years in length.

- ***Concession Agreement***: With a concession agreement, the Operator agrees to pay the owner an initial fee[6] for the right to manage the facility and a percentage of the gross monthly income[7]. The operator is responsible for all operating expenses, but retains the majority of gross revenues. Terms of operation are negotiated between the Owner and Operator, with the owner normally having greater input into the terms at the outset of the agreement. A typical agreement requires both parties to agree to binding arbitration or mediation in the event that accommodation cannot be reached on key terms[8] during the length of the agreement once executed. Because of the relative risk associated with such an agreement for the operator, most agreements run for a minimum of three (3) years of multiple options to renew in one (1) year increments.

- ***Management Agreement***: With a management agreement, the Operator agrees to run the facility under the terms dictated by the Owner. The Owner has sole right to determine the rates charged, hours of operation, staffing schedule and maintenance schedule. The Owner is responsible for all operating expenses and is at risk against changes in the gross revenue for the subject facility. The Operator provides services for a flat monthly fee, plus a percentage of gross or net revenues above a preset threshold[9]. Management agreements are cancellable with 30-90 days written notice by either party and can run for as little as one (1) year from the date of commencement.

RECOMMENDED OPERATING FORMAT

DESMAN would recommend that any parking structure developed at this site be incorporated as a public-private venture, with the public agency being the primary partner for securing financing and permitting for the project.

DESMAN would recommend that the project, when complete, should be managed by a private firm operating under a management agreement structure.

DESMAN advocates for a closed system design incorporating pay-on-foot ticket processing at central cashier stations, to minimize staffing requirements and overhead. In addition to central cashiers, DESMAN recommends installation of automated pay stations adjacent to the central

[6] Typically equivalent to 10% to 25% of historical gross annual revenues.

[7] Normally, between 3% and 10% of gross revenues, depending on the initial entry fee.

[8] These terms are anything that impact the bottom line and normally include such factors as rates, staffing, hour of operation and maintenance schedules.

[9] The threshold is typically set against historical revenues and/or a target figure. The percentage may be a straight percentage of revenues or a 'stepped' structure based on additional revenues collected.

cashier stations and at exits to allow the facility to operate under automation when it is not cost effective to staff cashier positions.

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Attachment C

Nelson\NyGaard: The LINK Parking Analysis

NELSON
NYGAARD

MEMORANDUM

To: Ben Carlson, Goody Clancy

From: Nelson\Nygaard

Date: December 5, 2013

Subject: Providence I-195 Redevelopment District Design and Development Framework- Parking Analysis

The LINK is envisioned to help transform the former I-195 highway corridor into an attractive place to live, work, and play for students, residents, and visitors. The proposed mixed- use redevelopment will help to create options for commercial and office space, expand research and lab facilities, provide high quality housing options, and create a viable street network that supports multimodal transportation options throughout the District. As part of this redevelopment effort, addressing parking and the management of these assets are essential to creating a thriving environment that works in line with the goals of the district and the City's downtown.

This memorandum helps to provide a baseline for evaluating the existing and potential parking demand generated by the parcel redevelopment scenarios throughout the district. This analysis will help project new District parking demand in four parking catchment area boundaries, which will be calibrated to observed supply and demand information provided by VHB's Downtown Parking Study in 2010. Parking ratios tailored relative to proposed development scenarios, local characteristics, and shared parking opportunities surrounding the District will be applied to test alternative supply scenarios proposed for each parcel. Overall this methodology will help to demonstrate potential areas within the District which may require expansion of existing parking supply to accommodate the redevelopment. However, this memorandum outlines opportunities to maximize efficiencies in existing supply and parking management options that the District should explore in conjunction with possible future parking expansions in the area.

EVALUATING DISTRICT PARKING DEMAND

Methodology

In order to evaluate the potential parking demand generated from the redevelopment parcel scenarios, four approximate boundary locations were created based on a five-minute walk radius from potential garage locations identified by the project team, as shown in Figure 1. These boundaries depict a capture radius and the potential for these garages to absorb generated

demand from these redeveloped parcels. These walk radii were clipped to parcel boundaries to prevent overlap and to provide a conservative walking capture potential for garage location, as shown in Figure 2. The subsequent parking analysis stems off of these parking catchment area boundaries to evaluate both existing and potential demand generated from the development scenarios.

Figure 1: Link Parking catchment area Walk Radii (Five-Minute Walk Radius)

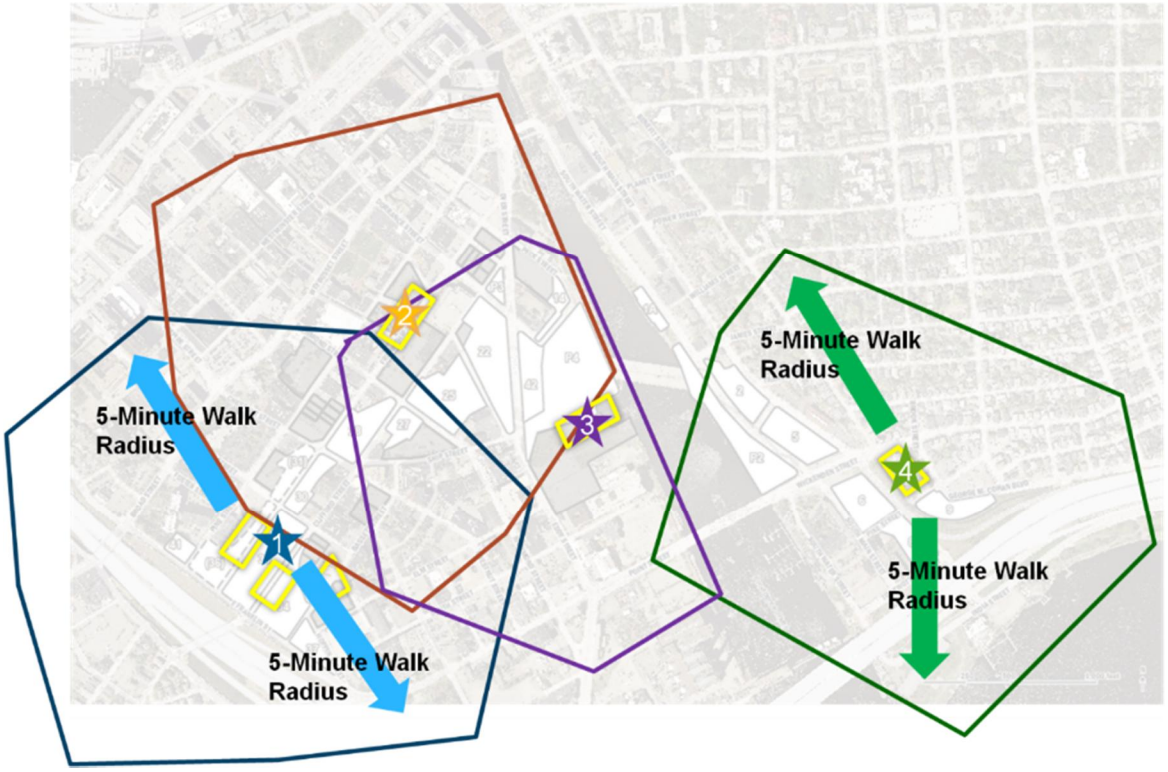
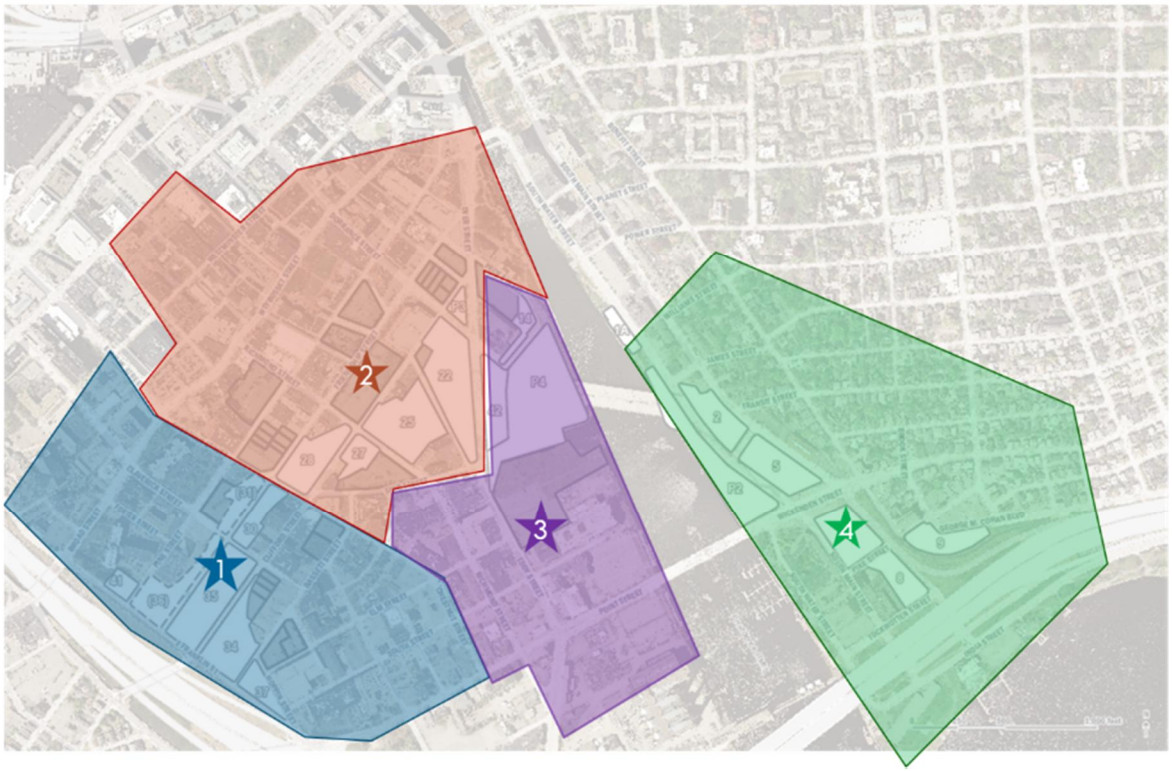


Figure 2: Link Parking catchment area Boundaries (Five-Minute Walk Radius Clipped)



Existing Parking Demand

In 2010, Vanasse Hangen Brustlin, Inc. (VHB) engaged in a parking study for downtown Providence, which helped to inventory and analyze the parking utilization and occupancy of existing on- and off-street parking assets throughout the district. The study divided the downtown into four sub-boundaries, three of which fall in line with three boundaries of our Link District analysis, the Downtown North, Downtown South, and the Jewelry District. The parking demand conclusions drawn from this study indicate that although there are pockets of high parking demand throughout the downtown and within sub-boundaries on an average weekday, overall there is still an ample supply of parking available. When combining VHB's three sub-boundaries, there is a combined total of around 16,777 spaces as counted by their sub-consultant, Walker Parking; however, when averaging the weekday occupancy of these spaces, there is only 66% utilization of all parking assets, leaving about 5,700 spaces available during peak demand. Note that the parking supply and demand gathered for our parking catchment area 4 – which was outside VHB's study area – and used in the subsequent analysis was based off of both field observations and orthography analyses.

Future Parking Demand

Typically, in mixed-use developments, customers and visitors can visit multiple destinations while parking only once. Moreover, throughout the day, different uses have different peak demands: for example, an office may have a high demand until 5pm, and a restaurant open for dinner may have a high demand only after 5pm. In a mixed-use environment, each land use may

not need its own dedicated supply of parking, yet traditional analysis and zoning are typically based on such assumptions. To model this type of shared parking activity in Providence, Nelson\Nygaard used an adapted shared parking model based on inputs from the Urban Land Institute's (ULI) Shared Parking Manual (2nd Edition, 2005) and ITE's Parking Generation (4th Edition, 2010). Besides accommodating varying demand by time of day, we tailored the shared parking model for the four boundaries in The LINK to include a parking demand reduction for using the same parking spaces for different uses (internal capture) based on the expected land use demands. In addition, typical reductions for demand management features and access to alternative modes were applied depending on the density, use mix, and access to alternative modes of each parking catchment area.

In order to estimate the potential demand generated from the redevelopment parcels within each of these four boundaries, both existing and future land uses were analyzed to determine the potential needed future supply. Parking catchment area shared parking models of existing development were calibrated to the observed supply and demand information provided by VHB's Downtown Parking Study in 2010. The models include a percent reduction to account for the mix of development patterns and were calibrated to reflect the observed and existing demand in each boundary. These reduction factors include internal capture, transportation demand management measures, as well as employee parking demand. In addition, a vacancy factor of 15% for commercial space was included to account for this estimated vacancy rate in 2008 when the parking data was collected, which continues today. As it turns out, the parking model remains conservative, as some of the maximum internal capture and TDM reductions were often taken – along with a vacancy factor, yet actual utilization is somewhat lower, suggesting that there is a high degree of natural sharing or alternative modal use occurring today in Providence and/or many people are willing to walk over 10 minutes outside of VHB's downtown study boundary.

Using each parking catchment area shared parking model for existing land uses as a base, land uses from the two proposed scenarios were applied to each parking catchment area model in order to generate a future shared demand and needed future supply as shown in Table 1. The needed future supply recommendation assumes full sharing of all spaces within the boundary.

Table 1: Existing and Future Parking Demand by Parking catchment area

	Parking catchment area One		Parking catchment area Two		Parking catchment area Three	Parking catchment area Four
	Scenario One	Scenario Two	Scenario One	Scenario Two	Scenario One & Two	Scenario One & Two
Existing Supply	3,497 Spaces		4,391 Spaces		2,368 Spaces	1,431 Spaces
Reserve Supply (Functional Capacity)	3,147 Spaces		3,952 Spaces		2,131 Spaces	1,287 Spaces
Existing Demand	2,570 Spaces		3,274 Spaces		1,251 Spaces	633 Spaces
Future Exclusive Demand	10,965 Spaces	10,231 Spaces	12,611 Spaces	12,353 Spaces	2,891 Spaces	2,686 Spaces
Future Shared Demand	5,173 Spaces	4,746 Spaces	6,005 Spaces	5,720 Spaces	1,688 Spaces	1,135 Spaces
Needed Future Supply (With Reserve)	5,690 Spaces	5,220 Spaces	6,605 Spaces	6,292 Spaces	1,856 Spaces	1,249 Spaces
Net Future Need	2,543 Spaces	2,073 Spaces	2,653 Spaces	2,340 Spaces	- 275 Spaces	-38 Spaces

Figure 3 depicts the existing and possible needed future supply for each boundary in land use scenario one, which contains a larger mixed-use and lab/ research land use presence than scenario two. Each boundary contains a varying level of potential demand in response to the development program for parcels within the boundary, internal capture characteristics, and potential trip reduction. In scenario one, boundaries one and two contain a higher potential parking demand than can be accommodated by the existing parking supply. However, the demand in boundaries three and four are approaching the existing supply available in these capture zones.

Scenario two, shown in Figure 4, indicates that there is slightly less potential parking demand for boundaries one and two compared to scenario one. This is due to the redevelopment program which emphasizes mixed-use with greater housing presence. The program for redevelopment parcels in boundaries three and four do not shift, as there is only one scenario for each boundary.

Figure 3: Link District Parking Demand by Parking catchment area for Land Use Scenario One

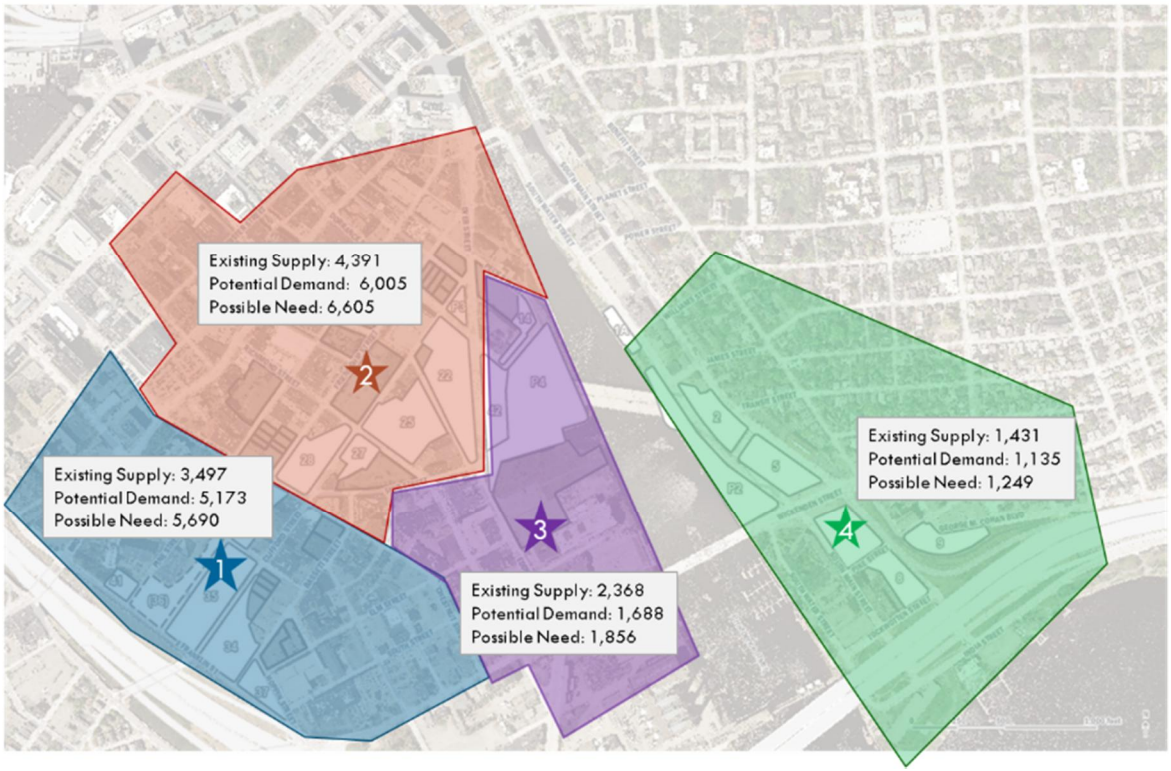
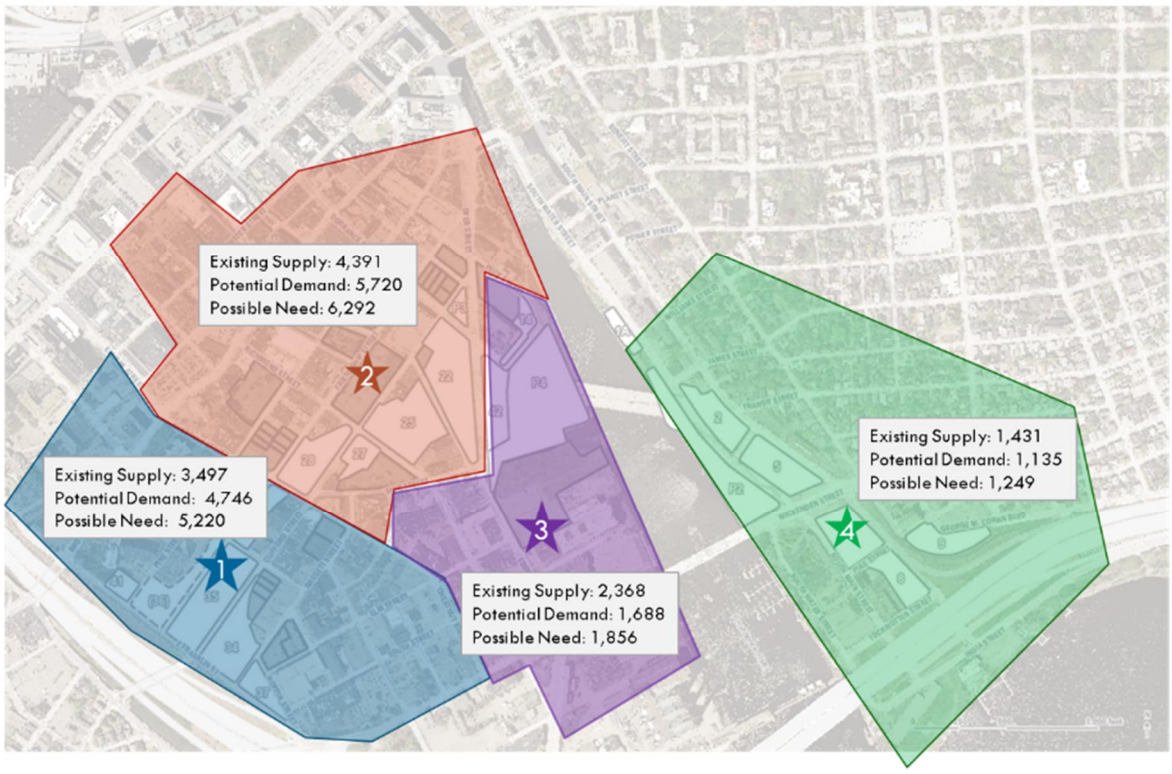


Figure 4: Link District Parking Demand by Parking catchment area for Land Use Scenario Two



Utilizing the shared parking analysis, tailored parking ratios were created for the proposed development scenarios for each land use type in each boundary location. These parking ratios were modified based on local characteristics and reduction factors within each parcel's walk shed. Table 2 below outlines the modified parking ratio for various land uses. The unshared column represents ITE Parking Generation standard ratios, while the shared column represents the modified ratios with applied reductions.

Table 2: Recommended Parking Ratios by Land Use for Link Parking catchment areas

Recommended Parking Ratios for Land Uses by Parking catchment area								
Land Use	Parking catchment area One		Parking catchment area Two		Parking catchment area Three		Parking catchment area Four	
	Unshared	Shared	Unshared	Shared	Unshared	Shared	Unshared	Shared
Retail/ Restaurant (space per 1,000 GLA)								
Industrial	0.75	0.49	0.75	0.49	0.75	0.53	0.75	0.53
University/ College	1.2	0.78	1.2	0.78	1.2	0.84	1.2	0.84
Hospital	4.5	2.29	4.5	2.29	4.5	2.59	4.5	-
Hotel	0.89	0.58	0.89	0.58	0.89	0.62	0.89	-
Church	8.37	5.42	8.37	5.42	8.37	-	8.37	5.87
Library	3.5	-	3.5	2.27	3.5	-	3.5	-
Theater* spaces per seat	0.33	-	0.33	0.21	0.33	-	0.33	-
General Retail	2.55	1.65	2.55	1.65	2.55	1.79	2.55	1.79
Quality Restaurant	10.6	-	10.6	-	10.6	-	10.6	7.43
High Turnover Restaurant	5.55	3.59	5.55	3.59	5.55	3.89	5.55	3.89
Office (space per 1,000 GLA)								
Government Office	3.2	2.07	3.2	2.07	3.2	2.24	3.2	2.24
General Office	2.47	1.25	2.47	1.25	2.47	1.42	2.47	1.42
Residential (space per 1,000 GLA)								
Low to Mid Rise Apartment	1.2	0.8	1.2	0.8	1.2	-	1.2	0.86
High Rise Apartment	0.45	0.29	0.45	0.29	0.45	0.32	0.45	-
Townhouse/ Condo	1.38	0.7	1.38	0.7	1.38	-	1.38	0.79

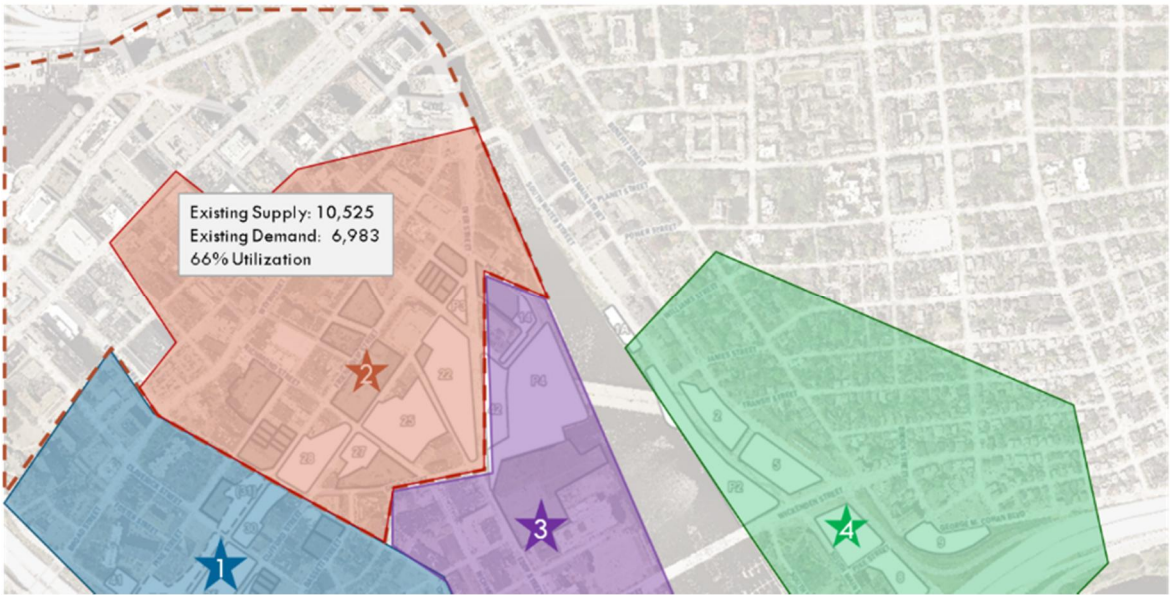
Parking Supply Summary

In conjunction with the overall analysis of existing and potential supply and demand in The LINK, this summary would indicate that in the near future the District will need to supplement the existing parking supply in order to accommodate the parcel redevelopment programs. However, it is important to take note that greater efficiencies will influence the need to build and accommodate this potential parking demand. The District should capitalize on existing supply, and expand upon parking management measures in order to increase the likelihood of utilizing existing assets before building additional parking. Similarly the tailored parking ratios suggested in the Table 2 should be utilized by developers within the respective district boundary.

It is important to recognize that the existing downtown district contains a larger supply of parking available for use than is currently being underutilized. This is well supported by the previous VHB study, which suggests that there is still ample parking supply available during the weekday peak demand. For the purposes of our analysis, we chose a five-minute walk radius as a means of understanding the capture radius for pedestrians. However if these radii were extended to a 10 minute boundary, as show by the dashed line in Figure 5, it is evident that there is ample supply available to accommodate and absorb potential demand generated by this boundary.

With the proposed streetcar and bus rapid transit alignments, the District should consider opportunities to promote alternative methods of accessing the District. Similarly the District should consider opportunities to accommodate residents, employees, and visitors who are parking in existing but remote garages by providing amenities, such as shuttles, into the District's destinations. Careful considerations for potential sharing opportunities and parking reduction factors, as outlined in the following Parking Management Recommendations section, should be reviewed and considered as part of this development process.

Figure 5: Link District Parking Demand for Parking catchment area Two With Ten-Minute Walk Radius



PARKING MANAGEMENT RECOMMENDATIONS

Shared Parking Program

The LINK is capitalizing on the natural synergies of its mix of tenants in close proximity to each other, as well as the nearby educational, commercial, and entertainment districts of Providence, to maximize the efficiencies of shared parking and alternatives to the automobile. A district-wide "park once" approach, coupled with well-managed parking in adjacent districts, will enable tenants to take advantage of an attractive pedestrian-oriented place that creates lower parking demand. This results in cost savings to tenants and their residents, employees, and visitors.

Mixed-use developments, such as within The LINK, offer the opportunity to share parking spaces between various uses, thereby reducing the total number of spaces required compared to the same uses in stand-alone developments. This is a primary benefit in mixed-use development contexts of moderate-to-high density. Shared parking operations offer many localized benefits to the surrounding community, including a more efficient use of land resources and reduced traffic congestion.

There are two basic types of shared parking opportunities: 1) proximate uses with staggered demand peaks, and 2) internal capture of trips between proximate uses.

Staggered Peaks

The first shared parking opportunity offered by mixed-use development comes from the staggered demand peaks associated with each use. Different land uses generate unique levels and patterns of parking demand. Parking supplies at mixed-use locations accommodate these demand fluctuations more efficiently than segregated supplies, by accommodating peaking uses with spaces left vacant by other uses. Thus, the same parking lot that was full of workers' vehicles during the day can be used for residents at night.

In recognition of the fact that parking demand for different land uses fluctuate throughout the day, each land use in The LINK has a variable parking demand rate by time of day. This varying demand is expressed as "occupancy rates" – a percentage of spaces allocated for a particular land uses that are likely to be occupied at any given time. If parking is shared, then the total demand for parking is the sum of the number of parking spaces occupied for all land uses at the busiest hour. For The LINK, staggered peaks have been modeled through all phases of development according to trusted methods published by the Institute of Transportation Engineers (ITE) and the Urban Land Institute (ULI).

Sharing does not reduce parking demand; instead it reduces the amount of square footage that is needed to meet the parking demand. These efficiencies allow for a much smaller "parking footprint" allowing for a) land to be used for more productive uses and b) greater flexibility in site planning and project design.

Internal Capture

Mixed-use projects allow for parking efficiencies through "internal capture" trips. Such trips are made by patrons who, having already parked, travel between uses without accessing their vehicle. Restaurants and retail services are common generators of internal capture trips in mixed-use

developments, as they serve both employees and residents within the same development. Not only does this proximity of uses present an opportunity to conserve land area from parking uses, but it reduces localized congestion as local employees and residents are presented with daily goods and services within walking distance.

Parking Demand Management

The LINK will implement a comprehensive package of parking demand management and trip reduction tools. The parking demand reduction measures listed below have been shown to reduce vehicle trips and parking demand in comparable development contexts. It is estimated that implementation of parking management, trip reduction, and operational efficiency measures will result in conservative parking demand reductions.

The LINK represents a unique opportunity to share many uses in a very efficient and cost-saving manner due to the size and number of uses in a compact area. The scale and compactness of the district will easily enable sharing within and between blocks. The shared parking analysis is based upon the careful application of observed and modeled parking demand rates throughout average weekday to each use category proposed.

Mixing uses in a single district such as The LINK allows the varying peaks of each tenant's demand to be accommodated across all hours of the day with far fewer district-wide parking spaces than self-parking each tenant's site would require. By passing on the savings of less parking construction and less undeveloped land to tenants or directly to their residents, employees, and visitors, the district can offer more amenities to more tenants at the same or reduced cost compared to traditional development sites.

Incentives to Share

The Link parking district can offer packages tailored to tenants, with convenience costs tied to proximate parking and incentives in place to share most parking:

- Dedicated Parking – A portion of included parking may be on-site and dedicated only to proximate tenants. The costs of this parking can be rolled into standard building lease rates, with transit and biking amenities available for a fee.
- Shared Parking – For tenants sharing a portion of parking at any one of several access-controlled shared facilities, a reduced building lease rate can be made available. These lower costs can be supported by amenities that include inexpensive transit, carshare and bikeshare passes, as well as discounted employee shuttles and free emergency taxi rides home.
- Remote Parking – Tenants willing to park some or all users remotely, including in designated off-site shared facilities, can receive the lowest building lease rates and all on-site amenities for free.

Any tenant offering payroll bonuses or rent reductions for individuals who don't drive may receive additional amenities, including dedicated shuttles, free marketing and transportation benefits coordination, and on-site showers and changing rooms, in addition to receiving all on-site amenities for free.

Developer Guarantees

Every tenant should be guaranteed the parking they desire. The development of The LINK ensures sufficient supply on-site for any level of dedicated or shared parking at all times during

build-out and beyond. In return for registering users' vehicles to enable periodic monitoring, tenants who experience less parking demand than anticipated can be eligible for early lease negotiation at lower rates if they participate in a shared parking program and the transit, biking, carsharing, and other employees incentives.

Carpooling, bus riding, biking, and carsharing are not for everyone. However, national trends towards compact live-work communities with ample alternatives to the automobile are accelerating as communities, developers, and employers see the value, cost savings, and health benefits of places like The LINK. The partners advancing these "park once" concepts in Providence recognize that the future of local development, employment, and profitability rest in the efficiencies of this and other District programs.

Phased Demand Management Program

Several strategies designed to efficiently and cost-effectively utilize parking resources comprise the parking management program for The LINK. The Parking District Plan is developed with these primary goals:

- Provide sufficient parking supply for all tenants, visitors, and residents of The LINK
- Support multi-modal transportation services and amenities that offer various travel options that reduce the reliance on automobiles, promote healthy lifestyles, and reduce polluting emissions
- Incentivize the efficient utilization of all available parking assets in order to maximize return on investment and minimize adverse development costs, impacts on the built environment, and degradation of public and open space opportunities in Providence
- Offer superior customer service, amenities, and programs that make The LINK an attractive place to live, work, and play

The district is designed to mitigate the high cost of maintaining quality parking spaces by limiting the number of hours spaces are unutilized. Projected shared parking efficiencies greatly reduce the need for supply over time, creating significant cost-savings that can be passed on as superior site amenities to tenants, residents, employees, and visitors.

The strategies that support this program include the following:

1) Promote a "Park Once" environment. The LINK makes efficient use of the parking supply by including as many spaces as possible in a common pool of shared, publicly available spaces. The parking supply for all users is shared, with the exception of tenants, residents, and employees who are willing to pay a premium for dedicated spaces.

   A Park Once district is an immediate generator of pedestrian life, creating pedestrian traffic that animates public life on the streets and generates the patrons of street-friendly retail businesses. The Park Once district should be managed by the District's Mobility Coordinator. The concept will be marketed to all tenants, their employees and their visitors. It is supported by the remaining strategies described in the following sections.

   This "Park Once" strategy can be implemented through the following lease program:

   a) Under the *tier 1 standard lease rate*, tenants or sub-developers are guaranteed that all – or a portion that they select – of their parking supply, not exceeding the shared ratio set in Table 2, will be available on-site or nearby in a dedicated facility that may be shared with other dedicated users. Availability is guaranteed during all hours of normal business

operation or all-day for residents. Subscribers have access to all transportation amenities described below for standard user fees, discounted for group purchases.

b) Under the *tier 2 reduced lease rate*, tenants or sub-developers are guaranteed that all – or a portion that they select – of their parking supply, not exceeding the shared ratio set in Table 2, will be available in the District in any shared facility. Availability is guaranteed at all hours. Subscribers have access to transportation amenities at substantially reduced rates.

c) Under the *tier 3 discount lease rate*, tenants or sub-developers are guaranteed that all – or a portion that they select – of their parking supply, not exceeding the shared ratio set in Table 2, will be available in shared facilities in the District or within a five-minute walk of the District. Availability is guaranteed during all hours of normal business operation or all-day for residents. Subscribers have full access to transportation amenities at no charge.

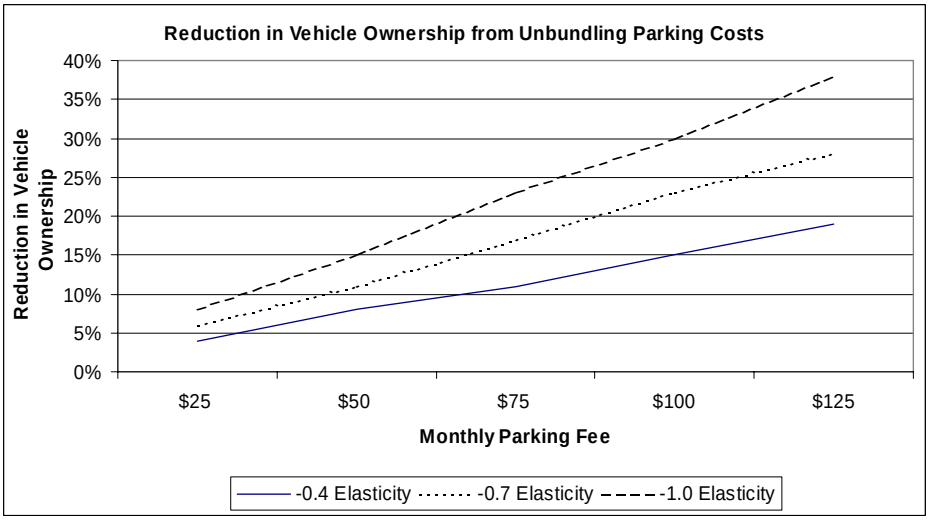
Establishment of the Tier 3 parking program requires leasehold or other arrangements with remote parking supplies (particularly those northwest of downtown as shown in Figure 5) for tenants willing to walk, bus, or streetcar across town. These arrangements are the most lucrative for The LINK, as the cost will be substantially lower than funding debt service on new garages.

2) Provide subsidized short-term parking for customers. In the first years of the project, retailers in the District may need every possible advantage to thrive. Initially, therefore, short-term parking rates in the District's shared parking facilities should provide 90 minutes of free parking, with a fee thereafter to keep long-term parkers from occupying customer spaces all day.

3) Charge for parking separately from the cost of residential space. Minimum parking requirements often mandate that one or more reserved parking spaces be provided for all new residential units. Traditionally, this required parking is included at no charge in the purchase or lease price of a residential housing unit. Because the cost of those spaces is included in the purchase price, the cost of these spaces is essentially hidden within the cost of the housing.

Separating, or "unbundling", the costs of parking from the costs of housing, and charging a fee for parking rights is a tool that at a minimum covers the marginal costs of providing the parking space (including land, construction, and operation/maintenance costs); it is also a tool for reducing parking demand and trip generation at residential developments.

Charging separately for parking is the single most effective strategy to encourage households to own fewer cars, and rely more on walking, cycling and transit. According to a study by Todd Litman (2004), unbundling residential parking can significantly reduce household vehicle ownership and parking demand.



This TDM effect occurs initially via "self-selection" effects that reward potential buyers who own fewer than average vehicles, and later by sending an ongoing price signal to occupants that provides incentive to reduce vehicle ownership.[1] Such unbundling makes the cost of vehicle ownership and use more transparent to housing consumers, and it lowers housing costs for residents who do not require additional spaces. Reductions in parking supplies provide significant savings in development costs and preserves land for more productive use that generate property and sales tax revenues for the City.

For all residential units, the full cost of providing parking should be "unbundled" from the cost of the housing itself, by offering all residential parking at hourly rates or the above leased rate tiers. Unbundling parking construction and maintenance costs from development and leasing costs will change parking in the District from a required purchase to an optional amenity, so that residents can freely choose how many spaces they wish to lease. Households may sublease or transfer to other residents their space unfettered just like any other real property.

4) Separate the cost of leasing employee parking from the cost of commercial space. Market-rate parking prices are one of the most effective strategies for reducing parking demand and vehicle trips. Market-rate parking charges have been found to reduce vehicle trips from 8% to 21%, with reductions of up to 38% in suburban locations.

   The LINK's retail tenants will need employee parking spaces. As with parking for residential units, the full cost of providing these employee spaces should be unbundled from the cost of leasing commercial space sub-leases, providing employers with a strong financial incentive to participate in transportation amenities and programs that will reduce employee parking demand. Tenants or sub-developers requiring these sub-lease arrangements will receive the associated retail parking demand as established in Table A at the *reduced lease rate*.

5) Incentivize parking cash out. Many employers are likely to wish to provide free parking for their employees as a fringe benefit. Employers should be allowed to do so, but those who *also offer at least half of the cash value of the per-space parking lease rate to any employee*

[1] The self-selection effects described here are known in the field of public choice economics as the "Tiebout Sorting Model", after the economist Charles Tiebout who first identified these effects and articulated a model of them. For more information, see http://en.wikipedia.org/wiki/Tiebout_sorting.

who declines a parking pass will receive discounted or free transportation amenities, while the associated property lease receives the *discounted lease rate*. Such "parking cash out" programs provide an equal transportation subsidy to employees who ride transit, carpool, walk or bicycle to work.

The benefits of parking cash out are numerous, and include:

- Provides an equal transportation subsidy to employees who ride transit, carpool, vanpool, walk or bicycle to work. The benefit is particularly valuable to low-income employees, who are less likely to drive to work alone.
- Provides a low-cost fringe benefit that can help individual businesses recruit and retain employees.
- Employers report that parking cash-out requirements are simple to administer and enforce, typically requiring just one to two minutes per employee per month or quarter to administer.

In addition to these benefits, the primary benefit of parking cash out programs is their proven effect on reducing auto congestion and parking demand. The figure below outlines key research on commuter responsiveness to financial incentive programs implemented throughout the United States. The studies illustrate programs implemented in cities, colleges, and by individual employers, covering tens of thousands of employees and hundreds of firms. The findings show that, even in suburban locations with little or no transit, financial incentives can substantially reduce parking demand. On average, a financial incentive of $70 per month reduced parking demand by over one-quarter. At the University of Washington, a financial incentive of just $18 per month reduced parking demand by 24%.

Location	Scope of Study	Financial Incentive per Month	Decrease in Parking Demand
Group A: Areas with little public transportation			
Century City, CA[2]	3500 employees at 100+ firms	$81	15%
Cornell University, NY[3]	9000 faculty and staff	$34	26%
San Fernando Valley, CA[4]	1 large employer (850 employees)	$37	30%
Bellevue, WA[5]	1 medium-size firm (430 employees)	$54	39%
Costa Mesa, CA[6]	State Farm Insurance employees	$37	22%
Average		$49	26%
Group B: Areas with fair public transportation			
Los Angeles Civic Center[7]	10,000+ employees, several firms	$125	36%
Mid-Wilshire Blvd, LA[8]	1 mid-sized firm	$89	38%
Washington DC suburbs[9]	5500 employees at 3 worksites	$68	26%
Downtown Los Angeles[10]	5000 employees at 118 firms	$126	25%
Average		$102	31%
Group C: Areas with good public transportation			
University of Washington[11]	50,000 faculty, staff and students	$18	24%
Downtown Ottawa[12]	3500+ government staff	$72	18%
Average		$102	31%
Overall Average		**$67**	**27%**

[2] Willson, Richard W. and Donald C. Shoup. "Parking Subsidies and Travel Choices: Assessing the Evidence." *Transportation*, 1990, Vol. 17b, 141-157 (p145).

[3] Cornell University Office of Transportation Services. "Summary of Transportation Demand Management Program." Unpublished, 1992.

[4] Willson (1990).

[5] United States Department of Transportation. "Proceedings of the Commuter Parking Symposium," *USDOT Report No. DOT-T-91-14,* 1990.

[6] Employers Manage Transportation. State Farm Insurance Company and Surface Transportation Policy Project, 1994.

[7] Willson (1990).

[8] ibid

[9] Miller, Gerald K. "The Impacts of Parking Prices on Commuter Travel," Metropolitan Washington Council of Governments, 1991.

[10] Shoup, Donald and Richard W. Wilson. "Employer-paid Parking: The Problem and Proposed Solutions," *Transportation* Quarterly, 1992, Vol. 46, No. 2, pp169-192 (p189).

[11] Williams, Michael E. and Kathleen L Petrait. "U-PASS: A Model Transportation Management Program That Works," *Transportation Research Record*, 1994, No.1404, p73-81.

[12] Willson (1990).

6) Provide Universal Transit Passes. RIPTA, the Rhode Island Public Transit Authority, boasts a successful U-Pass program that grants employers a bulk discount when they provide free transit passes to all employees on an annual basis. Nationally, these programs are a highly effective tool for reducing parking demand and increasing transit ridership. The principle of employee or residential transit passes is similar to that of insurance—transit agencies can offer lower rates on passes on the basis that not all those offered the pass will actually use them regularly. The universal passes are beneficial to everyone involved:

- For transit agencies, universal transit passes provide a stable source of income, while helping them meet their ridership goals.
- Employers reduce the demand for parking on-site and are able to provide an additional benefit that helps recruit and retain employees.
- For commuters, the transit pass reduces the cost of getting to work and affords a hassle-free level of transit mobility, eliminating a major barriers to transit use—the need to search for spare change with each trip. Residents also benefit from free or low-cost, hassle-free transit mobility, meaning they are less likely to own a vehicle.

The ripple effect to *developers* can mean reduced parking requirements and consequently far lower construction costs. And neighbors of employees or residences that take part in the program avoid the problem of spill-over parking. The figure below shows how the implementation of a universal transit pass program has significantly altered the mode shares of driving and riding transit in several municipalities and universities throughout North America.

Location	Drive to work		Transit to work	
Municipalities	**Before**	**After**	**Before**	**After**
Santa Clara (VTA) [13]	76%	60%	11%	27%
Bellevue, Washington[14]	81%	57%	13%	18%
Ann Arbor, Michigan[15]	N/A	(4%)	20%	25%
Universities				
UCLA[16] (faculty and staff)	46%	42%	8%	13%
Univ. of Washington, Seattle[17]	33%	24%	21%	36%
Univ. of British Colombia[18]	68%	57%	26%	38%
Univ. of Wisconsin, Milwaukee[19]	54%	41%	12%	26%
Colorado Univ. Boulder (students)[20]	43%	33%	4%	7%

A universal transit pass program should provide employees and residents of The LINK with unlimited rides on RIPTA buses. Annual passes would be purchased at a deeply discounted bulk rate for all employees of properties leased at the *tier 2 discounted and tier 3 reduced lease rates*. The savings is passes on to *tier 2 discounted lease rate* tenants, while passes are provided for free to *tier 3 reduced lease rate* tenants.

7) Dedicated Shuttle Services. For tier 2 discounted and tier 3 reduced lease rate individual or groups of tenants or sub-developers, dedicated employee shuttle services should be offered at bulk or significantly reduced rates below cost. Scheduled service to residential

[13] Santa Clara Valley Transportation Authority, 1997.

[14] 1990 to 2000; http://www.commuterchallenge.org/cc/newsmar01_flexpass.html.

[15] White et. al. "Impacts of an Employer-Based Transit Pass Program: The Go Pass in Ann Arbor, Michigan."

[16] Jeffrey Brown, et. al. "Fare-Free Public Transit at Universities." *Journal of Planning Education and Research* 23: 69-82, 2003.

[17] 1989 to 2002, weighted average of students, faculty, and staff; From Will Toor, et. al. *Transportation and Sustainable Campus Communities*, 2004.

[18] 2002 to 2003, the effect one year after U-Pass implementation; From Wu et. al, "Transportation Demand Management: UBC's U-P ass – a Case Study", April 2004.

[19] Mode shift one year after implementation in 1994; James Meyer et. al., "An Analysis of the Usage, Impacts and Benefits of an Innovative Transit Pass Program", January 14, 1998.

[20] Six years after program implementation; Francois Poinsatte et. al. "Finding a New Way: Campus Transportation for the 21st Century", April, 1999.

communities in nearby neighborhoods and nearby Universities can offer onboard wifi and position-tracking and notification to mobile devices.

8) Carpool & Vanpool Incentives. In addition to charging daily rates for parking, the practice of carpool pricing incentives helps reduce drive-alone trips. The exact amount charged for carpool spaces vis-à-vis regular spaces in District parking facilities should adjusted to maximize carpooling. The Mobility Coordinator will also provide ride-sharing services, including carpool and vanpool incentives, customized ride-matching services, a transportation information package for new employees and residents, a Guaranteed Ride Home program (offering a limited number of emergency taxi rides home per employee), and an active marketing program to advertise the services to employees and residents.

9) Transportation Resource Center. A storefront office that provides personalized information on transit routes and schedules, carpool and vanpool programs, bicycle routes and facilities and other transportation options will be provided on the main square. The Center will be responsible for administering and actively marketing all transportation amenities and programs.

Attachment D

DESMAN Associates: Garrahy Garage Conceptual Economic Analysis Details

Loan Amortization Schedule

Enter values	
Loan amount	$ 39,062,500.00
Annual interest rate	4.50 %
Loan period in years	25
Number of payments per year	12
Start date of loan	1/1/2015
Optional extra payments	$ -

Loan summary	
Scheduled payment	$ 217,122.06
Scheduled number of payments	300
Actual number of payments	300
Total early payments	$ -
Total interest	$ 26,074,118.51

Lender name:

PmtNo.	Payment Date	Beginning Balance	Scheduled Payment	Extra Payment	Total Payment	Principal	Interest	Ending Balance	Cumulative Interest
1	2/1/2015	$ 39,062,500.00	$ 217,122.06	$ -	$ 217,122.06	$ 70,637.69	$ 146,484.38	$38,991,862.31	$ 146,484.38
2	3/1/2015	38,991,862.31	217,122.06	-	217,122.06	70,902.58	146,219.48	38,920,959.74	292,703.86
3	4/1/2015	38,920,959.74	217,122.06	-	217,122.06	71,168.46	145,953.60	38,849,791.27	438,657.46
4	5/1/2015	38,849,791.27	217,122.06	-	217,122.06	71,435.34	145,686.72	38,778,355.93	584,344.17
5	6/1/2015	38,778,355.93	217,122.06	-	217,122.06	71,703.23	145,418.83	38,706,652.70	729,763.01
6	7/1/2015	38,706,652.70	217,122.06	-	217,122.06	71,972.11	145,149.95	38,634,680.59	874,912.96
7	8/1/2015	38,634,680.59	217,122.06	-	217,122.06	72,242.01	144,880.05	38,562,438.58	1,019,793.01
8	9/1/2015	38,562,438.58	217,122.06	-	217,122.06	72,512.92	144,609.14	38,489,925.66	1,164,402.15
9	10/1/2015	38,489,925.66	217,122.06	-	217,122.06	72,784.84	144,337.22	38,417,140.82	1,308,739.38
10	11/1/2015	38,417,140.82	217,122.06	-	217,122.06	73,057.78	144,064.28	38,344,083.04	1,452,803.65
11	12/1/2015	38,344,083.04	217,122.06	-	217,122.06	73,331.75	143,790.31	38,270,751.29	1,596,593.96
12	1/1/2016	38,270,751.29	217,122.06	-	217,122.06	73,606.74	143,515.32	38,197,144.54	1,740,109.28
13	2/1/2016	38,197,144.54	217,122.06	-	217,122.06	73,882.77	143,239.29	38,123,261.77	1,883,348.57
14	3/1/2016	38,123,261.77	217,122.06	-	217,122.06	74,159.83	142,962.23	38,049,101.94	2,026,310.81
15	4/1/2016	38,049,101.94	217,122.06	-	217,122.06	74,437.93	142,684.13	37,974,664.01	2,168,994.94
16	5/1/2016	37,974,664.01	217,122.06	-	217,122.06	74,717.07	142,404.99	37,899,946.94	2,311,399.93
17	6/1/2016	37,899,946.94	217,122.06	-	217,122.06	74,997.26	142,124.80	37,824,949.68	2,453,524.73
18	7/1/2016	37,824,949.68	217,122.06	-	217,122.06	75,278.50	141,843.56	37,749,671.18	2,595,368.29
19	8/1/2016	37,749,671.18	217,122.06	-	217,122.06	75,560.79	141,561.27	37,674,110.39	2,736,929.56
20	9/1/2016	37,674,110.39	217,122.06	-	217,122.06	75,844.15	141,277.91	37,598,266.24	2,878,207.47
21	10/1/2016	37,598,266.24	217,122.06	-	217,122.06	76,128.56	140,993.50	37,522,137.67	3,019,200.97
22	11/1/2016	37,522,137.67	217,122.06	-	217,122.06	76,414.05	140,708.02	37,445,723.63	3,159,908.99
23	12/1/2016	37,445,723.63	217,122.06	-	217,122.06	76,700.60	140,421.46	37,369,023.03	3,300,330.45
24	1/1/2017	37,369,023.03	217,122.06	-	217,122.06	76,988.23	140,133.84	37,292,034.81	3,440,464.29
25	2/1/2017	37,292,034.81	217,122.06	-	217,122.06	77,276.93	139,845.13	37,214,757.87	3,580,309.42
26	3/1/2017	37,214,757.87	217,122.06	-	217,122.06	77,566.72	139,555.34	37,137,191.15	3,719,864.76
27	4/1/2017	37,137,191.15	217,122.06	-	217,122.06	77,857.59	139,264.47	37,059,333.56	3,859,129.23
28	5/1/2017	37,059,333.56	217,122.06	-	217,122.06	78,149.56	138,972.50	36,981,184.00	3,998,101.73
29	6/1/2017	36,981,184.00	217,122.06	-	217,122.06	78,442.62	138,679.44	36,902,741.38	4,136,781.17
30	7/1/2017	36,902,741.38	217,122.06	-	217,122.06	78,736.78	138,385.28	36,824,004.60	4,275,166.45
31	8/1/2017	36,824,004.60	217,122.06	-	217,122.06	79,032.04	138,090.02	36,744,972.55	4,413,256.46
32	9/1/2017	36,744,972.55	217,122.06	-	217,122.06	79,328.41	137,793.65	36,665,644.14	4,551,050.11
33	10/1/2017	36,665,644.14	217,122.06	-	217,122.06	79,625.90	137,496.17	36,586,018.24	4,688,546.28
34	11/1/2017	36,586,018.24	217,122.06	-	217,122.06	79,924.49	137,197.57	36,506,093.75	4,825,743.84

PmtNo.	Payment Date	Beginning Balance	Scheduled Payment	Extra Payment	Total Payment	Principal	Interest	Ending Balance	Cumulative Interest
35	12/1/2017	36,506,093.75	217,122.06	-	217,122.06	80,224.21	136,897.85	36,425,869.54	4,962,641.70
36	1/1/2018	36,425,869.54	217,122.06	-	217,122.06	80,525.05	136,597.01	36,345,344.49	5,099,238.71
37	2/1/2018	36,345,344.49	217,122.06	-	217,122.06	80,827.02	136,295.04	36,264,517.47	5,235,533.75
38	3/1/2018	36,264,517.47	217,122.06	-	217,122.06	81,130.12	135,991.94	36,183,387.34	5,371,525.69
39	4/1/2018	36,183,387.34	217,122.06	-	217,122.06	81,434.36	135,687.70	36,101,952.99	5,507,213.39
40	5/1/2018	36,101,952.99	217,122.06	-	217,122.06	81,739.74	135,382.32	36,020,213.25	5,642,595.72
41	6/1/2018	36,020,213.25	217,122.06	-	217,122.06	82,046.26	135,075.80	35,938,166.99	5,777,671.52
42	7/1/2018	35,938,166.99	217,122.06	-	217,122.06	82,353.94	134,768.13	35,855,813.05	5,912,439.64
43	8/1/2018	35,855,813.05	217,122.06	-	217,122.06	82,662.76	134,459.30	35,773,150.29	6,046,898.94
44	9/1/2018	35,773,150.29	217,122.06	-	217,122.06	82,972.75	134,149.31	35,690,177.54	6,181,048.25
45	10/1/2018	35,690,177.54	217,122.06	-	217,122.06	83,283.90	133,838.17	35,606,893.64	6,314,886.42
46	11/1/2018	35,606,893.64	217,122.06	-	217,122.06	83,596.21	133,525.85	35,523,297.43	6,448,412.27
47	12/1/2018	35,523,297.43	217,122.06	-	217,122.06	83,909.70	133,212.37	35,439,387.74	6,581,624.64
48	1/1/2019	35,439,387.74	217,122.06	-	217,122.06	84,224.36	132,897.70	35,355,163.38	6,714,522.34
49	2/1/2019	35,355,163.38	217,122.06	-	217,122.06	84,540.20	132,581.86	35,270,623.18	6,847,104.20
50	3/1/2019	35,270,623.18	217,122.06	-	217,122.06	84,857.22	132,264.84	35,185,765.95	6,979,369.04
51	4/1/2019	35,185,765.95	217,122.06	-	217,122.06	85,175.44	131,946.62	35,100,590.52	7,111,315.66
52	5/1/2019	35,100,590.52	217,122.06	-	217,122.06	85,494.85	131,627.21	35,015,095.67	7,242,942.88
53	6/1/2019	35,015,095.67	217,122.06	-	217,122.06	85,815.45	131,306.61	34,929,280.21	7,374,249.49
54	7/1/2019	34,929,280.21	217,122.06	-	217,122.06	86,137.26	130,984.80	34,843,142.95	7,505,234.29
55	8/1/2019	34,843,142.95	217,122.06	-	217,122.06	86,460.28	130,661.79	34,756,682.68	7,635,896.07
56	9/1/2019	34,756,682.68	217,122.06	-	217,122.06	86,784.50	130,337.56	34,669,898.18	7,766,233.63
57	10/1/2019	34,669,898.18	217,122.06	-	217,122.06	87,109.94	130,012.12	34,582,788.23	7,896,245.75
58	11/1/2019	34,582,788.23	217,122.06	-	217,122.06	87,436.61	129,685.46	34,495,351.63	8,025,931.21
59	12/1/2019	34,495,351.63	217,122.06	-	217,122.06	87,764.49	129,357.57	34,407,587.13	8,155,288.77
60	1/1/2020	34,407,587.13	217,122.06	-	217,122.06	88,093.61	129,028.45	34,319,493.52	8,284,317.23
61	2/1/2020	34,319,493.52	217,122.06	-	217,122.06	88,423.96	128,698.10	34,231,069.56	8,413,015.33
62	3/1/2020	34,231,069.56	217,122.06	-	217,122.06	88,755.55	128,366.51	34,142,314.01	8,541,381.84
63	4/1/2020	34,142,314.01	217,122.06	-	217,122.06	89,088.38	128,033.68	34,053,225.63	8,669,415.52
64	5/1/2020	34,053,225.63	217,122.06	-	217,122.06	89,422.47	127,699.60	33,963,803.16	8,797,115.11
65	6/1/2020	33,963,803.16	217,122.06	-	217,122.06	89,757.80	127,364.26	33,874,045.36	8,924,479.37
66	7/1/2020	33,874,045.36	217,122.06	-	217,122.06	90,094.39	127,027.67	33,783,950.97	9,051,507.04
67	8/1/2020	33,783,950.97	217,122.06	-	217,122.06	90,432.25	126,689.82	33,693,518.73	9,178,196.86
68	9/1/2020	33,693,518.73	217,122.06	-	217,122.06	90,771.37	126,350.70	33,602,747.36	9,304,547.56
69	10/1/2020	33,602,747.36	217,122.06	-	217,122.06	91,111.76	126,010.30	33,511,635.60	9,430,557.86
70	11/1/2020	33,511,635.60	217,122.06	-	217,122.06	91,453.43	125,668.63	33,420,182.17	9,556,226.49
71	12/1/2020	33,420,182.17	217,122.06	-	217,122.06	91,796.38	125,325.68	33,328,385.79	9,681,552.17
72	1/1/2021	33,328,385.79	217,122.06	-	217,122.06	92,140.61	124,981.45	33,236,245.18	9,806,533.62
73	2/1/2021	33,236,245.18	217,122.06	-	217,122.06	92,486.14	124,635.92	33,143,759.04	9,931,169.54
74	3/1/2021	33,143,759.04	217,122.06	-	217,122.06	92,832.97	124,289.10	33,050,926.07	10,055,458.64
75	4/1/2021	33,050,926.07	217,122.06	-	217,122.06	93,181.09	123,940.97	32,957,744.98	10,179,399.61
76	5/1/2021	32,957,744.98	217,122.06	-	217,122.06	93,530.52	123,591.54	32,864,214.46	10,302,991.15
77	6/1/2021	32,864,214.46	217,122.06	-	217,122.06	93,881.26	123,240.80	32,770,333.21	10,426,231.96
78	7/1/2021	32,770,333.21	217,122.06	-	217,122.06	94,233.31	122,888.75	32,676,099.89	10,549,120.71
79	8/1/2021	32,676,099.89	217,122.06	-	217,122.06	94,586.69	122,535.37	32,581,513.21	10,671,656.08
80	9/1/2021	32,581,513.21	217,122.06	-	217,122.06	94,941.39	122,180.67	32,486,571.82	10,793,836.76
81	10/1/2021	32,486,571.82	217,122.06	-	217,122.06	95,297.42	121,824.64	32,391,274.40	10,915,661.40
82	11/1/2021	32,391,274.40	217,122.06	-	217,122.06	95,654.78	121,467.28	32,295,619.62	11,037,128.68

PmtNo.	Payment Date	Beginning Balance	Scheduled Payment	Extra Payment	Total Payment	Principal	Interest	Ending Balance	Cumulative Interest
83	12/1/2021	32,295,619.62	217,122.06	-	217,122.06	96,013.49	121,108.57	32,199,606.13	11,158,237.25
84	1/1/2022	32,199,606.13	217,122.06	-	217,122.06	96,373.54	120,748.52	32,103,232.59	11,278,985.78
85	2/1/2022	32,103,232.59	217,122.06	-	217,122.06	96,734.94	120,387.12	32,006,497.65	11,399,372.90
86	3/1/2022	32,006,497.65	217,122.06	-	217,122.06	97,097.70	120,024.37	31,909,399.96	11,519,397.26
87	4/1/2022	31,909,399.96	217,122.06	-	217,122.06	97,461.81	119,660.25	31,811,938.15	11,639,057.51
88	5/1/2022	31,811,938.15	217,122.06	-	217,122.06	97,827.29	119,294.77	31,714,110.85	11,758,352.28
89	6/1/2022	31,714,110.85	217,122.06	-	217,122.06	98,194.15	118,927.92	31,615,916.71	11,877,280.20
90	7/1/2022	31,615,916.71	217,122.06	-	217,122.06	98,562.37	118,559.69	31,517,354.33	11,995,839.89
91	8/1/2022	31,517,354.33	217,122.06	-	217,122.06	98,931.98	118,190.08	31,418,422.35	12,114,029.96
92	9/1/2022	31,418,422.35	217,122.06	-	217,122.06	99,302.98	117,819.08	31,319,119.37	12,231,849.05
93	10/1/2022	31,319,119.37	217,122.06	-	217,122.06	99,675.36	117,446.70	31,219,444.01	12,349,295.75
94	11/1/2022	31,219,444.01	217,122.06	-	217,122.06	100,049.15	117,072.92	31,119,394.86	12,466,368.66
95	12/1/2022	31,119,394.86	217,122.06	-	217,122.06	100,424.33	116,697.73	31,018,970.53	12,583,066.39
96	1/1/2023	31,018,970.53	217,122.06	-	217,122.06	100,800.92	116,321.14	30,918,169.61	12,699,387.53
97	2/1/2023	30,918,169.61	217,122.06	-	217,122.06	101,178.93	115,943.14	30,816,990.68	12,815,330.67
98	3/1/2023	30,816,990.68	217,122.06	-	217,122.06	101,558.35	115,563.72	30,715,432.34	12,930,894.38
99	4/1/2023	30,715,432.34	217,122.06	-	217,122.06	101,939.19	115,182.87	30,613,493.14	13,046,077.25
100	5/1/2023	30,613,493.14	217,122.06	-	217,122.06	102,321.46	114,800.60	30,511,171.68	13,160,877.85
101	6/1/2023	30,511,171.68	217,122.06	-	217,122.06	102,705.17	114,416.89	30,408,466.51	13,275,294.75
102	7/1/2023	30,408,466.51	217,122.06	-	217,122.06	103,090.31	114,031.75	30,305,376.20	13,389,326.50
103	8/1/2023	30,305,376.20	217,122.06	-	217,122.06	103,476.90	113,645.16	30,201,899.30	13,502,971.66
104	9/1/2023	30,201,899.30	217,122.06	-	217,122.06	103,864.94	113,257.12	30,098,034.36	13,616,228.78
105	10/1/2023	30,098,034.36	217,122.06	-	217,122.06	104,254.43	112,867.63	29,993,779.93	13,729,096.41
106	11/1/2023	29,993,779.93	217,122.06	-	217,122.06	104,645.39	112,476.67	29,889,134.54	13,841,573.08
107	12/1/2023	29,889,134.54	217,122.06	-	217,122.06	105,037.81	112,084.25	29,784,096.74	13,953,657.34
108	1/1/2024	29,784,096.74	217,122.06	-	217,122.06	105,431.70	111,690.36	29,678,665.04	14,065,347.70
109	2/1/2024	29,678,665.04	217,122.06	-	217,122.06	105,827.07	111,294.99	29,572,837.97	14,176,642.69
110	3/1/2024	29,572,837.97	217,122.06	-	217,122.06	106,223.92	110,898.14	29,466,614.05	14,287,540.84
111	4/1/2024	29,466,614.05	217,122.06	-	217,122.06	106,622.26	110,499.80	29,359,991.79	14,398,040.64
112	5/1/2024	29,359,991.79	217,122.06	-	217,122.06	107,022.09	110,099.97	29,252,969.70	14,508,140.61
113	6/1/2024	29,252,969.70	217,122.06	-	217,122.06	107,423.43	109,698.64	29,145,546.27	14,617,839.24
114	7/1/2024	29,145,546.27	217,122.06	-	217,122.06	107,826.26	109,295.80	29,037,720.01	14,727,135.04
115	8/1/2024	29,037,720.01	217,122.06	-	217,122.06	108,230.61	108,891.45	28,929,489.40	14,836,026.49
116	9/1/2024	28,929,489.40	217,122.06	-	217,122.06	108,636.48	108,485.59	28,820,852.92	14,944,512.08
117	10/1/2024	28,820,852.92	217,122.06	-	217,122.06	109,043.86	108,078.20	28,711,809.06	15,052,590.28
118	11/1/2024	28,711,809.06	217,122.06	-	217,122.06	109,452.78	107,669.28	28,602,356.28	15,160,259.56
119	12/1/2024	28,602,356.28	217,122.06	-	217,122.06	109,863.23	107,258.84	28,492,493.05	15,267,518.40
120	1/1/2025	28,492,493.05	217,122.06	-	217,122.06	110,275.21	106,846.85	28,382,217.84	15,374,365.25
121	2/1/2025	28,382,217.84	217,122.06	-	217,122.06	110,688.74	106,433.32	28,271,529.10	15,480,798.56
122	3/1/2025	28,271,529.10	217,122.06	-	217,122.06	111,103.83	106,018.23	28,160,425.27	15,586,816.80
123	4/1/2025	28,160,425.27	217,122.06	-	217,122.06	111,520.47	105,601.59	28,048,904.80	15,692,418.39
124	5/1/2025	28,048,904.80	217,122.06	-	217,122.06	111,938.67	105,183.39	27,936,966.13	15,797,601.78
125	6/1/2025	27,936,966.13	217,122.06	-	217,122.06	112,358.44	104,763.62	27,824,607.69	15,902,365.41
126	7/1/2025	27,824,607.69	217,122.06	-	217,122.06	112,779.78	104,342.28	27,711,827.91	16,006,707.69
127	8/1/2025	27,711,827.91	217,122.06	-	217,122.06	113,202.71	103,919.35	27,598,625.20	16,110,627.04
128	9/1/2025	27,598,625.20	217,122.06	-	217,122.06	113,627.22	103,494.84	27,484,997.99	16,214,121.89
129	10/1/2025	27,484,997.99	217,122.06	-	217,122.06	114,053.32	103,068.74	27,370,944.67	16,317,190.63
130	11/1/2025	27,370,944.67	217,122.06	-	217,122.06	114,481.02	102,641.04	27,256,463.65	16,419,831.67

PmtNo.	Payment Date	Beginning Balance	Scheduled Payment	Extra Payment	Total Payment	Principal	Interest	Ending Balance	Cumulative Interest
131	12/1/2025	27,256,463.65	217,122.06	-	217,122.06	114,910.32	102,211.74	27,141,553.33	16,522,043.41
132	1/1/2026	27,141,553.33	217,122.06	-	217,122.06	115,341.24	101,780.82	27,026,212.09	16,623,824.23
133	2/1/2026	27,026,212.09	217,122.06	-	217,122.06	115,773.77	101,348.30	26,910,438.32	16,725,172.53
134	3/1/2026	26,910,438.32	217,122.06	-	217,122.06	116,207.92	100,914.14	26,794,230.41	16,826,086.67
135	4/1/2026	26,794,230.41	217,122.06	-	217,122.06	116,643.70	100,478.36	26,677,586.71	16,926,565.04
136	5/1/2026	26,677,586.71	217,122.06	-	217,122.06	117,081.11	100,040.95	26,560,505.60	17,026,605.99
137	6/1/2026	26,560,505.60	217,122.06	-	217,122.06	117,520.17	99,601.90	26,442,985.43	17,126,207.88
138	7/1/2026	26,442,985.43	217,122.06	-	217,122.06	117,960.87	99,161.20	26,325,024.56	17,225,369.08
139	8/1/2026	26,325,024.56	217,122.06	-	217,122.06	118,403.22	98,718.84	26,206,621.34	17,324,087.92
140	9/1/2026	26,206,621.34	217,122.06	-	217,122.06	118,847.23	98,274.83	26,087,774.11	17,422,362.75
141	10/1/2026	26,087,774.11	217,122.06	-	217,122.06	119,292.91	97,829.15	25,968,481.20	17,520,191.90
142	11/1/2026	25,968,481.20	217,122.06	-	217,122.06	119,740.26	97,381.80	25,848,740.95	17,617,573.71
143	12/1/2026	25,848,740.95	217,122.06	-	217,122.06	120,189.28	96,932.78	25,728,551.66	17,714,506.49
144	1/1/2027	25,728,551.66	217,122.06	-	217,122.06	120,639.99	96,482.07	25,607,911.67	17,810,988.56
145	2/1/2027	25,607,911.67	217,122.06	-	217,122.06	121,092.39	96,029.67	25,486,819.28	17,907,018.22
146	3/1/2027	25,486,819.28	217,122.06	-	217,122.06	121,546.49	95,575.57	25,365,272.79	18,002,593.80
147	4/1/2027	25,365,272.79	217,122.06	-	217,122.06	122,002.29	95,119.77	25,243,270.50	18,097,713.57
148	5/1/2027	25,243,270.50	217,122.06	-	217,122.06	122,459.80	94,662.26	25,120,810.70	18,192,375.83
149	6/1/2027	25,120,810.70	217,122.06	-	217,122.06	122,919.02	94,203.04	24,997,891.68	18,286,578.87
150	7/1/2027	24,997,891.68	217,122.06	-	217,122.06	123,379.97	93,742.09	24,874,511.71	18,380,320.97
151	8/1/2027	24,874,511.71	217,122.06	-	217,122.06	123,842.64	93,279.42	24,750,669.07	18,473,600.39
152	9/1/2027	24,750,669.07	217,122.06	-	217,122.06	124,307.05	92,815.01	24,626,362.02	18,566,415.40
153	10/1/2027	24,626,362.02	217,122.06	-	217,122.06	124,773.20	92,348.86	24,501,588.81	18,658,764.25
154	11/1/2027	24,501,588.81	217,122.06	-	217,122.06	125,241.10	91,880.96	24,376,347.71	18,750,645.21
155	12/1/2027	24,376,347.71	217,122.06	-	217,122.06	125,710.76	91,411.30	24,250,636.95	18,842,056.52
156	1/1/2028	24,250,636.95	217,122.06	-	217,122.06	126,182.17	90,939.89	24,124,454.78	18,932,996.40
157	2/1/2028	24,124,454.78	217,122.06	-	217,122.06	126,655.36	90,466.71	23,997,799.42	19,023,463.11
158	3/1/2028	23,997,799.42	217,122.06	-	217,122.06	127,130.31	89,991.75	23,870,669.11	19,113,454.86
159	4/1/2028	23,870,669.11	217,122.06	-	217,122.06	127,607.05	89,515.01	23,743,062.06	19,202,969.87
160	5/1/2028	23,743,062.06	217,122.06	-	217,122.06	128,085.58	89,036.48	23,614,976.48	19,292,006.35
161	6/1/2028	23,614,976.48	217,122.06	-	217,122.06	128,565.90	88,556.16	23,486,410.58	19,380,562.51
162	7/1/2028	23,486,410.58	217,122.06	-	217,122.06	129,048.02	88,074.04	23,357,362.55	19,468,636.55
163	8/1/2028	23,357,362.55	217,122.06	-	217,122.06	129,531.95	87,590.11	23,227,830.60	19,556,226.66
164	9/1/2028	23,227,830.60	217,122.06	-	217,122.06	130,017.70	87,104.36	23,097,812.91	19,643,331.03
165	10/1/2028	23,097,812.91	217,122.06	-	217,122.06	130,505.26	86,616.80	22,967,307.64	19,729,947.82
166	11/1/2028	22,967,307.64	217,122.06	-	217,122.06	130,994.66	86,127.40	22,836,312.98	19,816,075.23
167	12/1/2028	22,836,312.98	217,122.06	-	217,122.06	131,485.89	85,636.17	22,704,827.10	19,901,711.40
168	1/1/2029	22,704,827.10	217,122.06	-	217,122.06	131,978.96	85,143.10	22,572,848.14	19,986,854.50
169	2/1/2029	22,572,848.14	217,122.06	-	217,122.06	132,473.88	84,648.18	22,440,374.26	20,071,502.68
170	3/1/2029	22,440,374.26	217,122.06	-	217,122.06	132,970.66	84,151.40	22,307,403.60	20,155,654.09
171	4/1/2029	22,307,403.60	217,122.06	-	217,122.06	133,469.30	83,652.76	22,173,934.30	20,239,306.85
172	5/1/2029	22,173,934.30	217,122.06	-	217,122.06	133,969.81	83,152.25	22,039,964.49	20,322,459.10
173	6/1/2029	22,039,964.49	217,122.06	-	217,122.06	134,472.19	82,649.87	21,905,492.30	20,405,108.97
174	7/1/2029	21,905,492.30	217,122.06	-	217,122.06	134,976.47	82,145.60	21,770,515.83	20,487,254.57
175	8/1/2029	21,770,515.83	217,122.06	-	217,122.06	135,482.63	81,639.43	21,635,033.20	20,568,894.00
176	9/1/2029	21,635,033.20	217,122.06	-	217,122.06	135,990.69	81,131.37	21,499,042.52	20,650,025.38
177	10/1/2029	21,499,042.52	217,122.06	-	217,122.06	136,500.65	80,621.41	21,362,541.86	20,730,646.78
178	11/1/2029	21,362,541.86	217,122.06	-	217,122.06	137,012.53	80,109.53	21,225,529.33	20,810,756.32

PmtNo.	Payment Date	Beginning Balance	Scheduled Payment	Extra Payment	Total Payment	Principal	Interest	Ending Balance	Cumulative Interest
179	12/1/2029	21,225,529.33	217,122.06	-	217,122.06	137,526.33	79,595.74	21,088,003.01	20,890,352.05
180	1/1/2030	21,088,003.01	217,122.06	-	217,122.06	138,042.05	79,080.01	20,949,960.96	20,969,432.06
181	2/1/2030	20,949,960.96	217,122.06	-	217,122.06	138,559.71	78,562.35	20,811,401.25	21,047,994.42
182	3/1/2030	20,811,401.25	217,122.06	-	217,122.06	139,079.31	78,042.75	20,672,321.94	21,126,037.17
183	4/1/2030	20,672,321.94	217,122.06	-	217,122.06	139,600.85	77,521.21	20,532,721.09	21,203,558.38
184	5/1/2030	20,532,721.09	217,122.06	-	217,122.06	140,124.36	76,997.70	20,392,596.73	21,280,556.08
185	6/1/2030	20,392,596.73	217,122.06	-	217,122.06	140,649.82	76,472.24	20,251,946.91	21,357,028.32
186	7/1/2030	20,251,946.91	217,122.06	-	217,122.06	141,177.26	75,944.80	20,110,769.64	21,432,973.12
187	8/1/2030	20,110,769.64	217,122.06	-	217,122.06	141,706.68	75,415.39	19,969,062.97	21,508,388.51
188	9/1/2030	19,969,062.97	217,122.06	-	217,122.06	142,238.08	74,883.99	19,826,824.89	21,583,272.49
189	10/1/2030	19,826,824.89	217,122.06	-	217,122.06	142,771.47	74,350.59	19,684,053.42	21,657,623.09
190	11/1/2030	19,684,053.42	217,122.06	-	217,122.06	143,306.86	73,815.20	19,540,746.56	21,731,438.29
191	12/1/2030	19,540,746.56	217,122.06	-	217,122.06	143,844.26	73,277.80	19,396,902.30	21,804,716.09
192	1/1/2031	19,396,902.30	217,122.06	-	217,122.06	144,383.68	72,738.38	19,252,518.62	21,877,454.47
193	2/1/2031	19,252,518.62	217,122.06	-	217,122.06	144,925.12	72,196.94	19,107,593.51	21,949,651.42
194	3/1/2031	19,107,593.51	217,122.06	-	217,122.06	145,468.59	71,653.48	18,962,124.92	22,021,304.89
195	4/1/2031	18,962,124.92	217,122.06	-	217,122.06	146,014.09	71,107.97	18,816,110.83	22,092,412.86
196	5/1/2031	18,816,110.83	217,122.06	-	217,122.06	146,561.65	70,560.42	18,669,549.18	22,162,973.28
197	6/1/2031	18,669,549.18	217,122.06	-	217,122.06	147,111.25	70,010.81	18,522,437.93	22,232,984.08
198	7/1/2031	18,522,437.93	217,122.06	-	217,122.06	147,662.92	69,459.14	18,374,775.01	22,302,443.23
199	8/1/2031	18,374,775.01	217,122.06	-	217,122.06	148,216.66	68,905.41	18,226,558.35	22,371,348.63
200	9/1/2031	18,226,558.35	217,122.06	-	217,122.06	148,772.47	68,349.59	18,077,785.89	22,439,698.23
201	10/1/2031	18,077,785.89	217,122.06	-	217,122.06	149,330.36	67,791.70	17,928,455.52	22,507,489.92
202	11/1/2031	17,928,455.52	217,122.06	-	217,122.06	149,890.35	67,231.71	17,778,565.17	22,574,721.63
203	12/1/2031	17,778,565.17	217,122.06	-	217,122.06	150,452.44	66,669.62	17,628,112.73	22,641,391.25
204	1/1/2032	17,628,112.73	217,122.06	-	217,122.06	151,016.64	66,105.42	17,477,096.09	22,707,496.67
205	2/1/2032	17,477,096.09	217,122.06	-	217,122.06	151,582.95	65,539.11	17,325,513.14	22,773,035.78
206	3/1/2032	17,325,513.14	217,122.06	-	217,122.06	152,151.39	64,970.67	17,173,361.75	22,838,006.46
207	4/1/2032	17,173,361.75	217,122.06	-	217,122.06	152,721.96	64,400.11	17,020,639.79	22,902,406.57
208	5/1/2032	17,020,639.79	217,122.06	-	217,122.06	153,294.66	63,827.40	16,867,345.13	22,966,233.96
209	6/1/2032	16,867,345.13	217,122.06	-	217,122.06	153,869.52	63,252.54	16,713,475.61	23,029,486.51
210	7/1/2032	16,713,475.61	217,122.06	-	217,122.06	154,446.53	62,675.53	16,559,029.08	23,092,162.04
211	8/1/2032	16,559,029.08	217,122.06	-	217,122.06	155,025.70	62,096.36	16,404,003.38	23,154,258.40
212	9/1/2032	16,404,003.38	217,122.06	-	217,122.06	155,607.05	61,515.01	16,248,396.33	23,215,773.41
213	10/1/2032	16,248,396.33	217,122.06	-	217,122.06	156,190.58	60,931.49	16,092,205.76	23,276,704.90
214	11/1/2032	16,092,205.76	217,122.06	-	217,122.06	156,776.29	60,345.77	15,935,429.47	23,337,050.67
215	12/1/2032	15,935,429.47	217,122.06	-	217,122.06	157,364.20	59,757.86	15,778,065.27	23,396,808.53
216	1/1/2033	15,778,065.27	217,122.06	-	217,122.06	157,954.32	59,167.74	15,620,110.95	23,455,976.28
217	2/1/2033	15,620,110.95	217,122.06	-	217,122.06	158,546.65	58,575.42	15,461,564.30	23,514,551.69
218	3/1/2033	15,461,564.30	217,122.06	-	217,122.06	159,141.20	57,980.87	15,302,423.11	23,572,532.56
219	4/1/2033	15,302,423.11	217,122.06	-	217,122.06	159,737.98	57,384.09	15,142,685.13	23,629,916.65
220	5/1/2033	15,142,685.13	217,122.06	-	217,122.06	160,336.99	56,785.07	14,982,348.14	23,686,701.72
221	6/1/2033	14,982,348.14	217,122.06	-	217,122.06	160,938.26	56,183.81	14,821,409.88	23,742,885.52
222	7/1/2033	14,821,409.88	217,122.06	-	217,122.06	161,541.77	55,580.29	14,659,868.11	23,798,465.81
223	8/1/2033	14,659,868.11	217,122.06	-	217,122.06	162,147.56	54,974.51	14,497,720.55	23,853,440.31
224	9/1/2033	14,497,720.55	217,122.06	-	217,122.06	162,755.61	54,366.45	14,334,964.94	23,907,806.77
225	10/1/2033	14,334,964.94	217,122.06	-	217,122.06	163,365.94	53,756.12	14,171,599.00	23,961,562.88
226	11/1/2033	14,171,599.00	217,122.06	-	217,122.06	163,978.57	53,143.50	14,007,620.44	24,014,706.38

PmtNo.	Payment Date	Beginning Balance	Scheduled Payment	Extra Payment	Total Payment	Principal	Interest	Ending Balance	Cumulative Interest
227	12/1/2033	14,007,620.44	217,122.06	-	217,122.06	164,593.49	52,528.58	13,843,026.95	24,067,234.96
228	1/1/2034	13,843,026.95	217,122.06	-	217,122.06	165,210.71	51,911.35	13,677,816.24	24,119,146.31
229	2/1/2034	13,677,816.24	217,122.06	-	217,122.06	165,830.25	51,291.81	13,511,985.99	24,170,438.12
230	3/1/2034	13,511,985.99	217,122.06	-	217,122.06	166,452.11	50,669.95	13,345,533.87	24,221,108.07
231	4/1/2034	13,345,533.87	217,122.06	-	217,122.06	167,076.31	50,045.75	13,178,457.56	24,271,153.82
232	5/1/2034	13,178,457.56	217,122.06	-	217,122.06	167,702.85	49,419.22	13,010,754.72	24,320,573.03
233	6/1/2034	13,010,754.72	217,122.06	-	217,122.06	168,331.73	48,790.33	12,842,422.99	24,369,363.36
234	7/1/2034	12,842,422.99	217,122.06	-	217,122.06	168,962.98	48,159.09	12,673,460.01	24,417,522.45
235	8/1/2034	12,673,460.01	217,122.06	-	217,122.06	169,596.59	47,525.48	12,503,863.43	24,465,047.93
236	9/1/2034	12,503,863.43	217,122.06	-	217,122.06	170,232.57	46,889.49	12,333,630.85	24,511,937.41
237	10/1/2034	12,333,630.85	217,122.06	-	217,122.06	170,870.95	46,251.12	12,162,759.91	24,558,188.53
238	11/1/2034	12,162,759.91	217,122.06	-	217,122.06	171,511.71	45,610.35	11,991,248.19	24,603,798.88
239	12/1/2034	11,991,248.19	217,122.06	-	217,122.06	172,154.88	44,967.18	11,819,093.31	24,648,766.06
240	1/1/2035	11,819,093.31	217,122.06	-	217,122.06	172,800.46	44,321.60	11,646,292.85	24,693,087.66
241	2/1/2035	11,646,292.85	217,122.06	-	217,122.06	173,448.46	43,673.60	11,472,844.39	24,736,761.26
242	3/1/2035	11,472,844.39	217,122.06	-	217,122.06	174,098.90	43,023.17	11,298,745.49	24,779,784.42
243	4/1/2035	11,298,745.49	217,122.06	-	217,122.06	174,751.77	42,370.30	11,123,993.73	24,822,154.72
244	5/1/2035	11,123,993.73	217,122.06	-	217,122.06	175,407.09	41,714.98	10,948,586.64	24,863,869.70
245	6/1/2035	10,948,586.64	217,122.06	-	217,122.06	176,064.86	41,057.20	10,772,521.78	24,904,926.90
246	7/1/2035	10,772,521.78	217,122.06	-	217,122.06	176,725.11	40,396.96	10,595,796.67	24,945,323.85
247	8/1/2035	10,595,796.67	217,122.06	-	217,122.06	177,387.82	39,734.24	10,418,408.85	24,985,058.09
248	9/1/2035	10,418,408.85	217,122.06	-	217,122.06	178,053.03	39,069.03	10,240,355.82	25,024,127.12
249	10/1/2035	10,240,355.82	217,122.06	-	217,122.06	178,720.73	38,401.33	10,061,635.09	25,062,528.46
250	11/1/2035	10,061,635.09	217,122.06	-	217,122.06	179,390.93	37,731.13	9,882,244.16	25,100,259.59
251	12/1/2035	9,882,244.16	217,122.06	-	217,122.06	180,063.65	37,058.42	9,702,180.52	25,137,318.00
252	1/1/2036	9,702,180.52	217,122.06	-	217,122.06	180,738.88	36,383.18	9,521,441.63	25,173,701.18
253	2/1/2036	9,521,441.63	217,122.06	-	217,122.06	181,416.66	35,705.41	9,340,024.98	25,209,406.59
254	3/1/2036	9,340,024.98	217,122.06	-	217,122.06	182,096.97	35,025.09	9,157,928.01	25,244,431.68
255	4/1/2036	9,157,928.01	217,122.06	-	217,122.06	182,779.83	34,342.23	8,975,148.18	25,278,773.91
256	5/1/2036	8,975,148.18	217,122.06	-	217,122.06	183,465.26	33,656.81	8,791,682.92	25,312,430.72
257	6/1/2036	8,791,682.92	217,122.06	-	217,122.06	184,153.25	32,968.81	8,607,529.67	25,345,399.53
258	7/1/2036	8,607,529.67	217,122.06	-	217,122.06	184,843.83	32,278.24	8,422,685.84	25,377,677.76
259	8/1/2036	8,422,685.84	217,122.06	-	217,122.06	185,536.99	31,585.07	8,237,148.86	25,409,262.84
260	9/1/2036	8,237,148.86	217,122.06	-	217,122.06	186,232.75	30,889.31	8,050,916.10	25,440,152.14
261	10/1/2036	8,050,916.10	217,122.06	-	217,122.06	186,931.13	30,190.94	7,863,984.98	25,470,343.08
262	11/1/2036	7,863,984.98	217,122.06	-	217,122.06	187,632.12	29,489.94	7,676,352.86	25,499,833.02
263	12/1/2036	7,676,352.86	217,122.06	-	217,122.06	188,335.74	28,786.32	7,488,017.12	25,528,619.35
264	1/1/2037	7,488,017.12	217,122.06	-	217,122.06	189,042.00	28,080.06	7,298,975.12	25,556,699.41
265	2/1/2037	7,298,975.12	217,122.06	-	217,122.06	189,750.90	27,371.16	7,109,224.22	25,584,070.57
266	3/1/2037	7,109,224.22	217,122.06	-	217,122.06	190,462.47	26,659.59	6,918,761.75	25,610,730.16
267	4/1/2037	6,918,761.75	217,122.06	-	217,122.06	191,176.71	25,945.36	6,727,585.04	25,636,675.52
268	5/1/2037	6,727,585.04	217,122.06	-	217,122.06	191,893.62	25,228.44	6,535,691.42	25,661,903.96
269	6/1/2037	6,535,691.42	217,122.06	-	217,122.06	192,613.22	24,508.84	6,343,078.20	25,686,412.80
270	7/1/2037	6,343,078.20	217,122.06	-	217,122.06	193,335.52	23,786.54	6,149,742.69	25,710,199.35
271	8/1/2037	6,149,742.69	217,122.06	-	217,122.06	194,060.53	23,061.54	5,955,682.16	25,733,260.88
272	9/1/2037	5,955,682.16	217,122.06	-	217,122.06	194,788.25	22,333.81	5,760,893.90	25,755,594.69
273	10/1/2037	5,760,893.90	217,122.06	-	217,122.06	195,518.71	21,603.35	5,565,375.20	25,777,198.04
274	11/1/2037	5,565,375.20	217,122.06	-	217,122.06	196,251.90	20,870.16	5,369,123.29	25,798,068.20

PmtNo.	Payment Date	Beginning Balance	Scheduled Payment	Extra Payment	Total Payment	Principal	Interest	Ending Balance	Cumulative Interest
275	12/1/2037	5,369,123.29	217,122.06	-	217,122.06	196,987.85	20,134.21	5,172,135.44	25,818,202.41
276	1/1/2038	5,172,135.44	217,122.06	-	217,122.06	197,726.55	19,395.51	4,974,408.89	25,837,597.92
277	2/1/2038	4,974,408.89	217,122.06	-	217,122.06	198,468.03	18,654.03	4,775,940.86	25,856,251.95
278	3/1/2038	4,775,940.86	217,122.06	-	217,122.06	199,212.28	17,909.78	4,576,728.58	25,874,161.73
279	4/1/2038	4,576,728.58	217,122.06	-	217,122.06	199,959.33	17,162.73	4,376,769.25	25,891,324.46
280	5/1/2038	4,376,769.25	217,122.06	-	217,122.06	200,709.18	16,412.88	4,176,060.07	25,907,737.35
281	6/1/2038	4,176,060.07	217,122.06	-	217,122.06	201,461.84	15,660.23	3,974,598.23	25,923,397.57
282	7/1/2038	3,974,598.23	217,122.06	-	217,122.06	202,217.32	14,904.74	3,772,380.91	25,938,302.31
283	8/1/2038	3,772,380.91	217,122.06	-	217,122.06	202,975.63	14,146.43	3,569,405.28	25,952,448.74
284	9/1/2038	3,569,405.28	217,122.06	-	217,122.06	203,736.79	13,385.27	3,365,668.49	25,965,834.01
285	10/1/2038	3,365,668.49	217,122.06	-	217,122.06	204,500.80	12,621.26	3,161,167.68	25,978,455.27
286	11/1/2038	3,161,167.68	217,122.06	-	217,122.06	205,267.68	11,854.38	2,955,900.00	25,990,309.65
287	12/1/2038	2,955,900.00	217,122.06	-	217,122.06	206,037.44	11,084.63	2,749,862.56	26,001,394.27
288	1/1/2039	2,749,862.56	217,122.06	-	217,122.06	206,810.08	10,311.98	2,543,052.49	26,011,706.26
289	2/1/2039	2,543,052.49	217,122.06	-	217,122.06	207,585.61	9,536.45	2,335,466.87	26,021,242.71
290	3/1/2039	2,335,466.87	217,122.06	-	217,122.06	208,364.06	8,758.00	2,127,102.81	26,030,000.71
291	4/1/2039	2,127,102.81	217,122.06	-	217,122.06	209,145.43	7,976.64	1,917,957.39	26,037,977.34
292	5/1/2039	1,917,957.39	217,122.06	-	217,122.06	209,929.72	7,192.34	1,708,027.66	26,045,169.68
293	6/1/2039	1,708,027.66	217,122.06	-	217,122.06	210,716.96	6,405.10	1,497,310.71	26,051,574.79
294	7/1/2039	1,497,310.71	217,122.06	-	217,122.06	211,507.15	5,614.92	1,285,803.56	26,057,189.70
295	8/1/2039	1,285,803.56	217,122.06	-	217,122.06	212,300.30	4,821.76	1,073,503.26	26,062,011.46
296	9/1/2039	1,073,503.26	217,122.06	-	217,122.06	213,096.42	4,025.64	860,406.84	26,066,037.10
297	10/1/2039	860,406.84	217,122.06	-	217,122.06	213,895.54	3,226.53	646,511.30	26,069,263.63
298	11/1/2039	646,511.30	217,122.06	-	217,122.06	214,697.64	2,424.42	431,813.66	26,071,688.04
299	12/1/2039	431,813.66	217,122.06	-	217,122.06	215,502.76	1,619.30	216,310.90	26,073,307.35
300	1/1/2040	216,310.90	217,122.06	-	216,310.90	215,499.73	811.17	0.00	26,074,118.51

Rates

RATES	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5	YEAR 6	YEAR 7	YEAR 8	YEAR 9	YEAR 10
Up to 0.5 hours	$ 8.00	$ 8.25	$ 8.50	$ 8.75	$ 9.00	$ 9.25	$ 9.50	$ 9.75	$ 10.00	$ 10.25
0.5 to 1.0 hour	$ 10.00	$ 10.25	$ 10.50	$ 10.75	$ 11.00	$ 11.25	$ 11.50	$ 11.75	$ 12.00	$ 12.25
1.0 to 1.5 hours	$ 12.00	$ 12.25	$ 12.50	$ 12.75	$ 13.00	$ 13.25	$ 13.50	$ 13.75	$ 14.00	$ 14.25
1.5 to 2.0 hours	$ 13.00	$ 13.50	$ 14.00	$ 14.50	$ 15.00	$ 15.50	$ 16.00	$ 16.50	$ 17.00	$ 17.50
2.0 to 2.5 hours	$ 14.00	$ 14.50	$ 15.00	$ 15.50	$ 16.00	$ 16.50	$ 17.00	$ 17.50	$ 18.00	$ 18.50
2.5 to 3.0 hours	$ 15.00	$ 15.50	$ 16.00	$ 16.50	$ 17.00	$ 17.50	$ 18.00	$ 18.50	$ 19.00	$ 19.50
3.0 to 3.5 hours	$ 16.00	$ 16.50	$ 17.00	$ 17.50	$ 18.00	$ 18.50	$ 19.00	$ 19.50	$ 20.00	$ 20.50
3.5 to 4.0 hours	$ 17.00	$ 17.50	$ 18.00	$ 18.50	$ 19.00	$ 19.50	$ 20.00	$ 20.50	$ 21.00	$ 21.50
4.0 to 4.5 hours	$ 18.00	$ 18.50	$ 19.00	$ 19.50	$ 20.00	$ 20.50	$ 21.00	$ 21.50	$ 22.00	$ 22.50
Daily Maximum	$ 20.00	$ 20.50	$ 21.00	$ 21.50	$ 22.00	$ 22.50	$ 23.00	$ 23.50	$ 24.00	$ 24.50
Early Bird [1]	$ 13.00	$ 13.50	$ 14.00	$ 14.50	$ 15.00	$ 15.50	$ 16.00	$ 16.50	$ 17.00	$ 17.50
Overnight Monthly [2]	$ 80.00	$ 82.50	$ 85.00	$ 87.50	$ 90.00	$ 92.50	$ 95.00	$ 97.50	$ 100.00	$ 102.50
Limited Monthly [3]	$ 110.00	$ 113.50	$ 117.00	$ 120.50	$ 124.00	$ 127.50	$ 131.00	$ 134.50	$ 138.00	$ 141.50
General Monthly [4]	$ 140.00	$ 144.00	$ 148.00	$ 152.00	$ 156.00	$ 160.00	$ 164.00	$ 168.00	$ 172.00	$ 176.00
Reserved Monthly [5]	$ 200.00	$ 206.00	$ 212.00	$ 218.00	$ 224.00	$ 230.00	$ 236.00	$ 242.00	$ 248.00	$ 254.00

Notes:

1. Daily transients arriving before 8:01 AM and exiting before 6:00 PM.

2. Overnight parkers can only enter the facility after 5:00 PM and and must leave by 8:00 AM on the following weekdays; 24/7 on Saturdays, Sundays and holidays.

3. Limited monthly parkers will have access to the facility only between the hours of 7:00 AM and 7:00 PM on weekdays only; not holidays or weekends.

4. General monthly parkers will have 24/7 access to the facility.

5. Reserved monthly parkers will have a parking space set aside for their exclusive use.

Staffing

POSITION	#	PAY RATE		HRS/ WK	ANNUAL PAYROLL	TAXES	BENEFITS	WORKER'S COMP	UNIFORMS
General Manager	1	$ 48,200	/year	40	$ 48,200	$ 5,302	$ 4,338	$ 1,205	$ 723
Bookkeeper	1	$ 18.10	/hour	40	$ 37,648	$ 4,141	$ 3,388	$ 941	$ 565
Maintenance Worker	1	$ 11.92	/hour	40	$ 24,794	$ 2,727	$ 2,231	$ 620	$ 372
Cashier/Attendants	2	$ 9.84	/hour	40	$ 40,934	$ 4,503	$ 3,684	$ 1,023	$ 614
TOTAL					**$ 151,576**	**$ 16,673**	**$ 13,642**	**$ 3,789**	**$ 2,274**

Development Scenarios

SCENARIO 1

	RESEARCH/OFFICE			RETAIL/ACTIVE			RESIDENTIAL		
Parcel	Average Program (SF)	Parking Ratio (sp/KSF)	Projected Demand	Average Program (SF)	Parking Ratio (sp/KSF)	Projected Demand	Average Program (Units)	Parking Ratio (sp/unit)	Projected Demand [1]
22	447,500	2.85	1,275	20,000	4.05	81	-	1.5	0
25	305,000	2.85	869	12,500	4.05	51	-	1.5	0
27	129,500	2.85	369	7,500	4.05	30	-	1.5	0
28	144,000	2.85	410	15,000	4.05	61	160	1.5	240
Total	**1,026,000**		**2,924**	**55,000**		**223**	**160**		**240**

SCENARIO 2

	RESEARCH/OFFICE			RETAIL/ACTIVE			RESIDENTIAL		
Parcel	Average Program (SF)	Parking Ratio (sp/KSF)	Projected Demand	Average Program (SF)	Parking Ratio (sp/KSF)	Projected Demand	Average Program (Units)	Parking Ratio (sp/unit)	Projected Demand [2,3]
22	-	2.85	0	12,500	4.05	51	675	1.5	813
25	380,000	2.85	1,083	15,000	4.05	61	-	1.5	0
27	136,000	2.85	388	7,500	4.05	30	-	1.5	0
28	-	2.85	0	12,500	4.05	51	375	1.5	383
Total	**516,000**		**1,471**	**47,500**		**192**	**1,050**		**1,195**

Notes:

1. No parking planned to support P28 residential building.

2. Reflects demand after planned 200-space parking structure to partially support residential units on P22.

3. Reflects demand after planned 180-space parking structure to partially support residential units on P28.

Revenue Model

ESCALATION:	**Year 1**	**Year 2**	**Year 3**	**Year 4**	**Year 5**	**Year 6**	**Year 7**	**Year 8**	**Year 9**	**Year 10**
Garrahy Employees (Contract)	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Garrahy Visitors [1]	$ -	$ 0.50	$ 1.00	$ 1.50	$ 2.00	$ 2.50	$ 3.00	$ 3.50	$ 4.00	$ 4.50
PPAC Patrons [2]	$ -	$ 0.50	$ 1.00	$ 1.50	$ 2.00	$ 2.50	$ 3.00	$ 3.50	$ 4.00	$ 4.50
General Transients [3]	$ -	$ 0.50	$ 1.00	$ 1.50	$ 2.00	$ 2.50	$ 3.00	$ 3.50	$ 4.00	$ 4.50
Overnight Monthly	$ -	$ 2.50	$ 5.00	$ 7.50	$ 10.00	$ 12.50	$ 15.00	$ 17.50	$ 20.00	$ 22.50
Limited Monthly	$ -	$ 3.50	$ 7.00	$ 10.50	$ 14.00	$ 17.50	$ 21.00	$ 24.50	$ 28.00	$ 31.50
General Monthly	$ -	$ 4.00	$ 8.00	$ 12.00	$ 16.00	$ 20.00	$ 24.00	$ 28.00	$ 32.00	$ 36.00
GROWTH/CHANGE:										
Garrahy Employees (Contract)	-	-	-	-	-	-	-	-	-	-
Garrahy Visitors/Early Bird Parkers [4]	-	25	50	75	65	50	40	(20)	(40)	(60)
PPAC Patrons/ Evening Transient [5]	-	5	10	15	15	15	25	40	60	70
General Transients [6]	-	2	4	6	8	10	20	40	50	60
Overnight Monthly [7]	-	2	4	6	8	10	110	125	150	200
Limited Monthly [8]	-	3	6	9	12	18	30	42	60	72
General Monthly [9]	-	5	10	15	20	25	50	100	150	200

REVENUES:

UserType	***Avg. Users/ Day***	***Oversell/ Turnover***	***Operating Days/Year***	***Average Ticket/Rate***	**Year 1**	**Year 2**	**Year 3**	**Year 4**	**Year 5**	**Year 6**	**Year 7**	**Year 8**	**Year 9**	**Year 10**
Garrahy Employees (Contract)	517	0%	12	$ -	$ 384,000	$ 384,000	$ 384,000	$ 384,000	$ 384,000	$ 384,000	$ 384,000	$ 384,000	$ 384,000	$ 384,000
Early Bird Parkers	600	10%	250	$ 13.00	$ 2,145,000	$ 2,311,875	$ 2,485,000	$ 2,664,375	$ 2,718,750	$ 2,751,250	$ 2,800,000	$ 2,640,000	$ 2,635,000	$ 2,625,000
Evening Transients	50	-	30	$ 14.00	$ 21,000	$ 23,925	$ 27,000	$ 30,225	$ 31,200	$ 32,175	$ 38,250	$ 47,250	$ 59,400	$ 66,600
Day Transients	50	10%	250	$ 15.00	$ 206,250	$ 220,875	$ 236,000	$ 251,625	$ 267,750	$ 284,375	$ 337,500	$ 439,375	$ 498,750	$ 560,625
Overnight Monthly	10	-	12	$ 80.00	$ 9,600	$ 11,880	$ 14,280	$ 16,800	$ 19,440	$ 22,200	$ 136,800	$ 157,950	$ 192,000	$ 258,300
Limited Monthly	20	20%	12	$ 110.00	$ 31,680	$ 36,774	$ 42,120	$ 47,718	$ 53,568	$ 64,260	$ 84,888	$ 106,524	$ 139,104	$ 163,008
General Monthly	35	20%	12	$ 140.00	$ 70,560	$ 81,216	$ 92,352	$ 103,968	$ 116,064	$ 128,640	$ 181,056	$ 286,272	$ 396,288	$ 511,104
TOTAL					**$ 2,868,090**	**$ 3,070,545**	**$ 3,280,752**	**$ 3,498,711**	**$ 3,590,772**	**$ 3,666,900**	**$ 3,962,494**	**$ 4,061,371**	**$ 4,304,542**	**$ 4,568,637**
Revenue/Space					***$ 2,294.47***	***$ 2,456.44***	***$ 2,624.60***	***$ 2,798.97***	***$ 2,872.62***	***$ 2,933.52***	***$ 3,170.00***	***$ 3,249.10***	***$ 3,443.63***	***$ 3,654.91***

Notes:

1. Garrahy Visitor median rate is equivalent to an average 2 hour length of stay and/or Early Bird rate.
2. PPAC/Evening Patron rate is equivalent to an average 2.5 hour length of stay.
3. Day Transient rate is equivalent to an average 3.0 hour length of stay.
4. Judicial service estimates there are 2,500 visitors/day to the Garrahy Courthouse currently; the majority of these are accounted for in revenue modelling as Early Birds. Volumes will increase with area development until Year 8, at which time numbers will decrease due to limited capacity after monthly pass sales.
5. Early growth will come from 'word of mouth' capture of PPAC patrons; later growth will be driven by development of retail/active uses on parcels.
6. Early growth will come from Brown Medical School visitors; later growth will be driven by development of retail/active and research/office uses on parcels.
7. Growth will come from development of residential units in and around the area.
8. Early growth will come from Brown Medical School staff; later growth will be driven by development of retail/active and research/office uses on parcels.
9. Early growth will come from Brown Medical School staff; later growth will be driven by development of retail/active and research/office uses on parcels.

Base Pro Forma

Capacity: *1250*

YEAR:		1	2	3	4	5	6	7	8	9	10
REVENUES											
Garrahy Employees (Contract)		384,000	384,000	384,000	384,000	384,000	384,000	384,000	384,000	384,000	384,000
Early Bird Parkers		2,145,000	2,311,875	2,485,000	2,664,375	2,718,750	2,751,250	2,800,000	2,640,000	2,635,000	2,625,000
Evening Transients		21,000	23,925	27,000	30,225	31,200	32,175	38,250	47,250	59,400	66,600
Day Transients		206,250	220,875	236,000	251,625	267,750	284,375	337,500	439,375	498,750	560,625
Overnight Monthly		9,600	11,880	14,280	16,800	19,440	22,200	136,800	157,950	192,000	258,300
Limited Monthly		31,680	36,774	42,120	47,718	53,568	64,260	84,888	106,524	139,104	163,008
General Monthly		70,560	81,216	92,352	103,968	116,064	128,640	181,056	286,272	396,288	511,104
Total Gross Revenues		**$ 2,868,090**	**$ 3,070,545**	**$ 3,280,752**	**$ 3,498,711**	**$ 3,590,772**	**$ 3,666,900**	**$ 3,962,494**	**$ 4,061,371**	**$ 4,304,542**	**$ 4,568,637**
Rev/Space		***$ 4,097***	***$ 4,386***	***$ 4,687***	***$ 4,998***	***$ 5,130***	***$ 5,238***	***$ 5,661***	***$ 5,802***	***$ 6,149***	***$ 6,527***
EXPENSES:											
Payroll	$ 121.26 /space	151,576	156,123	160,807	165,631	170,600	175,718	180,990	186,419	192,012	197,772
Payroll Taxes	$ 13.34 /space	16,673	17,174	17,689	18,219	18,766	19,329	19,909	20,506	21,121	21,755
Benefits	$ 10.91 /space	13,642	14,051	14,473	14,907	15,354	15,815	16,289	16,778	17,281	17,800
Worker's Comp	$ 3.03 /space	3,789	3,903	4,020	4,141	4,265	4,393	4,525	4,660	4,800	4,944
Uniforms	$ 1.82 /space	2,274	2,342	2,412	2,484	2,559	2,636	2,715	2,796	2,880	2,967
Utilities	$ 92.67 /space	115,838	119,313	122,892	126,579	130,376	134,287	138,316	142,466	146,739	151,142
Insurance	$ 18.33 /space	22,913	23,600	24,308	25,037	25,788	26,562	27,359	28,179	29,025	29,896
Supplies	$ 6.53 /space	8,163	8,407	8,660	8,919	9,187	9,463	9,746	10,039	10,340	10,650
Postage	$ 0.77 /space	963	991	1,021	1,052	1,083	1,116	1,149	1,184	1,219	1,256
Contracted Services	$ 4.67 /space	5,838	6,013	6,193	6,379	6,570	6,767	6,970	7,179	7,395	7,617
Elevator Maintenance	$ 600.00 /shaft	4,800	4,944	5,092	5,245	5,402	5,565	5,731	5,903	6,080	6,263
Snow Removal	$ 1.69 /space	2,113	2,176	2,241	2,308	2,378	2,449	2,522	2,598	2,676	2,756
Credit Card Fees [1]	$ 51.63 /space	64,532	66,468	68,462	70,516	72,631	74,810	77,055	79,366	81,747	84,200
Repairs & Maintenance	$ 87.80 /space	109,750	113,043	116,434	119,927	123,525	127,230	131,047	134,979	139,028	143,199
Sinking Fund	$ 75.00 /space	93,750	96,563	99,459	102,443	105,516	108,682	111,942	115,301	118,760	122,322
Management Fee [2]	$ 34.94 /space	43,681	44,991	46,341	47,731	49,163	50,638	52,157	53,722	55,334	56,994
Miscellaneous	$ 0.63 /space	788	811	835	861	886	913	940	969	998	1,028
Total Operating Expenses		**$ 661,080**	**$ 680,912**	**$ 701,339**	**$ 722,380**	**$ 744,051**	**$ 766,373**	**$ 789,364**	**$ 813,045**	**$ 837,436**	**$ 862,559**
Exp/Space		***$ 944***	***$ 973***	***$ 1,002***	***$ 1,032***	***$ 1,063***	***$ 1,095***	***$ 1,128***	***$ 1,161***	***$ 1,196***	***$ 1,232***
Net Operating Income		**$ 2,207,010**	**$ 2,389,633**	**$ 2,579,413**	**$ 2,776,331**	**$ 2,846,721**	**$ 2,900,527**	**$ 3,173,130**	**$ 3,248,326**	**$ 3,467,106**	**$ 3,706,078**
NOI/Space		***$ 3,153***	***$ 3,414***	***$ 3,685***	***$ 3,966***	***$ 4,067***	***$ 4,144***	***$ 4,533***	***$ 4,640***	***$ 4,953***	***$ 5,294***
Debt Service [3]		**$ 2,605,465**	**$ 2,605,465**	**$ 2,605,465**	**$ 2,605,465**	**$ 2,605,465**	**$ 2,605,465**	**$ 2,605,465**	**$ 2,605,465**	**$ 2,605,465**	**$ 2,605,465**
Coverage Ratio [4]		***0.85***	***0.92***	***0.99***	***1.07***	***1.09***	***1.11***	***1.22***	***1.25***	***1.33***	***1.42***
Net Cash Flow		**$ (398,454)**	**$ (215,832)**	**$ (26,052)**	**$ 170,867**	**$ 241,256**	**$ 295,063**	**$ 567,666**	**$ 642,862**	**$ 861,641**	**$ 1,100,613**
Net/Space		***$ (318.76)***	***$ (172.67)***	***$ (20.84)***	***$ 136.69***	***$ 193.01***	***$ 236.05***	***$ 454.13***	***$ 514.29***	***$ 689.31***	***$ 880.49***

Notes:

1. Assumes 75% of all users will pay by credit card, debit card or direct account withdrawl at a rate of 3.0% of total transaction value.

2. Assumes a base management fee of $1,250/month plus incentives equivalent to 1.0% of total gross revenues.

3. Debt service calculated on a base of $25,000/space in hard costs + 25% in soft costs, amortized at 4.5% APR over a 25-year term with no initial capital contribution.

4. Most lenders require NOI to be equivalent to 120% of annual debt service. Failure to meet this requirement will not necessarily negate underwriting, but may require the borrower to present evidence of adequate capital reserves to guarantee the debt.

Alternate Pro Forma

Capacity:	*1250*									
YEAR:	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**
REVENUES										
Garrahy Employees (Contract)	-	-	-	-	-	-	-	-	-	-
Early Bird Parkers	2,145,000	2,311,875	2,485,000	2,664,375	2,718,750	2,751,250	2,800,000	2,640,000	2,635,000	2,625,000
Evening Transients	21,000	23,925	27,000	30,225	31,200	32,175	38,250	47,250	59,400	66,600
Day Transients	206,250	220,875	236,000	251,625	267,750	284,375	337,500	439,375	498,750	560,625
Overnight Monthly	9,600	11,880	14,280	16,800	19,440	22,200	136,800	157,950	192,000	258,300
Limited Monthly	31,680	36,774	42,120	47,718	53,568	64,260	84,888	106,524	139,104	163,008
General Monthly	70,560	81,216	92,352	103,968	116,064	128,640	181,056	286,272	396,288	511,104
Total Gross Revenues	**$ 2,484,090**	**$ 2,686,545**	**$ 2,896,752**	**$ 3,114,711**	**$ 3,206,772**	**$ 3,282,900**	**$ 3,578,494**	**$ 3,677,371**	**$ 3,920,542**	**$ 4,184,637**
Rev/Space	***$ 3,549***	***$ 3,838***	***$ 4,138***	***$ 4,450***	***$ 4,581***	***$ 4,690***	***$ 5,112***	***$ 5,253***	***$ 5,601***	***$ 5,978***
EXPENSES:										
Payroll $ 121.26 /space	151,576	156,123	160,807	165,631	170,600	175,718	180,990	186,419	192,012	197,772
Payroll Taxes $ 13.34 /space	16,673	17,174	17,689	18,219	18,766	19,329	19,909	20,506	21,121	21,755
Benefits $ 10.91 /space	13,642	14,051	14,473	14,907	15,354	15,815	16,289	16,778	17,281	17,800
Worker's Comp $ 3.03 /space	3,789	3,903	4,020	4,141	4,265	4,393	4,525	4,660	4,800	4,944
Uniforms $ 1.82 /space	2,274	2,342	2,412	2,484	2,559	2,636	2,715	2,796	2,880	2,967
Utilities $ 92.67 /space	115,838	119,313	122,892	126,579	130,376	134,287	138,316	142,466	146,739	151,142
Insurance $ 18.33 /space	22,913	23,600	24,308	25,037	25,788	26,562	27,359	28,179	29,025	29,896
Supplies $ 6.53 /space	8,163	8,407	8,660	8,919	9,187	9,463	9,746	10,039	10,340	10,650
Postage $ 0.77 /space	963	991	1,021	1,052	1,083	1,116	1,149	1,184	1,219	1,256
Contracted Services $ 4.67 /space	5,838	6,013	6,193	6,379	6,570	6,767	6,970	7,179	7,395	7,617
Elevator Maintenance $ 600.00 /shaft	4,800	4,944	5,092	5,245	5,402	5,565	5,731	5,903	6,080	6,263
Snow Removal $ 1.69 /space	2,113	2,176	2,241	2,308	2,378	2,449	2,522	2,598	2,676	2,756
Credit Card Fees [1] $ 44.71 /space	55,892	57,569	59,296	61,075	62,907	64,794	66,738	68,740	70,802	72,926
Repairs & Maintenance $ 87.80 /space	109,750	113,043	116,434	119,927	123,525	127,230	131,047	134,979	139,028	143,199
Sinking Fund $ 75.00 /space	93,750	96,563	99,459	102,443	105,516	108,682	111,942	115,301	118,760	122,322
Management Fee [2] $ 31.87 /space	39,841	41,036	42,267	43,535	44,841	46,187	47,572	48,999	50,469	51,983
Miscellaneous $ 0.63 /space	788	811	835	861	886	913	940	969	998	1,028
Total Operating Expenses	**$ 648,600**	**$ 668,058**	**$ 688,099**	**$ 708,742**	**$ 730,005**	**$ 751,905**	**$ 774,462**	**$ 797,696**	**$ 821,627**	**$ 846,275**
Exp/Space	***$ 927***	***$ 954***	***$ 983***	***$ 1,012***	***$ 1,043***	***$ 1,074***	***$ 1,106***	***$ 1,140***	***$ 1,174***	***$ 1,209***
Net Operating Income	**$ 1,835,490**	**$ 2,018,487**	**$ 2,208,653**	**$ 2,405,969**	**$ 2,476,767**	**$ 2,530,995**	**$ 2,804,032**	**$ 2,879,675**	**$ 3,098,915**	**$ 3,338,362**
NOI/Space	***$ 2,622***	***$ 2,884***	***$ 3,155***	***$ 3,437***	***$ 3,538***	***$ 3,616***	***$ 4,006***	***$ 4,114***	***$ 4,427***	***$ 4,769***
Debt Service [3]	**$ 2,605,465**	**$ 2,605,465**	**$ 2,605,465**	**$ 2,605,465**	**$ 2,605,465**	**$ 2,605,465**	**$ 2,605,465**	**$ 2,605,465**	**$ 2,605,465**	**$ 2,605,465**
Coverage Ratio [4]	***0.70***	***0.77***	***0.85***	***0.92***	***0.95***	***0.97***	***1.08***	***1.11***	***1.19***	***1.28***
Net Cash Flow	**$ (769,974)**	**$ (586,977)**	**$ (396,812)**	**$ (199,496)**	**$ (128,697)**	**$ (74,470)**	**$ 198,567**	**$ 274,210**	**$ 493,451**	**$ 732,897**
Net/Space	***$ (615.98)***	***$ (469.58)***	***$ (317.45)***	***$ (159.60)***	***$ (102.96)***	***$ (59.58)***	***$ 158.85***	***$ 219.37***	***$ 394.76***	***$ 586.32***

Notes:

1. Assumes 75% of all users will pay by credit card, debit card or direct account withdrawl at a rate of 3.0% of total transaction value.

2. Assumes a base management fee of $1,250/month plus incentives equivalent to 1.0% of total gross revenues.

3. Debt service calculated on a base of $25,000/space in hard costs + 25% in soft costs, amortized at 4.5% APR over a 25-year term with no initial capital contribution.

4. Most lenders require NOI to be equivalent to 120% of annual debt service. Failure to meet this requirement will not necessarily negate underwriting, but may require the borrower to present evidence of adequate capital reserves to guarantee the debt.

Attachment E

Summary of Collaborator Qualifications

SUMMARY OF COLLABORATOR QUALIFICATIONS

Fuss & O'Neill, Inc is a multidiscipline engineering firm which provides the solutions that clients need for their specialized projects. We provide the same focus and expertise to small, straightforward, single-discipline projects as we do to large, complex, multi-discipline ones. Headquartered in Manchester, CT and founded in 1924, the company has grown to include six regional offices including Providence RI, three LLCs and about 300 employees. Our professional staff maintains licenses and certifications across a wide range of engineering, planning, landscape architecture, design build, scientific and manufacturing disciplines. Our full service capabilities continue to expand as we embrace sustainable practices. We are corporate members of the United States Green Building Council (USGBC) and have more than 20 certified Leadership in Energy and Environmental Design Accredited Professionals (LEED AP). In addition, we are actively involved in the Congress for the New Urbanism (CNU), the leading organization promoting walkable, mixed-use neighborhood development, sustainable communities and healthier living conditions.

DESMAN Associates, is a professional corporation with more than 100 professional and technical personnel. The firm is a leading national specialist in transportation improvements and the planning, design and construction administration of functionally efficient, attractive and cost effective parking facilities. Since the firm's inception in 1973, DESMAN has served public, private and institutional Clients and Owners throughout the U.S. and abroad and has provided planning, design, and restoration services for over 1,500 parking projects.

Nelson\Nygaard Consulting Associates Inc., a transportation planning firm headquartered in San Francisco California, is distinguished by its commitment to planning transportation systems and identifying mobility improvements that help build and support vibrant, sustainable communities.
A fully multi-modal approach, drawn from the real world experiences of industry specialists, is a hallmark of every Nelson\Nygaard project. Covering all modes of transportation, we specialize in transit, transit oriented development, accessibility and tools that balance the needs of each mode. Since its inception in 1987, Nelson\Nygaard has grown into a nationally recognized firm with seven offices covering North America. Today, our personnel work with a wide variety of clients including public transit operators, regional and state planning organizations, city and county municipal departments and private sector customers.

Goody Clancy is a firm of 85 architects, preservationists, planners and urban designers based in Boston, MA and working nationally. Over five decades of practice, our work has been characterized by an unwavering dedication to social responsibility and design excellence. Combining humanitarian purpose with visual distinction, we have planned and designed buildings, neighborhoods and open spaces which combine the firm's strong skills in new building design, preservation and research. This experience is coupled with our interest in energizing the public and encouraging them to stake a claim in their future. The resulting practice is inclusive, collaborative and participatory. The varied nature of our work recomposes and revitalizes existing campuses and communities for the people who live and work in them. Our work has been published extensively and has won numerous accolades for design excellence from such groups as the American Institute of Architects (AIA), the United Nations, the Urban Land Institute, and the Congress for the New Urbanism. We have won more than one hundred design awards, including six national AIA Honor awards.

Attachment F

Legislation (S-993 & H-6228)

2013 -- S 0993

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LC02751
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S T A T E O F R H O D E I S L A N D

IN GENERAL ASSEMBLY

JANUARY SESSION, A.D. 2013

J O I N T R E S O L U T I O N

CREATING A SPECIAL LEGISLATIVE COMMISSION TO STUDY BUILDING STRUCTURED PARKING AT THE GARRAHY JUDICIAL COMPLEX

Introduced By: Senators Ruggerio, Goodwin, Miller, Metts, and Jabour

Date Introduced: June 06, 2013

Referred To: Senate Special Legislation and Veterans Affairs

RESOLVED, That a special legislative commission be and the same is hereby created consisting of eleven (11) members: three (3) of whom shall be members of the Senate, not more than two (2) of whom shall be from the same political party, to be appointed by the Senate President; three (3) of whom shall be members of the House of Representative, not more than two (2) of whom shall be from the same political party, to be appointed by the Speaker of the House; one of whom shall be the Director of the Department of Administration, or his or her designee; one of whom shall be the Director of the Department of Transportation, or his or her designee; one of whom shall be the Chairperson of the I-195 Redevelopment District, or his or her designee; one of whom shall be the State Court Administrator, or his or her designee; and one of whom shall be the Honorable Mayor of Providence, or his or her designee.

The purpose of said commission shall be to make a comprehensive study and issue findings about building structured parking at the Garrahy Judicial Complex.

In lieu of any appointment of a member of the legislature to a permanent advisory commission, a legislative study commission, or any commission created by a general assembly resolution, the appointing authority may appoint a member of the general public to serve in lieu of a legislator, provided that the Majority Leader or the Minority Leader of the political party which is entitled to the appointment consents to the appointment of the member of the general public.

Forthwith upon passage of this resolution, the members of the commission shall meet at

the call of the Speaker of the House and Senate President, who shall select co-chairpersons. Vacancies in said commission shall be filled in like manner as the original appointment.

The membership of said commission shall receive no compensation for their services.

All departments, boards, commissions, and agencies of the state shall furnish such advice and information, documentary and otherwise, to said commission and its agents as is deemed necessary or desirable by the commission to facilitate the purposes of this resolution.

The Joint Committee on Legislative Services is hereby authorized and directed to provide suitable quarters for said commission; and be it further

RESOLVED, That the commission shall report its findings and recommendations to the General Assembly no later than January 7, 2014, and said commission shall expire on March 7, 2014.

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LC02751
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EXPLANATION

BY THE LEGISLATIVE COUNCIL

OF

J O I N T R E S O L U T I O N

CREATING A SPECIAL LEGISLATIVE COMMISSION TO STUDY BUILDING STRUCTURED PARKING AT THE GARRAHY JUDICIAL COMPLEX

***

This resolution would create an eleven (11) member special legislative commission whose purpose would be to make a comprehensive study and issue findings about building structured parking at the Garrahy Judicial Complex, and who would report back to the General Assembly no later than January 7, 2014, and whose life would expire March 7, 2014.

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LC02751
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2013 -- H 6228

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LC02785
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S T A T E O F R H O D E I S L A N D

IN GENERAL ASSEMBLY

JANUARY SESSION, A.D. 2013

J O I N T R E S O L U T I O N

CREATING A SPECIAL LEGISLATIVE COMMISSION TO STUDY BUILDING STRUCTURED PARKING AT THE GARRAHY JUDICIAL COMPLEX

Introduced By: Representatives Blazejewski, Keable, Lally, Johnston, and Silva

Date Introduced: June 12, 2013

Referred To: House Finance

RESOLVED, That a special legislative commission be and the same is hereby created consisting of eleven (11) members: three (3) of whom shall be members of the Senate, not more than two (2) of whom shall be from the same political party, to be appointed by the Senate President; three (3) of whom shall be members of the House of Representative, not more than two (2) of whom shall be from the same political party, to be appointed by the Speaker of the House; one of whom shall be the Director of the Department of Administration, or his or her designee; one of whom shall be the Director of the Department of Transportation, or his or her designee; one of whom shall be the Chairperson of the I-195 Redevelopment District, or his or her designee; one of whom shall be the State Court Administrator, or his or her designee; and one of whom shall be the Honorable Mayor of Providence, or his or her designee.

The purpose of said commission shall be to make a comprehensive study and issue findings about building structured parking at the Garrahy Judicial Complex.

In lieu of any appointment of a member of the legislature to a permanent advisory commission, a legislative study commission, or any commission created by a general assembly resolution, the appointing authority may appoint a member of the general public to serve in lieu of a legislator, provided that the Majority Leader or the Minority Leader of the political party which is entitled to the appointment consents to the appointment of the member of the general public.

Forthwith upon passage of this resolution, the members of the commission shall meet at

the call of the Speaker of the House and Senate President, who shall select co-chairpersons. Vacancies in said commission shall be filled in like manner as the original appointment.

The membership of said commission shall receive no compensation for their services.

All departments, boards, commissions, and agencies of the state shall furnish such advice and information, documentary and otherwise, to said commission and its agents as is deemed necessary or desirable by the commission to facilitate the purposes of this resolution.

The Joint Committee on Legislative Services is hereby authorized and directed to provide suitable quarters for said commission; and be it further

RESOLVED, That the commission shall report its findings and recommendations to the General Assembly no later than January 7, 2014, and said commission shall expire on March 7, 2014.

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LC02785
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EXPLANATION

BY THE LEGISLATIVE COUNCIL

OF

J O I N T R E S O L U T I O N

CREATING A SPECIAL LEGISLATIVE COMMISSION TO STUDY BUILDING STRUCTURED PARKING AT THE GARRAHY JUDICIAL COMPLEX

***

This resolution would create an eleven (11) member special legislative commission whose purpose would be to make a comprehensive study and issue findings about building structured parking at the Garrahy Judicial Complex, and who would report back to the General Assembly no later than January 7, 2014, and whose life would expire March 7, 2014.

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Attachment G

Committee Meeting Minutes
October 23, 2013 and December 13, 2013

Special Legislative Commission to Study Building Structure Parking at the Garrahy Judicial Complex

Wednesday, October 23, 2013

3:00PM

Members present: Co-Chair Senator Miller, Co-Chair Rep. Blazejewski, Senator Hodgson, Senator Goodwin, Rep. Keable, Richard Licht, Colin Kane, Michael Lewis, J. Joseph Baxter, Mark Ryan

Co-Chair Miller provided a brief introduction. Colin Kane, Chairman of the 195 Redevelopment District Commission provided a presentation (see attached) on the current and prospective parking situation in Providence. He explained that with the opening of land from the 195 construction project, there will be a significant demand for parking in the area. The opening of land is providing approximately 2-3 million in building fabric. Consequently, the ideal parking requirement is approximately 2,000 spots.

According to Mr. Kane, the Garrahy Judicial Complex provides a center location for parking in the area. The Judicial Complex parking lot, which according to Director Lewis is owned by DOT, currently has 188 spaces of surface parking. However, the original structure was designed for a parking structure. Preliminary numbers indicate that a 4 level structure would create 690 spaces. Mr. Kane stated that if two levels were added, it would create close to 1,000 spaces.

Mr. Kane explained that Johnson and Wales University is currently in the middle of construction on a parking garage. However, this structure will only be available to JWU. In his discussions with JWU, the estimated cost for parking is $30,000 to $50,000 per structure space.

In response to Senator Hodgson's questions about time frame, Mr. Kane stated that because parking structures are boilerplate, the project would take approximately 8-9 months.

In response to J. Joseph Baxter's question about court employees during construction, Colin Kane stated that the 195 Commission has adjacent lots that could accommodate employees for temporary parking. However, permanent surface parking is not possible in Providence with zoning laws.

City of Providence Parking Administrator Leo Perrotta testified before the commission on the current parking situation in Providence. The current cost for a parking meter in Providence is $1.25 per hour. This translates to $3,900 per year. Private parking lots in the city charge between $8 and $12 per day.

Director Licht asked whether the Providence Off Street Parking Authority still exists to which Mr. Perrotta answered it exists but only on paper. According to Mr. Perrotta, the Authority is not currently functioning.

The commission and members concluded that it will look into the following: how much the city and surrounding agencies pay for parking for its employees, financing mechanisms, and possible collaboration with the city with mechanisms such as Tax Incremental Financing.

The commission adjourned.

Special Legislative Commission to Study Building Structure Parking at the Garrahy Judicial Complex

Friday, December 13, 2013
3:0PM

Members present: Co-Chair Senator Miller, Co-Chair Rep. Blazejewski, Senator Hodgson, Senator Goodwin, Richard Licht, Colin Kane, Michael Lewis, J. Joseph Baxter, Mark Ryan

Co-Chair Miller provided an introduction and explained that the report will be due.

Colin Kane presented to the commission regarding parking downtown. He stated that the framework study is nearly complete and that parking is more compelling than it was before. He explained that there is a static model which dedicates parking to a building, and dynamic model which provides mixed use parking. The dynamic model is currently being looked into.

Mr. Kane explained that the Garrahy Garage Conceptual Program has a structure consisting of 7 levels, 1,250 parking spaces and allows for 13,800 ft2 of liner retail space. He stated that many booths are automated which keeps operating costs down. The conceptual program would cost $39,062,500 for 1,250 spaces. It would be approximately $43,000,000 if this includes retail. Mr. Kane stated that existing Garrahy commitments are 517 spaces.

Richard Licht stated that when the state utilizes the Convention Center Parking, it is essentially the state paying the state. Director Licht provided a document with executive parking requirements and stated that DCYF has a high requirement. He said that he would look into the capacity of parking at the Convention Center and also the amount of money that URI pays the Convention Center in regard to parking for the extension center. Director Licht said the amount is approximately $1 million per year.

Joseph Baxter stated that if Providence changes street parking dedicated to the courts, the courts will need to increase their parking garage requirement. In response to a question from Senator Miller, Mr. Baxter stated that they also have off site parking for jurors that utilizes a shuttle and costs approximately $7,300 to $8,200 per month.

Colin Kane also stated that in the beginning, Boston Parking was expensive when it was created by the Boston Redevelopment Area but now is a big source of revenue. He stated that a public private partnership could help.

Senator Miller explained that they will begin to work on a report and circulate it to the members.

The meeting adjourned.