

# Preston Center Parking Garage Study



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North Central Texas  
Council of Governments



**WALKER**  
CONSULTANTS

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# SECTION 1 - EXECUTIVE SUMMARY

In 2016, the City of Dallas and the North Central Texas Council of Governments (NCTCOG) developed a community vision for the neighborhoods surrounding the Northwest Highway and Preston Road interchange in Dallas, Texas, entitled the Northwest Highway and Preston Road Area Plan (also referred to in this document as the Area Plan). A central recommendation of the plan was the redevelopment of the aging Preston Center Parking Garage, an 800-space, two-level structure built in the 1960s on City-owned property. The redevelopment vision championed by the community included an underground parking structure with an at-grade community park on top.

In response to this recommendation, NCTCOG initiated the Preston Center Parking Garage study. The key objectives of this study included:

- Evaluating and recommending technical needs for the new parking structure.
- Assessing the feasibility of the recommended underground structure and community park.
- Assessing the feasibility of alternative options.
- Confirming and refining the community vision.
- Developing a framework for evaluating design concepts.
- Creating a series of design concepts that meet technical requirements and the refined community vision.
- Identifying next steps in implementing the community vision.

This report comprises the key findings and recommendations from the study, which are summarized herein.

## RELATIONSHIP TO OTHER TRANSPORTATION PLANNING PROJECTS

This study is part of a larger effort to expand access to neighborhoods around the Northwest Highway and Preston Road interchange, reduce traffic congestion, and improve safety for motorists, pedestrians, and those using other modes of travel. Concurrent projects in the vicinity undertaken by NCTCOG, the City of Dallas, the Texas Department of Transportation (TxDOT), and the North Texas Tollway Authority (NTTA) include an evaluation of new access points along the Dallas North Tollway (DNT), intersection improvements, a Texas U-turn at Northwest Highway and Dallas North Tollway, various sidewalk improvements, and exploration of a possible grade separation of Northwest Highway.

## COMMUNITY VISION

The study process included a series of meetings with City of Dallas and associated agency staff, representatives from the Preston Center West Corporation (PCWC, the property ownership group), a designated Project Review Committee, a designated Stakeholder Working Group, and community members to shape and refine the vision for the Preston Center Parking Garage redevelopment. Fundamentally, these meetings reiterated and solidified the recommendation set forth in the Area Plan. Key issues identified by the community included:

- **Garage Sizing:** Providing sufficient parking to accommodate demand for a successful and vibrant Preston Center well into the future, while being aware of oversupply and the costs of a new garage.
- **Access:** Improving and clarifying vehicular and pedestrian access to the garage and enhancing the overall access environment.
- **Garage Features and Design:** Providing a sleek and inconspicuous garage design with security and technology features that make parkers feel safe and welcomed and offer a high level of service.
- **Community Park:** Incorporating an at-grade, clearly publicly accessible community park at the ground level to maximize public benefit from the site and add a community amenity to Preston Center beyond only a parking garage.



## TECHNICAL FEASIBILITY OF THE COMMUNITY VISION

Initial phases of the study included parking data collection, a cursory structural and functional review of the existing garage, and an analysis of technical feasibility for the envisioned redevelopment scheme for the Preston Center Parking Garage. Key findings included:

- **Parking Supply Needs:** An update was conducted to the parking sufficiency study performed by Kimley-Horn as part of the Area Plan, and projected sufficiency assuming full tenant occupancy in Preston Center. Based on this analysis, it is recommended that the redeveloped Preston Center Parking Garage be sized at 1,200 spaces (replacement plus 400 additional) to accommodate new and existing demand and provide a high level of service for parking patrons.

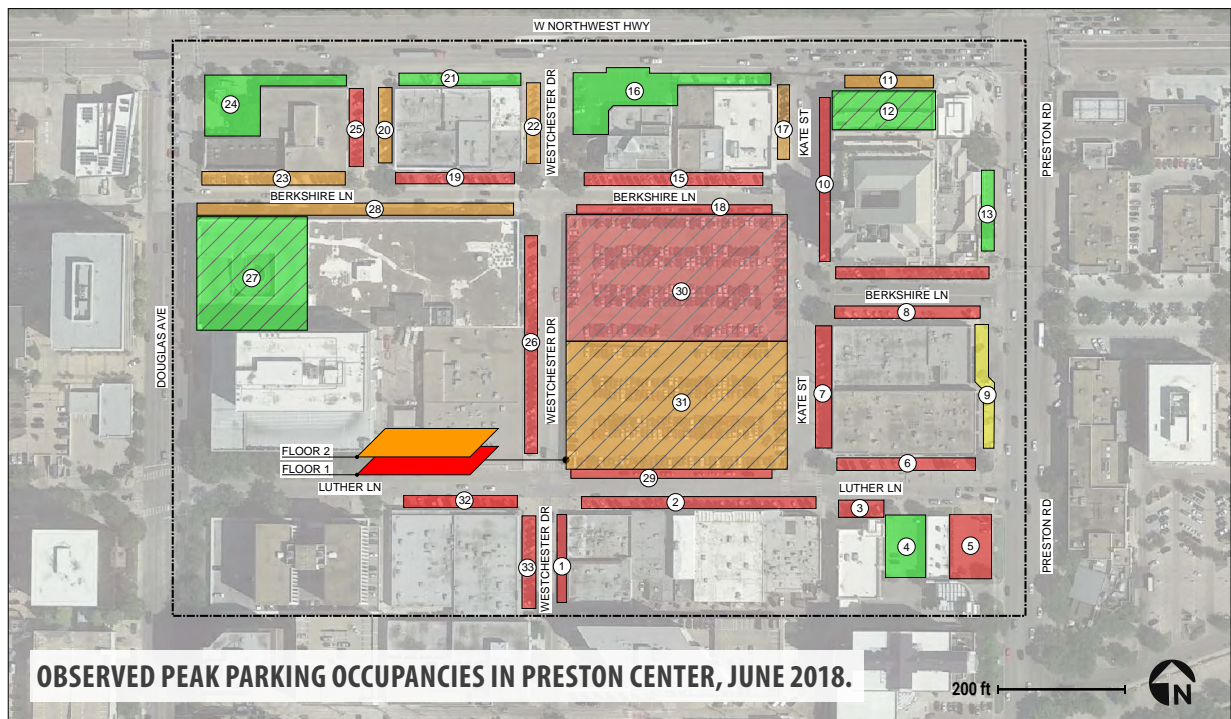


- **Condition of the Existing Garage:** It was found that many factors impeded the ability of the existing Preston Center Parking Garage to serve parkers, including structural wear and damage, age, lighting, circulation and access, signage and wayfinding, concrete and striping conditions, and cleanliness.
- **Technical Feasibility of Area Plan Recommendation:** The technical viability of the community vision set forth in the Area Plan was established, but there remains the need to explore various considerations, including:

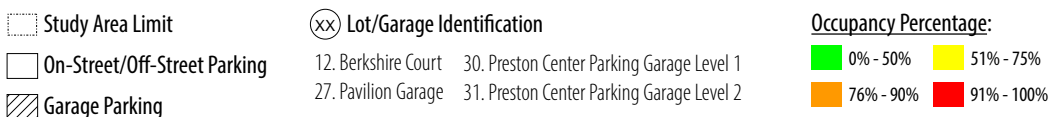
**Garage Features:** Functional design (meaning ingress and egress, floor plate layout, ramp sloping, and other technical attributes), security, and technology measures are needed for an effective, high-service underground structure.

**Community Park Features:** Technical recommendations center around creating a usable green space with construction planned concurrently with the garage redevelopment to avoid an extended active construction period.

**Vehicular and Pedestrian Access:** The existing garage’s undefined ingress and egress points have contributed to a deteriorated access environment and increased vehicular and pedestrian conflicts. Clear, defined, and industry standard vehicular and pedestrian access points are essential to a successful garage redevelopment.



**WEEKDAY LUNCHTIME PARKING OCCUPANCY BY AREA**





## FEASIBILITY OF OTHER SCENARIOS

Upon initiation of the study, several other scenarios were discussed as possibilities for improving or replacing the Preston Center Parking Garage, including construction of a new entirely above-grade structure and expansion and enhancement of the existing structure.

- **Typical Above-Grade Structure:** This scenario is not community-supported and has limited support from members of the PCWC. Benefits of this scenario chiefly regard construction cost as compared to the cost of building a new underground garage. In addition, some members of the Corporation have indicated support of this scenario due to their desire for at-grade parking for their tenants. While technically feasible, this scenario did not fulfill a key component of the Area Plan recommendation, which was to redevelop the parking garage site with a clear and multi-faceted public benefit beyond simply providing parking for retail customers. This type of facility would not be available for City of Dallas bond funds or North Central Texas Council of Governments (NCTCOG) funds per those agencies.
- **Expansion of Existing Structure:** This scenario is not community-supported and has little to no support from the PCWC. In addition, it is largely infeasible due existing known structural integrity issues, challenges with the current ramping system, and unknowns in the structural system, foundation capacity and lateral load resisting system. Beyond the likelihood of technical infeasibility, an addition to the existing garage would not solve key elements such as confusing and ineffective access, pedestrian/vehicular conflicts, and aesthetics.

## EVALUATION FRAMEWORK

Beyond assessing the two concepts currently presented as possibilities for the parking garage site, an essential component of this analysis was developing a quantitative and qualitative evaluation framework through which future development opportunities for the site can be assessed and selected objectively. This framework comprises both quantitative and qualitative components.

- **Quantitative Framework:** The quantitative framework comprises an evaluation of key quantifiable elements of the design option, including number of parking spaces available to the public, public park size, and total construction cost.
- **Qualitative Analysis:** The qualitative framework comprises an evaluation of the design option's ability to fulfill the vision set forth by the community. First, design criteria created by the community were rated in terms of their value on a scale between 0.7 (the criterion is desirable, but not a major factor in success of the project) to 1.0 (the criterion is essential to ensure success of the project). Second, the design options were ranked based on their ability to meet each criterion on a scale between 1.0 (the option does not meet the criterion) to 3.0 (the option perfectly meets the criterion). The results from these steps were multiplied and totaled to create a cumulative weighted score for each option.

This framework can and should be used to evaluate future design options that are presented for the Preston Center Parking Garage site. The possibilities on the site are truly endless, and a Request for Proposal (RFP) process, as discussed later in this Executive Summary, is the ideal method for assessing market conditions and needs for the site.

## DESIGN CONCEPTS

NCTCOG, the City of Dallas, and community partners developed two conceptual designs for redevelopment of the parking garage site and assessed them using the evaluation framework. Note that both concepts comprise full, unphased demolition of the existing structure.

- **Concept 1 - 100% Underground with a Full-Site Park:** Concept 1 comprised parking provided fully sub-grade, with an at-grade park spanning the full site (2.9 acres). Active construction was projected to span 23 months, with a total estimated construction cost of \$44.1M-47.5M. Concept 1 is discussed in greater detail on pages 47-55 of this report.
- **Concept 2 - Hybrid Parking with Partial-Site Park:** Concept 2 comprised a bifurcation of the site, with a partial-site, at-grade park (park sizing options between 0.9-acre to 1.4-acre parks were analyzed, discussed further on pages 57-61), at- and above-grade parking on the remaining footprint, with two levels of below-grade parking spanning the full footprint. The park size could be expanded dependent on the development footprint. This concept would provide an opportunity for vertical construction above the at- and above-grade parking levels. Active construction was projected to span 23 months, with a total estimated construction cost of \$40.8M-42.7M. Concept 2 in its entirety is discussed in greater detail on pages 56-63.

Of the concepts presented as part of this study, it was recommended to pursue Concept 1 based on the relatively insubstantial projected cost and construction timeline differences between the concepts and Concept 1's ability to better fulfill qualitative design criteria.

The following figures depict Concept 1 from aerial and side views.





The following figures depict Concept 1’s quantitative and qualitative analyses pursuant to the framework discussed on page 64.

Concept	Number of Public Spaces	Park Size	Project Garage Construction Cost	Project Park Construction Cost	Project Total Construction Cost
Concept 1	1,200	2.9 Acres	\$38.5M—41.2M	\$5.6M—6.2M	\$44.1M—47.5M

Category	Criteria	A: Importance Ratio (0.7-1.0)	B: Raw Score (1.0-3.0)	Weighted Score (A*B)
Garage Sizing	At least 1,200 public spaces	1.0	3.0	3.0
	Rightsizing to reflect actual needs	0.8	3.0	2.4
Access	Two clearly defined ingress and egress points	1.0	3.0	3.0
	Maintain existing street/circulation patterns	0.7	3.0	2.1
	Defined bike and ped access point	0.8	2.0	1.6
Security	Potential for both active and passive security	1.0	3.0	3.0
Technology	Potential for tech that helps drivers	0.7	2.0	1.4
Design (G)	Sleek and inconspicuous visual elements	0.8	3.0	2.4
	Does not impede vehicle/ped access	1.0	2.0	1.0
Design (P)	Visibly publicly accessible	1.0	3.0	3.0
	At least partially at-grade	1.0	3.0	3.0
	Simple design with minimal traffic generation	0.9	3.0	2.7
Funding	Meets qualifications for funding from city, NCTCOG, etc.	1.0	3.0	3.0
<b>Total</b>				<b>31.6</b>



## CONSTRUCTION IMPACT MITIGATION

An effective construction impact mitigation strategy will require a multi-faceted approach, with shared parking agreements identifying alternative facilities for use during demolition and construction of the new parking structure, active and ongoing communications with business and property owners, residents, office employees, and visitors, parking management and transportation demand management strategies, and on-the-ground signage and wayfinding efforts. Following is a prospective timeline of initiatives to implement leading up to construction start.

The following table represents a recommended planning and notification schedule for construction as it relates to parking. It is further discussed on page 77.

When	Action
6 months prior to construction	Outreach to office facilities where shared parking agreements have been reached, if applicable.
4 months prior to construction	Outreach to business owners and neighboring property owners in and around the Preston Center introducing the project and proposed permit actions (in connection with permit notice standards). Notice will include advance notice of construction activities as well as a tentative plan to move parking to shared facilities and contact information made available for questions and concerns.
10 weeks prior to construction	Follow-up outreach to affected businesses and other Preston Center property owners.
6 weeks prior to construction	Launch construction project webpage and develop a fact sheet containing relevant parking details and outlining alternative transit options.
4 weeks prior to construction	Post flyers in and around the Preston Center Plaza and inside businesses and retailers. Start posting temporary signage and wayfinding guiding self-parkers to shared facilities, if applicable. Include start date for shared parking or keep signs covered until parking garage closure. Contact TNCs to initiate discount code that can be used by Preston Center patrons.
72 hours prior to construction	Place no-parking signs for lane closures as needed, as well as other construction notices and signage. Place signage relating to parking relocation with associated wayfinding, but keep signage covered.
48 hours prior to construction	Uncover parking relocation signage and wayfinding and close existing structure entrances and exits with construction cones.

## NEXT STEPS

Implementation of a full-site redevelopment for the parking garage site will require substantial involvement from the City and its partners. The following next steps are recommended:

**Regulations:** The Preston Center Parking Garage fulfills off-street parking requirements for the surrounding retail center. During construction, these spaces will be temporarily displaced and unavailable for public use. The City should develop and issue an administrative waiver from off-street parking requirements while the garage site is redeveloped before actively selecting and pursuing a redevelopment concept.

**Park Operations and Management:** Redevelopment of the site will likely include at least a partial-site, if not full-site, public park, intended to operate as a City of Dallas park. The City, and specifically the Dallas Parks Department, should evaluate budgetary and staffing needs to assume control of a new park, in addition to establishing appropriate hours of operation, programming, and other details. This process may require additional public outreach and input. Identifying operations and maintenance funding will require a concerted effort between the City of Dallas and the Preston Center West Corporation.

**RFP Development:** The City of Dallas should issue an RFP for site redevelopment, including demolition of the existing structure, site preparation, and construction of the new parking structure and park. The RFP should request a proposed redevelopment concept based on the evaluation framework presented in this report. In addition to planning, design, and construction, the RFP should require that the successful bidder develop a construction mitigation plan to maximize construction efficiency and reduce impacts on the surrounding neighborhoods. The scope of services for the RFP should require respondents to evaluate needed parking spaces needed during construction activities and the procurement of those spaces, whether through a shared parking agreement, remote parking with shuttle services, or other alternatives to ensure minimal disruption to business operations and minimal impact on their revenues. Construction mitigation techniques are further discussed in Section 7 of this report; a sample shared parking agreement has been provided in Appendix 7.

**Financing and Funding:** Prior to and during this study, some private monies for the garage and park construction were pledged; in addition, the City of Dallas and the Preston Center West Corporation should explore funding options for public infrastructure through NCTCOG and other state and federal entities. Note that a key criterion in assessing design concepts for the Preston Center Garage site is the concept's ability to meet funding requirements set forth by such entities. For ongoing operations and maintenance costs, a Public Improvement District (PID) could be considered wherein adjacent property owners would fund parking management, digital parking enforcement, and other management and maintenance activities for both the garage and the park. Projected construction and operations and maintenance costs for the concepts explored as part of this study are discussed in Section 6 of this report.

**Mobility and Street Network Planning:** Future design concepts on the Preston Center Parking Garage site may also include opportunities to improve overall mobility and connectivity in and around the study area. Such measures could include optimization of traffic flow through possible one-way to two-way street conversion, greening and parklets, expansion of the pedestrian network, and vehicular and pedestrian connectivity to Northwest Highway, Douglas Avenue, and other surrounding streets. There might also be opportunities to convert streets adjacent to the park into additional park space, or reduce them in size to offer a larger park footprint. Any mobility and street network changes should be in concert with current and future efforts by NCTCOG, TXDOT, the City of Dallas, and others. The existing street and mobility network is further discussed on pages 18-20 and in Appendices 2B and 2C.

# 02

## EXISTING CONDITIONS



# SECTION 2 - EXISTING CONDITIONS

The following figure (**Figure 2.1**) summarizes key takeaways from this section.

Figure 2.1: Existing Conditions Key Takeaways

Focus Area	#	Key Takeaway
Background and Context	1	A license agreement between the City of Dallas and the Preston Center West Corporation, a group of private citizens with ownership stake in the properties surrounding the garage, dictates that the garage site must be used for public parking.
	2	The Preston Center West Corporation has veto power over the ultimate design selected for an updated parking garage.
	3	Preliminary conversations with both the City and the Corporation indicate that both have similar goals for a new parking structure, including a high level of service and a reduction in congestion on Preston Center's internal roadways.
Existing Parking System Supply, Demand, and Management	1	The overall Preston Center parking system (including publicly available on-street, surface, and structured parking) experienced peak occupancy on a weekday between 12:00 and 1:00 PM, with a total occupancy of 71%. The Preston Center Garage was 95% occupied at the peak hour.
	2	Current vacancy levels in the study area are between 10%-15%. Assuming 100% occupancy, recommended supply should reach 1,200 spaces to accommodate potential intensification of the sites surrounding the facility.
	3	Several considerations related to enforcement, management structure, and information-sharing could improve the overall efficiency and cohesiveness of the Preston Center parking system as a whole.
	4	Several factors severely impede the ability of the Preston Center Garage to serve its patrons well, including age, circulation and access, lighting, concrete and striping conditions, and cleanliness.
Traffic Circulation, Vehicular Access, and Multimodal Mobility	1	The study area is bounded and accessed by several major roadways, including Northwest Highway, Preston Road, and the Dallas North Tollway. Circulation immediately around the garage is characterized by one-way, counterclockwise, streets.
	2	The existing traffic patterns combined with a lack of multimodal amenities (including non-continuous and poorly maintained sidewalks) result in an unfriendly environment for pedestrians and cyclists.

## BACKGROUND AND CONTEXT

Public parking has been the use and purpose of the Preston Center Garage site for many years—since 1950, and the current garage site has been known as the “parking plaza” for Preston Center’s many visitors and other key user groups. Operation of the Preston Center Garage is influenced by the relationship between two key parties: The City of Dallas and the Preston Center West Corporation (PCWC), a group of private citizens and/or corporations with ownership stake in the properties surrounding the garage. This relationship is presently governed by a license agreement first initiated in 1964, one year prior to the construction of the second-level deck that comprises the existing garage. This license agreement sets forth various stipulations for use of the Preston Center Garage, owned by the City of Dallas and leased, for a nominal annual fee, by the Preston Center Corporation. Key stipulations include, among others:

1. The PCWC shall use the Preston Center Garage premises for public parking and associated maintenance and improvements.
2. Any permanent improvements on the site will be the property of the City of Dallas.
3. The PCWC shall maintain the Preston Center Garage for public parking, with no parking reserved for specific uses or any other modification otherwise barring public use.
4. The PCWC shall not charge for parking on the existing ground level or roof level deck of the garage, though the Corporation can charge for parking on additional decks (e.g. a new deck constructed on the garage site). Revenue collected from parking fees cannot exceed garage operating expenses.

This license agreement can be amended or updated, but such action requires the participation and agreement of both parties.

While, pursuant to the license agreement, the PCWC is solely responsible for funding construction of new or additional parking decks on the Preston Center Garage site, the City has identified alternative funding opportunities for the new garage, with some participation from the Corporation, including private sector fundraising, public sector grants, and an additional tax assessment on Preston Center West property owners, among others. The Corporation does have significant influence—including veto power over designs presented for a new parking garage. A previous conceptual plan for the new parking structure, developed as part of the Area Plan, included subgrade parking with a public park on the ground level. Later, as ownerships changed and new stakeholders engaged, Corporation members expressed concerns related to customer level of service and security. However, conversations with both the City and the PCWC as part of this study indicate that the two entities are aligned on some key objectives for a new parking garage, which include fulfilling existing and projected parking demand, maintaining a high level of service for public parkers, and improving traffic flow throughout Preston Center.

## EXISTING PARKING SYSTEM: SUPPLY, DEMAND, & MANAGEMENT

The commercial/retail portion of Preston Center is generally bound by Northwest Highway to the north, Preston Road to the east, Luther Lane to the south (including the business on the south side of Luther Lane), and Douglas Avenue to the west.

Parking is available on-street adjacent to businesses, in several small, private parking lots, and in three parking structures; the Preston Center Garage, the Berkshire Court Garage, and the Pavilion (“Gold’s Gym”) Garage.

Review of the existing parking system included the following elements. Note that the facilities counted during this data collection effort were the same counted by Kimley-Horn as part of the *Northwest Highway and Preston Road Area Plan* development in 2016, except for the Bank of America and SoulCycle lots, which were not open during the 2016 study. The facilities counted are labeled in **Figure 2.2**; inventories and peak observed occupancies of each are shown in **Figure 2.3**.

- A site visit and select manual data collection at Preston Center on June 12-14, 2018 included:
  - An inventory (number of spaces) of on- and off-street parking facilities around the Preston Center Garage. This count included privately-owned facilities that are open to the public.
  - Parking occupancy counts at on- and off-street parking facilities around the Preston Center Garage including counts during the weekday lunchtime rush.
  - Vehicle turnover information every two hours on Wednesday June 13th, 2018 to quantify the extent to which long-term parkers occupy short-term on-street and garage parking spaces.
- Parking demand data collection on Saturday, June 30, 2018 included:
  - Parking occupancy counts at on- and off-street parking assets during lunchtime to confirm that the weekday lunchtime period is the period of peak parking demand for the study area.
- Review of parking data and information contained in *Northwest Highway and Preston Road Area Plan Final Report (Kimley-Horn and Associates, July 2016)* and *Northwest Highway and Preston Road Area Plan Advisory Task Force Final Report (December 2016)*.

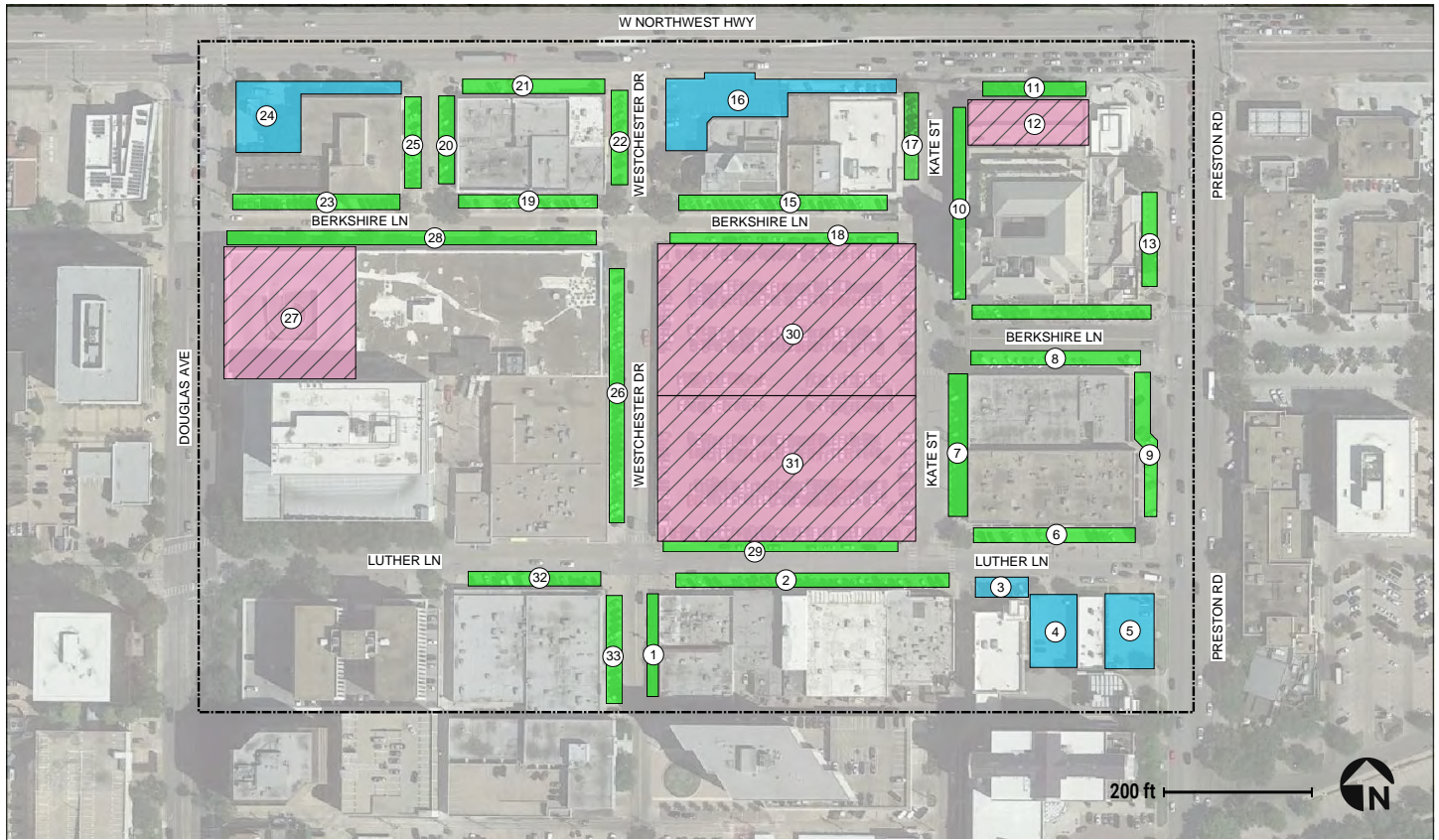
A detailed manual inventory of “publicly available” parking by space type in the study area was collected during the site visit on June 12-14, 2018. This study’s definition of “publicly available” includes the following:

- On-street surface parking, including spaces that have been designated for a single business with either temporary or permanent signage.
- Off-street surface parking that is not access-restricted, but typically signed for customers/employees only (such as the parking at Bank of America and Soulcycle)
- Structured parking in the Preston Center Garage
- Structured parking in the Pavilion Garage and Berkshire Court Garage which are privately-owned spaces available to the public.



The following figure (Figure 2.2) provides a graphical overview of the parking system.

Figure 2.2: Preston Center Parking System Map



### PRESTON CENTER PARKING SYSTEM MAP

- Study Area Limit
  - On-Street Parking
  - xx Lot/Garage Identification
  - Garage Parking
  - Off-Street Parking
- |                     |   |
|---------------------|---|
| 12. Berkshire Court | 30. Preston Center Parking Garage Level 1 |
| 27. Pavilion Garage | 31. Preston Center Parking Garage Level 2 |

### EXISTING PARKING SUPPLY AND PEAK PARKING DEMAND

The Area Plan included seven, eight-hour days of parking demand data collection in the study area in January 2016. The consensus result was that parking demand at Preston Center peaks on weekdays at lunchtime, and that the parking availability issues the area experiences are concentrated within the 11:30-1:30 timeframe on weekdays. Based on this information, collected parking demand counts were collected during the lunchtime peak period (12:00 - 1:00 PM) on Wednesday June 13, 2018.

**Figure 2.3** summarizes the results of the inventory of the study area as well as the peak weekday occupancy count. **Figure 2.4** breaks out parking inventory and occupancy into two categories: publicly-available and unrestricted, and restricted. Restricted parking refers to any parking that necessitates a certain use or credential. For example, this could include parking spaces reserved for Soulcycle guests, or ADA parking. However, note that spaces that are only time-restricted and can be used by any parking patron are in the publicly-available and unrestricted column.

Figure 2.3: Existing Conditions Parking Supply and Peak Lunchtime Demand

Type	User Group	Number of Spaces	Peak Occupancy	Peak Percent Occupancy
On-Street	Time Restricted	291	282	97%
	Reserved	74	40	54%
	Loading	2	2	100%
	ADA	12	4	33%
	Unrestricted	30	27	90%
	<b>Total</b>	<b>409</b>	<b>355</b>	<b>87%</b>
Off-Street Surface	Regular	109	50	46%
	ADA	4	0	0%
	<b>Total</b>	<b>113</b>	<b>50</b>	<b>44%</b>
Pavilion Garage	Regular	292	86	29%
	ADA	7	1	14%
	<b>Total</b>	<b>299</b>	<b>87</b>	<b>29%</b>
Berkshire Court	Reserved	249	86	35%
	Visitor	62	44	71%
	ADA	9	4	44%
	<b>Total</b>	<b>320</b>	<b>134</b>	<b>42%</b>
Preston Center Garage	ADA (1st Floor)	10	8	80%
	3-Hour (1st Floor)	404	404	100%
	Unrestricted (2nd Floor)	388	346	89%
	<b>Total</b>	<b>802</b>	<b>758</b>	<b>95%</b>
<b>Grand Total</b>		<b>1,943</b>	<b>1,384</b>	<b>71%</b>

Figure 2.4: Parking Inventory and Peak Occupancy Summary

	Publicly-Available/Unrestricted Parking	Restricted Parking
Inventory	1,516	427
Peak Occupancy	1,197	187
Peak Occupancy %	79%	46%

Overall, the study area parking inventory recorded by the project team in June 2018 is similar to the total inventory listed in the Preston Center Area Plan. Notable changes include the opening of Soulcycle with a 32-space parking area (fenced off and inaccessible during the prior study), and a slight reduction in parking spaces in the Pavilion Garage due to ongoing construction of a new elevator shaft adjacent to the retail space. Best efforts were made to include parking spaces currently fenced off that are likely to be made available following construction.

The overall weekday peak parking occupancy of 71% is similar to the maximum peak of 70% shown in Figure IV-2, page IV-3 in the appendix of the Area Plan. Parking occupancy in the Preston Center Garage peaked at approximately 80% during the lunch period (12:00-1:00 p.m.). The current parking inventory found that the Preston Center Garage was 95% full during the peak lunch period, and the time-limited lower level of the garage was 100% full, with the exception of two ADA spaces.

Observed parking demand in the Pavilion Garage was significantly lower than in the prior study, with a peak occupancy of only 29%. The lower occupancy in the Pavilion Garage may be due to construction in the garage that was ongoing in June 2018, which reduced the width of the main drive aisle in several locations, making for slower and less comfortable navigation in the garage. The lower observed occupancy in the Pavilion Garage may be one reason why observed demand in the Preston Center Garage was higher. Additionally, vacancy levels may or may not have been different in 2016 and 2018. With the constantly evolving tenant mix in Preston Center, uses that generate more parking may have replaced uses that generate less parking in the two years between studies.

Generally speaking, the public parking available, whether on-street parking or at the Preston Center Garage, was effectively full during the lunchtime peak period, with unreserved on-street parking 97% occupied, and the Preston Center Garage 95% occupied (total of both levels). The one exception to this were the on-street parking spaces that are reserved for individual retail tenants, which were only 54% occupied. Reserving spaces for individual uses results in an inefficient use of parking assets.

On-street parking spaces reserved for specific businesses tend to be less utilized than regular time-restricted spaces available to any user. To the extent that reserved on-street spaces are vacant during the peak lunchtime rush, parking assets are being underutilized due to these restrictions, as only certain patrons are able to use them.

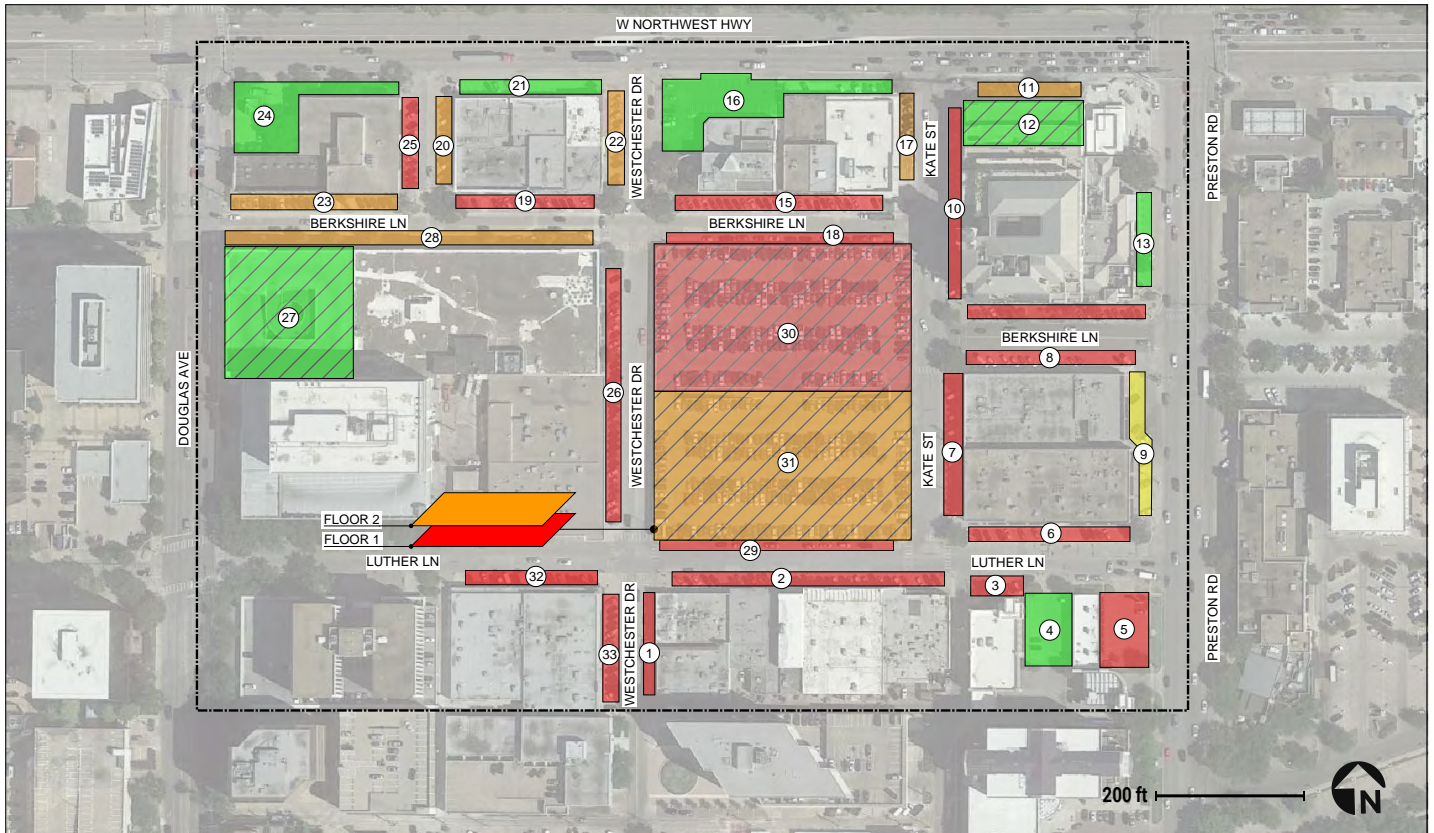


Source: Google Street View, 2020



Figure 2.5 depicts observed weekday parking occupancy by zone during the lunchtime peak.

Figure 2.5: Weekday Lunchtime Parking Occupancy by Area



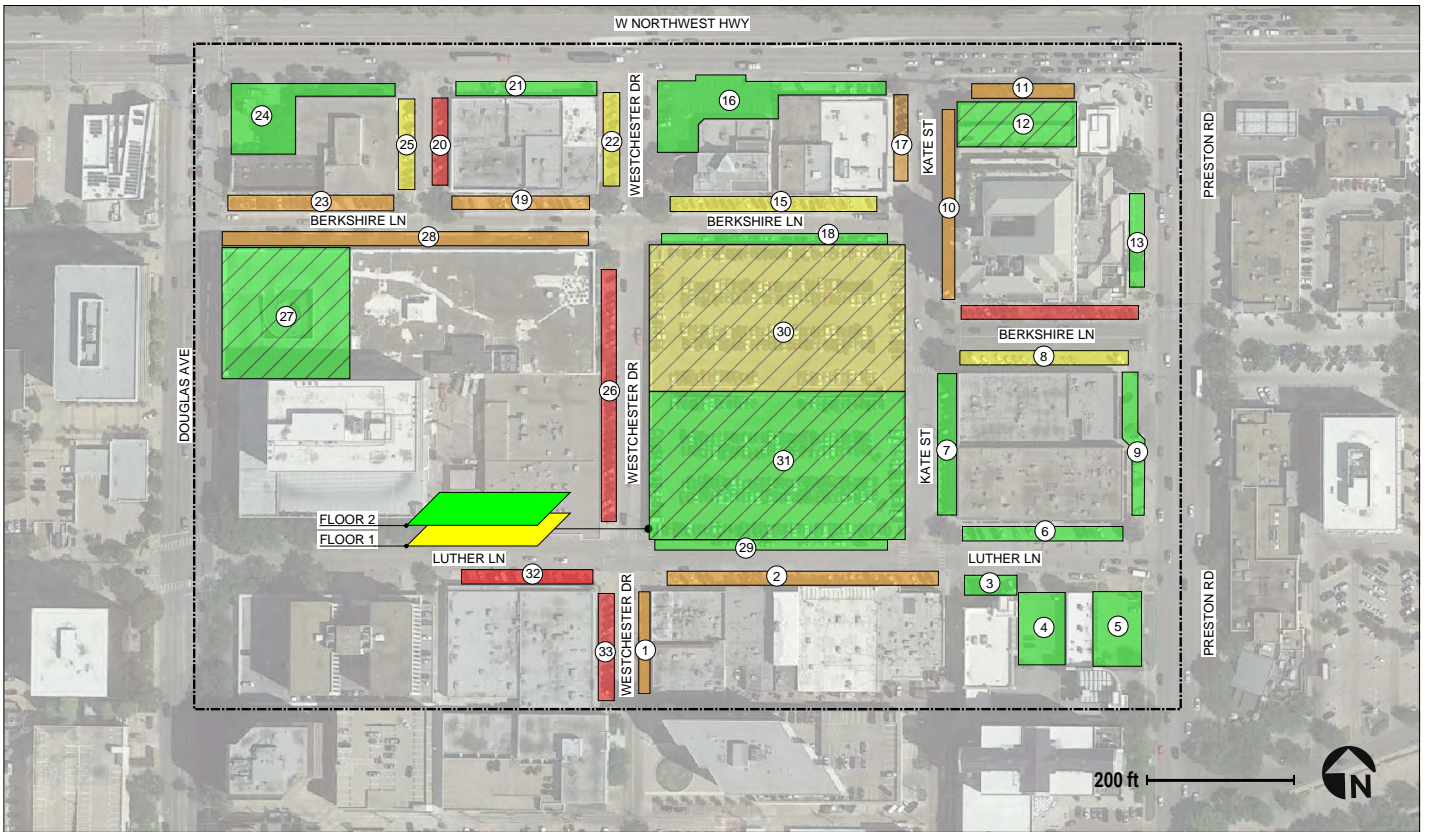
### WEEKDAY LUNCHTIME PARKING OCCUPANCY BY AREA

- |  |   |  |
|--|---|--|
| <ul style="list-style-type: none"> <li>□ Study Area Limit</li> <li>□ On-Street/Off-Street Parking</li> <li>▨ Garage Parking</li> </ul> | <ul style="list-style-type: none"> <li>⊗ Lot/Garage Identification</li> <li>12. Berkshire Court</li> <li>27. Pavilion Garage</li> <li>30. Preston Center Parking Garage Level 1</li> <li>31. Preston Center Parking Garage Level 2</li> </ul> | <p><b>Occupancy Percentage:</b></p> <ul style="list-style-type: none"> <li style="width: 50%;">■ 0% - 50%</li> <li style="width: 50%;">■ 51% - 75%</li> <li style="width: 50%;">■ 76% - 90%</li> <li style="width: 50%;">■ 91% - 100%</li> </ul> |
|--|---|--|

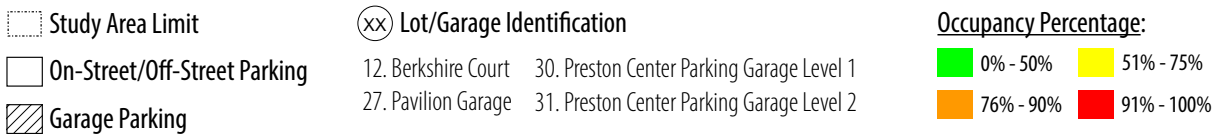
The consultant team also collected lunchtime parking demand data at Preston Center on Saturday June 30, 2018, to confirm the conclusion from the prior study that parking demand at Preston Center is lower on weekends. Overall parking utilization in the study area during the Saturday lunchtime period was 40%. The Preston Center Garage was 58% utilized on the lower level and 38% utilized on the upper level.

Figure 2.6 depicts observed Saturday lunchtime parking occupancy.

Figure 2.6: Saturday Lunchtime Parking Occupancy by Area



### SATURDAY LUNCHTIME PARKING OCCUPANCY BY AREA



Detailed parking inventory and occupancy information is included in Appendix A.

It should be noted that, based on discussion with the Preston Center West Corporation manager, the current vacancy rate in Preston Center is approximately 10-15%. This analysis accounts for the additional parking demand associated with re-tenanting of vacancies in the Projected Near-Term Parking Demand section of this memorandum.

## Parking Turnover Sample

A turnover survey was performed in select locations to gather a sampling of whether time restrictions were being observed both on-street and at the ground level of the Preston Center Garage. Data was recorded at 9:30 AM, 11:30 AM, 1:30 PM and 3:30 PM on Wednesday June 13, 2018.

**Figure 2.7** summarizes the on-street turnover sample collected on June 13, 2018. The on-street parking sample consisted of all time-restricted parking and did not include any ADA spaces. The number of “times” a vehicle was counted signifies the number of instances its presence was recorded within the period in which data was collected. Vehicles recorded 2 times were present for at least two hours. Vehicles recorded 3 times were present for at least four hours. Vehicles recorded 4 times were present for at least six hours.

Figure 2.7: Weekday Turnover Sample – On-Street

Zone	Total Spaces <sup>(1)</sup>	Number of Vehicles Counted		
		4 Times	3 Times	2 Times
32	16	4	1	3
26	29	2	1	6
19	17	0	1	3
20	12	2	0	7
25	11	0	4	3
18	14	1	0	0
15	23	2	1	7
<b>Total</b>	<b>122</b>	<b>11</b>	<b>8</b>	<b>29</b>
<b>Percent of Total</b>	<b>###</b>	<b>9.0%</b>	<b>6.6%</b>	<b>23.8%</b>

<sup>1</sup>Excludes ADA Spaces

As shown in **Figure 2.7**, approximately 15.6% of the on-street parking spaces in the sample areas intended for short-term customer parking (2 hours or less) were occupied by long-term parkers during the lunchtime peak. 9% of the spaces were occupied by vehicles that were parked for at least 6 hours, with an additional 6.6% of the spaces occupied by vehicles parked for 4 hours or longer. An additional 23.8% of spaces were occupied by parkers that had something between a short overstay (2 hours and 1 minute) to a longer overstay (up to 3 hours and 59 minutes). This indicates a lack of consistent enforcement in the study area (the City of Dallas has confirmed that regular enforcement is not occurring in the study area, although complaint-based enforcement and ticketing is conducted periodically). An overstay is defined as staying longer than the posted time limit.

**Figure 2.8** summarizes the off-street turnover sample collected on June 13, 2018 on the first level of the Preston Center Garage. This parking is 3-hour time restricted parking. Four rows of parking were sampled on the 1st level, or approximately 25% of the level's spaces.



Figure 2.8: Weekday Turnover Sample – Preston Center Garage First Floor

Zone	Total Spaces <sup>(1)</sup>	Number of Vehicles Counted	
		4 Times	3 Times
P1 Garage	25	4	4
	31	1	7
	31	4	10
	26	3	6
<b>Total</b>	<b>113</b>	<b>12</b>	<b>27</b>
<b>Percent of Total</b>	<b>###</b>	<b>10.6%</b>	<b>23.9%</b>

<sup>1</sup>Excludes ADA Spaces

Approximately 34.5% of the parking spaces in the sample were occupied by long-term parkers (vehicles recorded as parked in the same space 3 or more times during the data collection period) during the lunchtime peak. 10.6% of the spaces were occupied by vehicles that were parked for at least 6 hours, with an additional 23.9% of the spaces occupied by vehicles parked for 4 hours or longer. This rate of overtime parking is slightly higher than, but still consistent with, the reported figure of 114 vehicles (29% of capacity) reported in the prior study, which surveyed the entire first level.

### Projected Near-Term Parking Demand

As previously discussed in the existing conditions section, the vacancy rate at Preston Center was projected at 10-15% in June 2018. This section provides a simple near-term parking demand projection based on the following assumptions:

- Vacancies will be filled with a similar mix/proportion of uses as currently exists.
- New tenants will generate parking demand at a similar level as existing tenants.

Applying these basic assumptions, parking demand in the study area could increase approximately 15% if all business vacancies are filled. This would increase parking demand from the existing observed 1,384 total parking spaces in the study area to approximately 1,628 parking spaces ( $1,384 / .85 = 1,628$ ), a projected increase of 244 spaces of parking demand.

Based on the pattern of existing vacancies, some of this additional parking demand would naturally end up in the Pavilion Garage as the Pavilion has a large vacant space on its 3rd floor, and in the Berkshire Court garage, as Berkshire Court also has vacancies. However, there are also several vacant storefronts along Luther Lane, and the parking demand associated with these spaces being re-occupied would typically be accommodated by either on-street parking supply or in the Preston Center Garage. Given current occupancy levels some patrons would be pushed out of these desirable parking areas into the Pavilion Garage and/or Berkshire Court Garage, resulting in lower levels of service.

**Figure 2.9** summarizes projected parking occupancy by space type, assuming full occupancy of existing commercial space in the study area. The projection assumes that additional parking demand would occupy available (unreserved) on-street spaces first, Preston Center Garage spaces second, and Pavilion Garage/ Berkshire Court Garage spaces third.



Figure 2.9: Projected Parking Supply and Peak Weekday Lunchtime Demand at Full (100%) Occupancy of Existing Commercial Space

Type	User Group	Number of Spaces	Peak Occupancy	Peak Percent Occupancy
On-Street	Time Restricted	291	293	101%
	Reserved	74	40	54%
	Loading	2	2	100%
	ADA	12	8	67%
	Unrestricted	30	30	100%
	<b>Total</b>	<b>409</b>	<b>373</b>	<b>91%</b>
Off-Street Surface	Regular	109	59	54%
	ADA	4	1	25%
	<b>Total</b>	<b>113</b>	<b>60</b>	<b>44%</b>
Pavilion Garage	Regular	292	222	76%
	ADA	7	1	14%
	<b>Total</b>	<b>299</b>	<b>223</b>	<b>29%</b>
Berkshire Court	Reserved	249	115	46%
	Visitor	62	52	84%
	ADA	9	5	56%
	<b>Total</b>	<b>320</b>	<b>172</b>	<b>42%</b>
Preston Center Garage	ADA (1st Floor)	10	8	80%
	3-Hour (1st Floor)	404	404	100%
	Unrestricted (2nd Floor)	388	388	100%
	<b>Total</b>	<b>802</b>	<b>800</b>	<b>100%</b>
<b>Grand Total</b>		<b>1,943</b>	<b>1,628</b>	<b>84%</b>

It should be noted that time-restricted on-street parking is projected to be over 100% occupied; this tends to occur as a parking system reaches overcapacity as vehicles park in spaces that are not legal parking spaces but only lightly enforced. This behavior was also observed for existing conditions.

As shown in **Figure 2.9**, if commercial space was 100% occupied, the publicly available parking at Preston Center Garage would be at or over-capacity based on current parking demand levels. Unreserved on-street parking and the Preston Center Garage would potentially be completely full, with much higher parking demands in the Pavilion Garage as a result. The Berkshire Court Garage, with its heavy concentration of reserved parking spaces, is projected to remain underutilized.

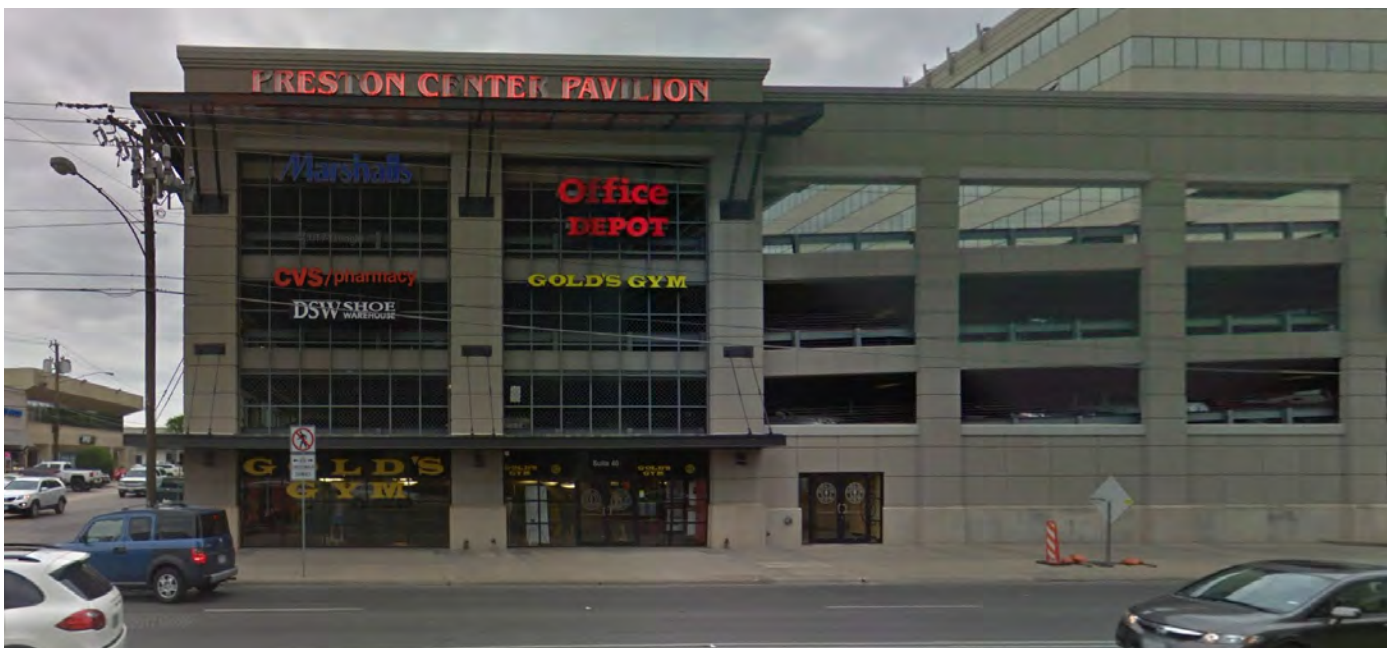
In practice, when the Preston Center Garage is full on both levels, there are also cars circulating throughout the structure looking for a parking space. This contributes to increased congestion on the streets around the garage since the ground level does not have internal circulation.

## Recommended Near-Term Parking Supply

Parking systems do not operate at peak efficiency when occupancy is at 100%. At any given moment, at least a portion of a parking system's spaces are generally unavailable for use. The reasons for unavailability may include things such as spaces closed and needing repair, maintenance to a parking facility or area, mis-parked and oversized vehicles occupying more than one space, and/or utilization of spaces for other purposes such as construction staging or storage. Vehicular and pedestrian traffic can also render parking spaces unavailable - as a motorist waits for another driver to vacate a parking space or for pedestrians to walk by, empty spaces ahead may remain unused as vehicles queue. Additionally, the configuration of spaces within a parking system can lead to spaces being underutilized. In a busier parking system, motorists may miss spaces obscured by columns or other structures and/or motorists may be reluctant to use spaces that appear difficult to navigate.

To account for the almost inevitable unavailability of parking spaces in a parking system, and the desire to have some parking cushion to allow for motorists to find a parking space without needing to hunt for it, demand within the parking system was evaluated by applying an effective supply factor (ESF) to that supply's inventory. An effective supply factor is a multiplier that parking designers use to ensure adequate service in parking facilities<sup>1</sup>. It is typically between 0.8 and 0.95 depending on user group and space type, and accounts for the need to have a parking cushion for the system to operate efficiently.

Based on this need, the preliminary recommended supply for the Preston Center Garage is 1,000 parking spaces as shown in **Figure 2.10** below. The occupancy goal for on-street parking should be approximately 90%, with a peak occupancy goal of 85% in parking structures. The preliminary recommended supply and projected demand assume full occupancy at Preston Center, as well as permanent increased utilization of the Pavilion Garage, but does not assume any additional land use is added to the study area that would utilize the Preston Center Garage to satisfy its parking needs.



Source: Google Street View, 2020

<sup>1</sup> Chrest, A. et al., *Parking Structures: Planning, Design, and Construction, Third Edition*. 2001: New York, Springer Science + Business Media., pg. 10.

Figure 2.10: Recommended Parking Supply and Projected Peak Occupancy by Space Type/Location

Type	User Group	Number of Spaces	Peak Occupancy	Peak Percent Occupancy
On-Street	Time Restricted	291	293	101%
	Reserved	74	40	54%
	Loading	2	2	100%
	ADA	12	8	67%
	Unrestricted	30	30	100%
	<b>Total</b>	<b>409</b>	<b>373</b>	<b>91%</b>
Off-Street Surface	Regular	109	59	54%
	ADA	4	1	25%
	<b>Total</b>	<b>113</b>	<b>60</b>	<b>44%</b>
Pavilion Garage	Regular	292	222	76%
	ADA	7	1	14%
	<b>Total</b>	<b>299</b>	<b>223</b>	<b>29%</b>
Berkshire Court	Reserved	249	115	46%
	Visitor	62	52	84%
	ADA	9	5	56%
	<b>Total</b>	<b>320</b>	<b>172</b>	<b>42%</b>
New Preston Center Garage	<b>Total</b>	<b>1,000</b>	<b>850</b>	<b>85%</b>
<b>Grand Total</b>		<b>2,141</b>	<b>1,628</b>	<b>76%</b>

## PARKING MANAGEMENT & OPERATIONS

The following section discusses current management and enforcement practices of the public on-street parking facilities and the Preston Center Garage and sets forth several recommendations for consideration.

### Public On-Street Parking

The majority of the study area's public on-street parking, which includes 409 total spaces, is time-limited, with time limits ranging from 10 minutes to 2 hours. The City is using manual enforcement techniques (tire chalking) to encourage turnover of these spaces. Based on the turnover data discussed on page 8, it appears that the on-street parking is not consistently monitored, resulting in a significant number of time limit violations. On-street parking is primarily angled with some parallel and 90-degree parking along Berkshire and Luther lanes. Striping and signage are fairly visible to motorists and pedestrians alike, and consistent throughout the study area.



The figures below (**Figures 2.11 and 2.12**) depict examples of angled and parallel on-street parking areas within the study area, and associated time limit signage

Figure 2.11: On-Street Parking Example 1



Figure 2.12: On-Street Parking Example 2



## Preston Center Garage

The City is responsible for enforcing parking restrictions in the roughly 800-space Preston Center Garage. The garage does not have access controls and offers open access to patrons. The lower level has a signed time limit of three hours, though it does not appear to be regularly enforced based on turnover data. The upper level is unrestricted and, pursuant to information provided by members of the PCWC, is largely utilized by employees of the retail and service businesses within the study area.

The PCWC is responsible for maintaining the parking structure, including installing signage, security and access controls, and conducting regular cleanings and repairs.

## Parking Management & Operations Recommendations

The following is a series of preliminary parking management and operations recommendations for the current Preston Center garage based on observations of the study area, initial conversations with local stakeholders, and knowledge of industry best practices.

1. **Enforcement:** The key objective of enforcement is to create an environment where turnover is induced in high-demand areas. The parking rules being enforced should be simple, liberally posted and shared, and immediately understandable to first-time visitors and seasoned residents and employees alike. Possible recommendations include:
  - a. Implement uniform time limits for on-street parking throughout the study area and Preston Center Garage. The only anticipated cost for this measure is signage installation.
  - b. Implement digitized enforcement via License Plate Recognition (LPR) cameras for on-street parking. Implement passive enforcement in the parking structure through Radio Frequency Identification (RFI), Automatic Vehicle Identification (AVI), or other methods. For reference, an LPR unit costs between \$40,000 and \$50,000. The direct return on investment would include greater annual parking fine collection; however, active parking enforcement can also result in improved economic activity in the surrounding area due to a higher turnover in the parking system and therefore a higher level of service for customers.
  - c. Clearly identify and mark long-term parking options; consider implementing an employee parking permit program for downtown employees needing to use public parking options.
  - d. Paid parking would be an alternative market-based (rather than enforcement-based) option for inciting turnover in high-demand areas. A paid parking market exists in the area, driven by a number of surrounding parking facilities.
  - e. Develop designated short-term loading areas for delivery vehicles, pick-up and drop-off, Uber and Lyft, etc.
2. **Management Structure:** A cohesive management entity for the entirety of the Preston Center parking system would help create a uniform structure for enforcement, signage and wayfinding, structural and aesthetic improvements, policy and goal setting, and funding. The management entity could be a joint venture between the City and local property owners. As parking demand increases over time and management scope expands, the entity could also assist in the procurement and supervision of third-party operation of the parking system or other initiatives to ensure high standards of customer service.



- 3. Information-Sharing:** Sharing information about parking and mobility options before and during a visit is another component to creating strong levels of service for all user groups. Possible considerations include:
- Develop a parking and mobility website for Preston Center with maps showing parking facilities, relevant restrictions, and other information.
  - Create a signage and wayfinding system clearly marking publicly available parking facilities.
  - Consider dynamic signage on access roadways to the study area and to major parking facilities (e.g. the Preston Center Garage) to influence vehicular path of travel, reduce congestion within the study area's internal street network, and enhance level of service.

### Parking Garage Conditions & Level of Service

The roughly 275,000 sq. ft. Preston Center Garage is 800 spaces, split between 2 levels—a ground level and a roof level. The garage was built over an existing surface lot in 1965 and completed in 1966, with the original surface lot comprising the ground level, and a new roof level constructed above.

The following figure (**Figure 2.13**) provides an overview of the \$180,300 2018 operating budget for the Preston Center Garage, as provided by the Corporation.

Figure 2.13: 2018 Maintenance Budget - Preston Center Garage

Expense Category	Description	2018 Budget (Rounded)	% of Total Budget
Insurance	Liability/general garage keepers insurance needs	\$15,100	8%
Utilities	Electricity	\$12,000	7%
General Repairs and Maintenance	Landscaping, lighting materials, cleaning, security, supplies, repairs, etc.	\$117,800	65%
Building Improvements	Garage design work and other building improvement projects	\$19,500	11%
Administrative Costs	Management fee; garage administration labor and materials	\$14,700	8%
Contingency Reserve	General reserve fund	\$1,200	1%
<b>Total</b>		<b>\$180,300</b>	<b>100%</b>

Source: Preston Center West Corporation

The structure's open design, wide drive aisles and simple ramping system are positive elements. However, several conditions—both a function of design and of wear-and-tear commensurate with an over 50-year-old structure—inhibit the ability of the garage to adequately service its patrons. These include:

- **Age:** The structure, completed in 1966, is over 50 years old and is at or closely approaching the end of its useful life. Improvements to the garage at this point in its lifecycle can improve (at least temporarily) the aesthetic condition of the garage but are unable to permanently solve structural problems associated with an aging facility. Maintenance costs of the garage are likely to increase dramatically over time as more structural failures occur due to wear-and-tear
- **Circulation and access:** The roof level deck was constructed over an existing surface lot (now the first level of the structure) with no real changes to the surface lot's existing configuration or circulation patterns, which have patrons exiting drive aisles onto roadways to get to the next drive aisle—effectively making the one-way streets surrounding the garage its internal circulation network. This not only creates traffic congestion on these roadways and frustration for thru-travelers; it also prevents, in practical terms, the installation of a parking access and revenue control system (PARCS) as there are too many entry/exit points to effectively control access.
- **Lighting:** Despite recent upgrades to LED bulbs, the lighting configuration combined with ceiling height and design components have resulted in a dimly-lit first floor, creating an unfriendly environment for parkers (and especially pedestrians returning to their vehicles after dark) and making it difficult for patrons to read signage.
- **Concrete and striping conditions:** Portions of the structure, particularly along the ramp and on the roof level, suffer from concrete spalling and cracking. On the roof level, faded striping contributes to mis-parking and a general lack of parking efficiency. Note, however, that a restriping would be unlikely to result in any tangible benefit in terms of effective supply in the structure.
- **Cleanliness:** The first floor of the garage has significant dust and dirt pile-up and would benefit from a regular power washing schedule in the near-term.

## TRAFFIC CIRCULATION, VEHICULAR ACCESS, & MULTIMODAL MOBILITY

### EXISTING ROADWAY NETWORK

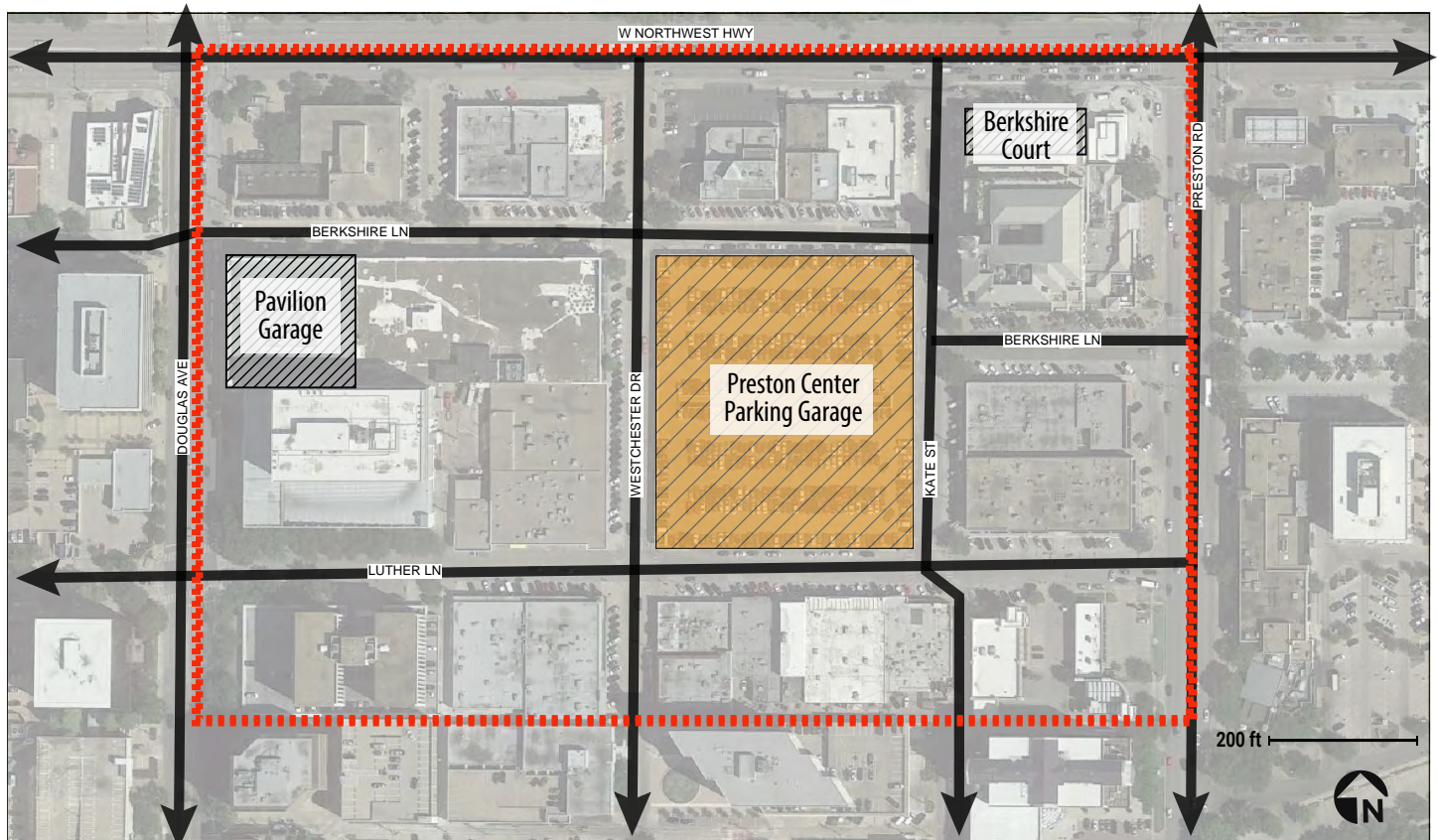
Preston Center is flanked by two major thoroughfares, Northwest Highway on the north and Preston Road on the East. The site is bounded by Douglas Avenue on the west and Luther Lane on the south. The roadways flanking the study area, except Luther Lane, are high-volume and high-speed major regional roadways.

The Preston Center parking garage and surrounding on-street parking provides convenient parking for employees and patrons for the diverse mixed-use developments including retail, restaurants, and community services. Westchester Drive, Kate Street, Berkshire Lane, and Luther Lane establish the parking garage's boundaries and provide ingress/egress and circulation for the parking garage. These roadways are all two-way roadways, except around the Preston Center Garage, where they form a circle of one-way streets around the garage, with traffic flow occurring in a counterclockwise direction. There are six driveways on Westchester Drive providing access to the ground floor of the garage (3 ingress and three egress), and six driveways on Kate Street providing access to the ground floor of the garage (3 ingress and three egress).

There is one direct ramp on Westchester Lane providing ingress to the roof level, and one direct ramp on Kate Street providing egress from the roof level.

A brief description of the roadways serving the study area is provided in this section. The following figure provides general orientation to the site and surrounding streets.

Figure 2.14: Existing Roadway Network



- **Northwest Highway (Loop 12)** is an east-west six-lane divided roadway with a posted speed limit of 35 mph. Northwest Highway carries a substantial amount of regional traffic and provides direct access to Westchester Drive. Westchester Drive provides access and circulation to the Preston Center Parking Garage study area. The City of Dallas classifies Northwest Highway as a Principal Arterial. Northwest Highway is an on-system roadway, which means TxDOT maintains the roadway.
- **Dallas North Tollway (DNT)** is a north-south 32-mile regional toll road. The toll road has six-lanes with limited access. There is a full-diamond interchange at DNT and Northwest Highway. DNT passes through and along the cities of Dallas, Highland Park, University Park, Farmers Branch, Addison, Plano, and Frisco.
- **Preston Road** is a north-south four-lane undivided roadway with a posted speed limit of 35 mph in the study area. Just north of Northwest Highway, Preston Road is a six-lane divided roadway and classified as a Principal Arterial that serves a significant amount of regional traffic. Preston Road provides direct access to Berkshire Lane and Luther Lane which lead directly to the Preston Center Parking Garage study area.

- **Douglas Avenue** is a north-south six-lane divided roadway from Northwest Highway to approximately 150 feet south of Luther Lane, where the roadway converts to a four-lane undivided roadway. The posted speed limit is 30 mph. Douglas Avenue is designated as a Community Collector.
- **Westchester Drive** is a north-south two-lane undivided local collector roadway that extends from Northwest Highway to Weldon-Powell Parkway. From Northwest Highway to Berkshire Lane, Westchester Drive is a two-lane, two-way roadway and allows angle parking along the west curb. Between Berkshire Lane and Luther Drive, Westchester Drive is a two-lane one-way southbound roadway that provides ingress/egress and circulation to the parking garage and establishes the west boundary of the parking garage. There is also head-in parking provided on the west side of the road. South of Luther Lane, Westchester Drive continues as a north-south two-way, two-lane roadway.
- **Berkshire Lane** is a two-lane undivided local collector roadway that extends from Lomo Alto Drive east to Kate Street. At Kate Street, Berkshire Lane is offset approximately 150 feet south before continuing east to Preston Road. Between Lomo Alto and Douglas, Berkshire Lane serves as a local access road for adjacent land uses. Between Douglas Ave. and Westchester, Berkshire Lane is a two-lane, two-way roadway that allows on-street parking on both side of the street. From Westchester Drive to Kate Street, Berkshire Lane is a two-lane one-way westbound street with parallel parking on the south side and angle parking on the north side of the street. From Kate Street to Preston Road, Berkshire Lane is two-lane, two-way roadways with angled parking on both sides of the street. The intersection of Preston Road and Berkshire Lane is signalized. Berkshire Lane does not provide direct access to the parking garage, but it establishes the north boundary of the parking garage and is used for circulation.
- **Luther Lane** is a two-lane undivided local collector roadway that extends from Lomo Alto Drive east to Preston Road. From Douglas Avenue to Westchester Lane, Luther Lane prohibits on-street parking, with the exception of approximately 170 feet of angled-in parking west of Berkshire Lane. At Westchester Drive, Luther Lane becomes a two-lane one-way eastbound roadway. Luther Lane does not provide access to the parking garage, but it establishes the south boundary of the parking garage and is used for circulation. The intersection of Luther Lane and Preston Road is unsignalized.
- **Kate Street** is a two-lane undivided local collector roadway that extends from Sherry Lane north to Northwest Highway. From Sherry Lane to Luther Street, Kate Street is a local collector serving adjoining office buildings and businesses. A minimal amount of on-street parking is allowed. From Luther Street to Berkshire Lane, Kate Street is a one-way northbound roadway that provide ingress/egress and circulation for the parking garage and establishes the east boundary of the parking garage. From Berkshire Lane to Northwest, Kate Street is a north/south roadway with angled on-street parking provided.

Additional figures showing the area roadway network, existing circulation around the Preston Center Garage, intersection configurations at the roadways surrounding Preston Center and how to access the Preston Center Garage from the Dallas North Tollway are included in Appendix 2A and Appendix 2B.



## EXISTING PRESTON CENTER GARAGE INGRESS/EGRESS

Access to the garage is primarily from Northwest Highway, via Westchester Drive and Kate Street, and Preston Road, via Luther Lane and Berkshire Lane.

Westchester Drive provides access for both eastbound and westbound motorists from Northwest Highway. However, the channelized westbound left-turn is ineffective for parts of the day due to congestion levels on Northwest Highway. Kate Street provides access for eastbound motorist only. Left turns onto Kate Street from westbound Northwest Highway are prohibited by a raised median. Garage egress from at Northwest Highway via Kate and Westchester is right turn only.

The traffic signal at Preston Road and Berkshire Lane provides access to the parking garage for northbound and southbound motorist from Preston Road or from the Preston Center Plaza located on the east side of Preston Road.

Secondary access is provided from the west by Douglas Avenue via Berkshire Lane and Luther Lane. Only minor access is available from the south, using Sherry Lane and Westchester Drive.

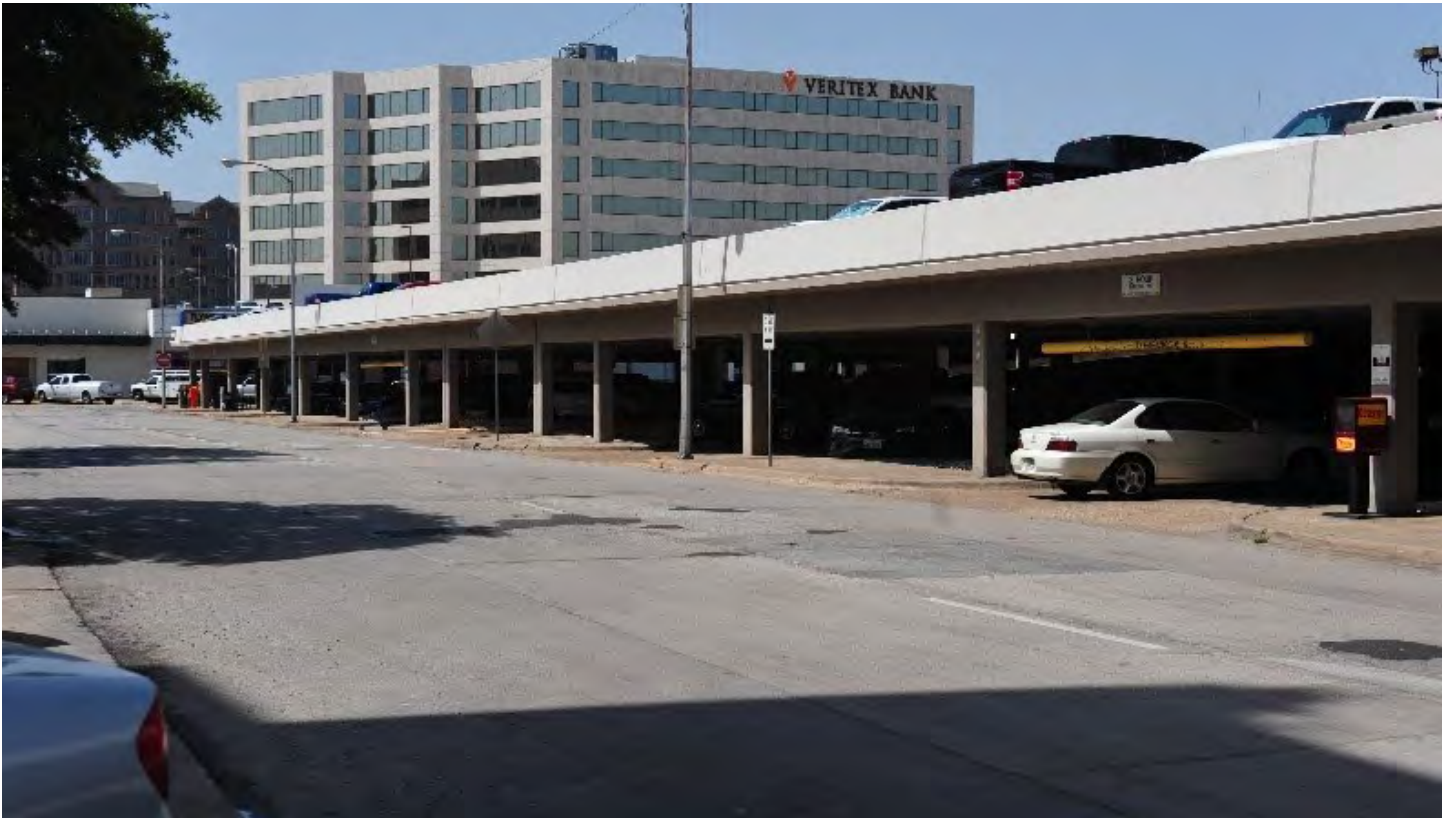
### Vehicular Circulation

Vehicular circulation adjacent to garage is provided by two one-way street pairs. Westchester Drive and Kate Street form the north/south pair (Westchester southbound and Kate northbound) and Berkshire Lane and Luther Lane form the east/west pair (Berkshire westbound and Luther eastbound). Vehicular circulation is counterclockwise. All four roadways are two-lanes, with the left lane being used for circulation and ingress/egress movements to/from the parking garage while the right lane provides circulation through or out of the study area. All-way stop control is provided at each intersection of the one-way pairs. The one-way vehicular circulation around the garage seems to function well despite less than optimal pavement markings, signing, and pedestrian accommodations.

### Parking Garage Access

The Preston Center parking garage is a two-level garage with multiple access points on the east and west sides of the garage. The lower level of the garage has no internal vehicle circulation and vehicles must exit the garage to access other areas of the garage as shown in the example in **Figure 2.15**. In some cases, vehicles must circle around the garage and re-enter the garage from the other side due to the one-way street configuration. This external circulation increases the risk of pedestrian/vehicle and vehicle/vehicle conflicts.

Figure 2.15: Preston Center Garage Driveways



Source: Teal Engineering Services, Inc.

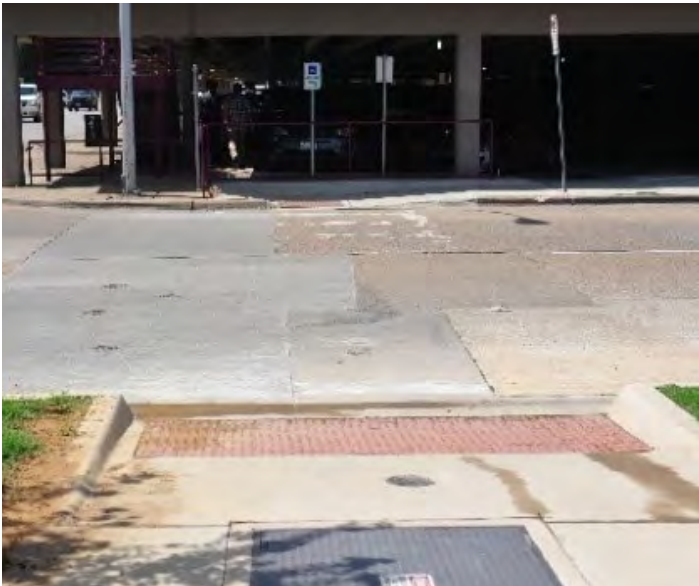
The parking garage study area was not observed to be congested, but it was observed to have an unnecessary number of potential pedestrian/vehicle and vehicle/vehicle conflict points. Pedestrians take the shortest path out of the garage and cross the roadways at random locations rather than being guided to a designated pedestrian crosswalk. The on-ground parking garage circulation lane has garage users entering and exiting the circulation roadway, garage users circulating, and pedestrian crossing to and from the parking garage.

Since the ground level of the garage has no internal circulation, each ingress driveway provides access to only one drive aisle. Essentially, Westchester Drive, Berkshire Lane, Luther Lane, and Kate Street provide circulation for the ground floor. This maximizes the parking provided on-site, at the cost of a significant traffic burden on these roadways as patrons circulate onto and off these roadways multiple times trying to find a space on the ground floor during busy periods. Additionally, this circulation pattern frequently results in users waiting within the garage for a space, blocking internal drive lanes, rather than exiting and returning via the roadways.

## Signing and Pavement Markings

Motorists, pedestrians, cyclists, public transportation (buses), and delivery vehicles were observed coming in and out of the parking garage study area. To facilitate a safe and friendly environment for all modes of travel, it is important to have visible and effective placement of pavement marking and signage to direct traffic, impose speed limits, designate parking and clearly mark crossings for pedestrians. Throughout the study area there is less than optimal pavement markings and signage used to warn and direct motorists and pedestrians. Many of the pavement markings for parking designation, traffic flow, lane separation, pedestrian crossings, and stop control are faded. Examples of poor pavement markings are shown in **Figure 2-16**.

Figure 2.16: Examples of Poor Pavement Markings



Source: Teal Engineering Services, Inc.

While there are several designated loading or 15-minute zones in Preston Center, they are insufficient to accommodate its volume of loading and unloading (particularly commercial loading and unloading). Vehicles were observed making deliveries by parking in the middle of the road on several roadways including Luther Lane and Westchester Lane. Note that the existing cross-section is wide enough for small delivery vehicles to park straddling the center painted divider, while still allowing vehicles to pass in both directions.

## EXISTING TRANSIT, BICYCLE, & PEDESTRIAN FACILITIES

Transit service for the site is provided by Dallas Area Rapid Transit (DART) Bus Route 36, with a stop with a bench and no shelter on Preston Road just north of Luther Lane. Route (428) provides service off Northwest Highway west of Ames Street. The bus stop at that location consists of a sign only and no shelter. Little to no activity was observed at these bus stops.

The study area is not bicycle friendly, with no on-street bicycle lanes and very little bike parking (one bike rack between Anna's Tailors and the entrance to the Berkshire Court parking structure) , within the study area or on major regional roadways such as Preston Road, Douglas Avenue or Northwest Highway.

The entire area's sidewalks and pedestrian accommodations are out of date, deteriorating and lacking comfort, creativity, or cohesion for pedestrians. Despite this, there are many pedestrians coming from the office buildings west of Douglas Avenue to have lunch or run an errand. There are no visible pedestrian amenity upgrades in the study area, such as in-pavement flashers, pedestrian signals or designated crossings, or public benches. The traffic signal at Preston Avenue/Berkshire Lane lacks pedestrian push buttons and pedestrian walk indicators. There is no accommodation for pedestrians on Northwest Highway including a lack of continuous curbing and sidewalks.

Appendix C includes several sketches depicting preliminary considerations for improvements to the multimodal infrastructure system in Preston Center, with a particular focus on pedestrian safety and access to the Preston Center Garage.

## OVERALL ACCESS OBSERVATIONS AND RECOMMENDATIONS

Observations and recommendations resulting from field observations are provided below.

### VEHICULAR ACCESS AND CIRCULATION

Adequate access to the garage is provided by the existing roadway system. Little or no congestion was observed around the garage or surrounding local streets resulting from queuing into the garage. Vehicles had little or no problem accessing the garage or on-street parking with little 'cruising for parking' observed. In the absence of significant increases in the garage capacity, the existing roadway system should continue to serve the garage.

Congestion was observed on Northwest Highway between Dallas North Tollway and Preston Road. Pursuant to observations, this congestion appeared to be generally a result of vehicles circulating the center rather than vehicles accessing the garage. The left turn lane for Westbound Northwest Highway vehicles turning onto Westchester Drive has the capacity to store approximately nine vehicles without blocking the westbound thru lane. Although this blocking condition was not observed, the uncontrolled left turn could cause this condition to occur during periods of significant congestion on Northwest Highway.

The one-way circulation around the garage operates efficiently and decreases the number of vehicular conflicts adjacent to the garage.



Preliminary considerations include:

1. Maintain the one-way circulation around the garage for existing conditions.
2. Depending on the alternatives developed for the Preston Center Garage, evaluate the closure of the westbound left turn lane from Northwest Highway to Westchester Drive.
3. Depending on the alternatives developed for the Preston Center Garage, evaluate the continued functionality of one-way circulation around the garage.

## PARKING GARAGE ACCESS

The multiple garage access/egress points and lack of internal circulation in the garage were observed to create the following conditions.

1. Vehicles must utilize the adjacent roadway system to circulate through the lower level of the garage or access the upper level. This causes unnecessary vehicle/vehicle and vehicle/pedestrian conflicts.
2. Because of the one-way circulation pattern around the garage, vehicles can only access a maximum of two available parking aisles on the ground floor without having to use the roadway network to circulate around the garage and re-enter from the other side.
3. The multiple garage access points allow pedestrians to exit the garage at several points. Pedestrians were observed crossing the adjacent streets at random/numerous locations surrounding the garage.

Preliminary considerations include:

1. Alternatives developed as part of this study should include internal parking garage circulation, including accessibility to any upper parking levels and reduce the number of access/egress points into the garage.
2. Pedestrian ingress/egress from the garage should guide pedestrians to/from designated crosswalks.

## SIGNAGE AND PAVEMENT MARKINGS & ADA

Signing and pavement markings in the area were noted as faded, blocked, or non-existent during the observations. Although most of vehicles and patrons observed during the site visits appeared to know the area well, new visitors to the area should be provided clear and comprehensive signing and pavement markings to guide them to their destination. There appears to be conditions in the area that are non-compliant with the Americans with Disabilities Act (ADA).

Preliminary considerations include:

1. A comprehensive signing and pavement marking plan should accompany any final design documents for the Preston Center Garage. The Plan should include all required regulatory, directional, and guidance signing for the area.
2. The improvements to the area should include making a best efforts attempt to make all facilities ADA compliant.

## KEY TAKEAWAYS

- A license agreement between the City of Dallas and the Preston Center West Corporation, a group of private citizens with ownership stake in the properties surrounding the garage, dictates that the garage site must be used for public parking.
- The Preston Center West Corporation has veto power over the ultimate design selected for an updated parking garage.
- Preliminary conversations with both the City and the Corporation indicate that both have similar goals for a new parking structure, including a high level of service and a reduction in congestion on Preston Center's internal roadways.
- The overall Preston Center parking system (including publicly available on-street, surface, and structured parking) experienced peak occupancy on a weekday between 12:00 and 1:00 PM, with a total occupancy of 71%. The Preston Center Garage was 95% occupied at the peak hour.
- Current vacancy levels in the study area are between 10%-15%. Assuming 100% occupancy, recommended supply should reach 1,200 spaces to accommodate potential intensification of the sites surrounding the facility.
- Several considerations related to enforcement, management structure, and information-sharing could improve the overall efficiency and cohesiveness of the Preston Center parking system as a whole.
- Several factors severely impede the ability of the Preston Center Garage to serve its patrons well, including age, circulation and access, lighting, concrete and striping conditions, and cleanliness.
- The study area is bounded and accessed by several major roadways, including Northwest Highway, Preston Road, and the Dallas North Tollway. Circulation immediately around the garage is characterized by one-way, counterclockwise, streets.
- The existing traffic patterns combined with a lack of multimodal amenities (including non-continuous and poorly maintained sidewalks) result in an unfriendly environment for pedestrians and cyclists.

# 03

## PLANNING PRINCIPLES & TECHNICAL RECOMMENDATIONS

# SECTION 3 - PLANNING PRINCIPLES & TECHNICAL RECOMMENDATIONS

The existing parking garage consists of one supported level made of cast-in-place concrete. The garage is over 50 years old and is plagued by both structural and access challenges that have decreased its level of service to the point of dysfunction. This section focuses on the key elements for new garage design as set forth by the Community Vision (also referred to as the Preferred Vision) established in the *Northwest Highway and Preston Road Area Plan*, including underground parking, community parks, and security measures. The following discussion includes both an assessment of supporting planning principles and a technical evaluation.

## SUPPORTING PLANNING PRINCIPLES

In considering next steps for the Preston Center Garage, it is essential to weigh technical challenges against qualitative considerations, including best practice planning principles and community feedback. The following section outlines the findings around these key factors.

### UNDERGROUND PARKING: QUANTITATIVE & QUALITATIVE BENEFITS

A key factor in the Community Vision is the location of parking underground, rather than at-grade (surface parking) or above-grade.

Underground parking offers many tangible benefits to garage owners, users and surrounding property owners, including:

- No or very limited obstruction of sunlight and sightlines for surrounding buildings
- Controlled/abated vehicle pollution and noise above ground
- No or very limited stormwater runoff
- Reduced likelihood of slip and fall hazards, like rain, ice, and snow
- Opportunity to include greenspace or other more “active” uses aboveground
- Added safety and security due to limited and controlled access points and more opportunities to control access
- Generally lower maintenance costs and long-term maintenance needs than above-grade structures, as parking areas are not subjected to weather conditions (such as freeze/thaw, etc.)



## COMMUNITY PARKS: QUANTITATIVE & QUALITATIVE BENEFITS

There is significant data supporting parks' ability to provide major community benefits, such as promoting incidental physical activity and healthier lifestyles, decreasing vehicular/pedestrian conflicts, reducing pollution, and creating organic opportunities for social interaction and community development<sup>1</sup>. Beyond the social, physical, and psychological benefits, parks can have quantifiable impact on the economic health and vibrancy of the communities they support, representing an overall return of investment in the form of increased tax revenues that justify initial funding. In fact, properties located in walkable communities near parks generally realize values over \$80 higher per square foot than properties that are not located in such areas<sup>2</sup>. In addition to this tangible increase in value, community amenities like parks have a demonstrated ability to attract high-caliber employers and businesses who believe such amenities will improve their bottom line.

## TECHNICAL ASSESSMENT

The following section focuses on the technical elements of garage design and construction, including functional design and attributes, construction type and schedule, projected costs, and key challenges and solutions.

Following is a brief list of definitions for technical terms used in this section.

**Dead load:** The basic weight of a structure, less any passengers, goods, or other materials.

**Earth retention system:** Systems used to retain the earth (e.g. surface soil) in a particular position so that construction can occur.

**Egress:** Place of exit.

**Footcandle:** A measurement of light intensity, meaning the amount of illumination caused within one square foot from a particular source of light.

**Ingress:** Place of entry.

**Level of Service:** The Level of Service design approach is similar to the criteria used by traffic engineers while designing the functional layout for a parking garage. The design criteria vary from a Level of Service A, free flow, through Level of Service D, below average delays while circulating. The geometry incorporated in the recommended design will not go below a Level of Service C, given average delays. The Level of Service design criteria includes the following items:

- Width of parking module, front of stall to front of stall opposite the drive aisle
- Width of the parking stall
- Turning radii for two way concentric and non-concentric turns in the end bays
- Ramp slopes
- Walking distance to the stair towers within the garage

<sup>1</sup> Trust for Public Land, "The Health Benefits of Parks", 2006

<sup>2</sup> National Recreation and Park Association, 2018

Figure 3.1: Level of Service Specifications

Level of Service	Parking Module	Stall Width	Turning Radii	Ramp Slope	Walking Distance
A	61'-6"	9'-0"	29'-6" (C)/31'-0" (N)	5%	300'-0"
B	60'-6"	8'-9"	28'-6" (C)/30'-0" (N)	5.50%	600'-0"
C	59'-6"	8'-6"	27'-6" (C)/29'-0" (N)	6%	900'-0"
D	58'-6"	8'-3"	26'-6" (C)/28'-0" (N)	6.50%	1200'-0"

**Notes:**

1. (C) – Two Way Concentric Turns
2. (N) – Two Way Non-Concentric Turns
3. To maintain the same level of service with wider stalls, reduce the parking module by 3" for each 1" additional stall width. Example: The parking module could be reduced to 59'-9" to maintain a level of service B with a 9'-0" stall width.

**Live load:** The weight of people, vehicles, goods, or materials beyond the basic weight of a structure.

**Secant pile system:** A system of concrete walls used for earth retention.

**Uniform/Uniformity (in lighting):** Integrating sphere-based light sources.

## FUNCTIONAL DESIGNS & ATTRIBUTES

Functional design plays an essential role in a user's perception of safety and comfort as they are driving into and through a parking garage. This is especially important in garages that serve as the main parking asset for retail environments, where the parking experience can influence a visitor's entire trip—including future retail purchases. In developing a functional concept, user intuition and safety is emphasized while ensuring that key elements—such as ingress and egress—are not so vastly different from existing attributes that they cause a "shock to the system" and confuse long-time users.

Existing vehicular entry/exits for the current garage are located on the Westchester Drive and Kate Street sides. The functional design for the new underground garage considered the current traffic flow experienced by the patrons parking in the garage by maintaining the vehicular entry/exits at about the same location as that currently used. Both of the vehicular entry/exits would allow for vehicular ingress and egress to provide a flow capacity that supports the peak hour demand while allowing the patrons flexibility to enter and/or exit from either the north or south directions.

The total thickness of the “Ground” level will be significantly greater than the typical levels when considering the depth of soil necessary for a sustainable landscaping design and the structural depth required to support the added dead load and increased live load for the potential assembly of pedestrians in a park setting. To account for the increased floor to floor height resulting from the Ground Level structural system, the vehicular ramps will slope greater than 6.67%, and as such cannot contain parking spaces in accordance with the requirements in the International Building Code. The ramp lengths will increase at the typical parking levels below grade and have a more shallow structural depth due to the reduced live loads for a parking area. The combination of these two items will allow for parking on the ramps for the lower levels. Due to limitations resulting from the site dimensions, the ramps would only be able to have parking on the interior side. The ramps would stack in the eastern and western bays to supply flat contiguous parking throughout the garage. The turning radii and parking module geometry will allow free flow of traffic providing an enhanced experience for the patrons.

## LIGHTING

The garage lighting should be designed in accordance with IESNA (Illumination Engineering Society of North America) guidelines for underground parking garages, with increased lighting in pedestrian areas, such as stair and elevator locations and entrances/exits. This calls for an average footcandle rating of 6.0 with a max./min. uniformity of 10/1 and an average/min. uniformity of 3/1. The 6.0 footcandle rating provides adequate lighting for facial recognition should security cameras be installed, and generally ensures high visibility for patrons both in the car and on foot. The pedestrian towers, stairs and elevators, would enhance the light levels to an average footcandle rating of 10.0 with the same uniformity.

LED light fixtures should be used to maximize the service life of the lighting system while reducing the long-term maintenance costs.

## SECURITY

Security in a parking garage consists of two separate concepts: passive security and active security. Passive security is the level of comfort a patron feels while walking through the garage, enhanced when potential blind spots are eliminated and sightlines to entrances/exits are continuous. Locating the vehicular ramps in the exterior bays, constructing a cast-in-place concrete structural system, and providing flat contiguous bays of parking all maximize the passive security in a garage by granting patrons the highest possible level of visibility when exiting the stair tower and entering the garage. All three design parameters work to eliminate elements where an ill-willed person could hide.

Active security—wherein direct measures are taken to improve safety and security for patrons—would involve installing security cameras and security phones. Security cameras could be located throughout the garage for monitoring activities during the hours of operation, and code blue phones could be located at the stair and elevator towers. The code blue phones could be programmed to contact a security office or have direct connection to 911.

In addition, the presence of people in the garage will increase the overall feeling of safety and security among patrons. One option would be to develop a regularly staffed visitor’s booth at the ground level to assist patrons with using garage technology, locating their vehicles, addressing safety/security issues or general complaints, and finding their destinations within Preston Center.

Finally, Parking Access and Revenue Control Systems or PARCS, discussed in the following section, can improve the feeling of safety, security, and service among patrons. PARCS elements include automated parking guidance systems (APGS), vehicle location services, and access controls.

## PARKING ACCESS AND REVENUE CONTROL SYSTEMS

In keeping with its position as a public parking resource for all of Preston Center, the existing Preston Center Garage does not include access controls and does not charge for parking. In fact, it would be difficult to implement an efficient access control system at this garage given the number of ingress and egress points and the lack of an internal circulation system (meaning that patrons must exit the garage entirely to get to the next bay of parking at the ground level).

Implementing a true PARCS would be challenging given that the garage is presently designated for free and open public parking. However, there are various features that can be explored for future design:

- **Gated and controlled system:** A gated system, with ample, attractive, and well-placed signage indicating the availability of parking for Preston Center patrons and employees, allowing for monitoring of ingress and egress and increasing opportunities for automated parking guidance and other amenities.
- **Credit card payment options with validations:** Paid parking with credit card and cash options, with validation for the first two hours. While paid parking was not well-supported among community members in outreach conducted to-date, many showed interest in validation options and credit card payment options if paid parking were implemented.
- **RFI access for long-term parkers:** Designated, segregated parking locations within the garage for long-term parkers (e.g. employees) with radio frequency identification (RFI) or another access credential.
- **Vehicle location services:** Vehicle location assistance for patrons at payment kiosks (level and row).
- **Automated parking guidance systems:** Camera-, light-, or sensor-based parking guidance systems displaying availability of spaces by facility, level, and/or space.

In addition, valet could be considered as an operational option, particularly at busy periods (e.g. weekday lunch). Valet is already incorporated at peak periods in some designated locations in Preston Center, paid for by individual business owners as an amenity. The garage could offer an opportunity to expand and centralize valet services for Preston Center businesses and services as a whole.



# 04

## COMMUNITY INPUT

# SECTION 4 - COMMUNITY INPUT

The Preston Center Parking Garage Study was set in motion by recommendations developed by community members as part of the Northwest Highway and Preston Road Area Plan (hereafter referred to as the “Area Plan”). As such, the wants and needs of the community are essential components of the study’s ultimate findings and recommended next steps. This section outlines input provided the community in various forms.

Input from community members was gathered in a variety of ways, including stakeholder group meetings, one-on-one meetings, public open houses, and a digital survey. Through these methods, community members shared their opinions of the existing garage and preferences related to design, technology, and functionality for a new garage option. The public were offered opportunities to comment and provide opinions on design and technology choices within the parameters of what was previously determined to be technically feasible, from both a qualitative and quantitative standpoint.

## OPPORTUNITIES FOR INPUT

The study included three groups intended to guide the effort and its outcomes. These included a Project Review Committee, a Stakeholder Working Group, and the general public. The role of the Project Review Committee, comprised of City, NCTCOG, and TxDOT staff and representatives, was generally to confirm technical feasibility of options within the context of various City and agency regulations and initiatives. This report focuses on the participation of the Stakeholder Working Group and the general public.

An overall summary of these meetings, in addition to individual meeting summaries, have been provided in Appendix 4B.

## STAKEHOLDER WORKING GROUP

The objective and purpose of the Stakeholder Working Group was to represent their businesses and organizations through commentary and feedback on options and recommendations provided by the team. Members of the Stakeholder Working Group include two community representatives, select members of the Project Technical Committee (including COG staff and some City officials), and several appointees from the PCWC.

The Stakeholder Working Group met four times over the course of the study to date to provide input and discuss findings and outcomes. In addition to these meetings, the project team met the administrator for the PCWC and a major property owner with the PCWC and a representative for the Corporation on the Northwest Highway/Preston Road Area Plan Advisory Task Force.

The Stakeholder Working Group, though interested in the aesthetic and functional elements of the garage and park, were most vocal about the needs of their tenants and the general business interests of the Corporation.

## GENERAL PUBLIC

The objective and purpose of the General Public meetings were to inform residents, business and property owners, and other interested members of the general public on project progress, and to obtain their feedback on various components of planning and design for the Preston Center garage site. To generate attendance for meetings and participation in digital interactions, a combination of outreach methods was used.

- Notice of meetings and feedback opportunities took place in a variety of ways, including:
- A notice in the district council member's community newsletter and/or sending a direct announcement to the district email distribution list;
- Cards issued to local businesses sharing the survey link and details about the study;
- Distributing a media release to area media, including Park Cities News, Park Cities People and Bubble Life; and
- Notice of the meeting on the NCTCOG and City of Dallas websites.

Meeting summaries are provided in Appendix D.

In addition to these in-person opportunities for input, the public was invited to participate in an online survey via SurveyMonkey. The survey solicited feedback on the existing garage's design and functionality, and gauged initial support for various aspects of technology, management, and design solutions. This survey, completed in August 2018, shaped methods and areas of focus for the in-person meetings. 324 responses were received for the survey. Generally, the results indicated that the current garage is seen as aesthetically and functionally inadequate. Respondents also indicated support for underground parking, community features, and technology to improve customer service for parkers. Full responses have been provided in Appendix 4A.

## FINDINGS

The following section summarizes input gathered from stakeholders and members of the public by category.

### GARAGE SIZING

Three options for garage sizing were provided for feedback at a community meeting in January 2019, including:

- **1,000 spaces (replace existing garage and 200 new spaces added):** Capacity needs based on results of occupancy analyses performed in 2016 and 2018, adjusted to 100% occupancy in the center.
- **1,200 spaces (replace existing garage and 400 new spaces added):** Capacity needs based on occupancy analyses plus some additional capacity for increased level of service/minimization of circulation to serve future development at increased densities.
- **1,600 spaces (replace existing garage and 800 new spaces added):** Sizing recommendation from the Area Plan.

#### Input on this topic included:

- The 1,600-space recommendation is not based on quantitative data and may be adding too much parking to the system when it is not needed, especially with increased usage of Uber and Lyft and other developments in mobility options and infrastructure.
- Level of service is a very important consideration and people are worried about the traffic and congestion ramifications of having to circulate around the Center for parking.
- Property owners in the Center shared their concerns about adding too little parking, or adding only enough parking to accommodate current development, given potential future plans for increased density. Additionally, property owners stressed the importance of the garage's ability to serve parking needs for 50+ years into the future.
- There is a need to strike a balance between providing too much parking and too little parking.

### VEHICULAR ACCESS, MULTIMODAL ACCESS, AND TRAFFIC GENERATION

#### Input on this topic included:

- Vehicular access to the garage needs to be clear and streamlined, with appropriate signage.
- There should be designated space in the Center and around the garage for pick-up/drop-off (Uber, Lyft, and Transportation Network Companies [TNCs] only), and loading for deliveries.
- General concerns about traffic issues at the Northwest Highway/Preston Road intersection and worries about uses that would generate additional traffic on a regular basis.
- 
- There should be clear and safe options for access by pedestrians and cyclists to and from the garage.
- Preston Center is not a particularly cyclist- or pedestrian-friendly area and will not be in the future without other infrastructure improvements outside of the parking garage.
- General interest in the possibility of bike parking and other light mobility options, such as electric scooters, placed in and around the garage.

### SECURITY

#### Input on this topic included:

- There was a general concern (mostly from surrounding property owners) about security in an underground garage given their anecdotal experiences with underground garages.
- Significant support for passive and active security measures, including security cameras, a staffed security booth, open and well-lit design, and emergency call systems.



## TECHNOLOGY & MANAGEMENT

Input on this topic included:

- The highest levels of support were for technology and management options that improve level of service and help drivers make decisions about where and how to park.
- There is support of signage and wayfinding programs, specifically dynamic signage and wayfinding directing patrons to available parking.
- There is support of various technology and management concepts, including automated parking guidance systems and automatic identification for frequent parkers, and enforcement of parking time limits to encourage turnover.
- There are some concerns about the possibility of paid parking at the garage. If paid parking is implemented, patrons suggested credit card-enabled, automated payment systems that would not contribute to congestion at ingress and egress points.
- There is some support of monitored and/or gated entry to the garage, although most participants seemed to support open and unobstructed entry point(s).

## DESIGN & ARCHITECTURE (GARAGE)

Input on this topic included:

- Support for an inconspicuous yet modern design for the visible elements of the parking structure, with glass and steel being favored materials.
- Support for clear and separate vehicle and pedestrian access points.
- Support from the community for a fully underground parking structure with a community park at grade. General concern about an elevated park given the lack of access and a desire to connect the park to the sidewalk and street.
- Property owners who attended meetings expressed concerns about losing parking at grade, citing issues with maintaining existing tenants if at-grade parking in the garage became unavailable.
- Representatives of the PCWC, indicated that the PCWC unanimously supports an alternative proposal combining underground/above-ground parking, a residential tower, and an elevated park, and would not agree to approve a fully underground parking design.
- Community members expressed a need for elevators/core locations at all four corners of the garage site, and a need for accessibility for disabled and elderly patrons.

## PARK DESIGN & ACCESS

Input on this topic included:

- Community members cited a need for a passive community park with grass, open space, and seating options in the Preston Center area.
- Support for at-grade access to the park (no elevation)
- Significant support for the following park features: seating and landscape, shrubs and trees, farmers market/other vendors, pavilions and shade structures, and outdoor dining space.
- Some opposition to band and performance areas (concern about traffic generation and noise), splash pads, dog parks, playscapes, and community gardens. Community members expressed that they did not want the park to be a citywide or regional attraction.
- Interest in green, open parks with landscaping, seating, and shade structures (Belo Gardens in Dallas was identified as a comparable example).
- Interest in a park that is clearly accessible to the public and maintained with the standards of other City of Dallas public parks.

## FUNDING & ORGANIZATION

Input on this topic included:

- Community members and others expressed concern that nothing would happen on the site, or an underground parking option with a community park would be an impossibility, due to the PCWC's ability to veto design options and the statements from some representatives of the PCWC that the Corporation would not agree to an underground parking garage.
- In discussing an alternative proposal of a residential tower/elevated park on the site, some community members expressed dislike of the idea of tax dollars potentially being spent on a private development.

## KEY TAKEAWAYS

Input from community members was gathered in a variety of ways, including stakeholder group meetings, one-on-one meetings, public open houses, and a digital survey. Through these methods, community members shared their opinions of the existing garage and preferences related to design, technology, and functionality for a new garage option. The following summarizes key input from each topic of garage planning, design, and implementation:

- Community members supported sizing the garage to accommodate future needs without overbuilding. This would include capacity needs based on current occupancy analyses, plus some additional capacity for increased level of service/minimization of circulation to serve future development at increased densities.
- The Stakeholder Working Group, though interested in the aesthetic and functional elements of the garage and park, were most vocal about the needs of their tenants and the general business interests of the Corporation.
- Preston Center is not a particularly cyclist- or pedestrian-friendly area and will not be in the future without other infrastructure improvements outside of the parking garage, though clearly defined bicycle and pedestrian access points and infrastructure were identified as desire components of a new structure.
- There is support of various technology and management concepts, including automated parking guidance systems and automatic identification for frequent parkers, and enforcement of parking time limits to encourage turnover.

# 05

## DESIGN CRITERIA & CONCEPT DESIGN EVALUATION



# SECTION 5 - DESIGN CRITERIA & CONCEPT DESIGN EVALUATION

The following section discusses design criteria for a new parking structure on the Preston Center Parking Garage site based on technical findings and analysis developed by the project team and input from the community on subjective, qualitative factors. An essential component of the Preston Center Parking Garage study is to create a framework by which to evaluate potential design options for the site. As such, this section also discusses the process for weighting the importance of each criterion and scoring design options on their ability to meet each criterion.

## DESIGN CRITERIA

Design criteria are grouped by topic and source (technical finding or community input).

Figure 5.1: Garage Design Criteria

Source	Criteria
<b>Garage Sizing Criteria</b> Garage sizing refers to the number of spaces the parking structure provides to the public.	
Technical Analysis	The size of the parking garage should be right sized to meet actual demand, determined by a supply analysis reflective of conditions at the time of garage construction.
Community Input	The parking garage should be sufficient to accommodate future growth.
<b>Vehicular &amp; Multimodal Access Criteria</b> Vehicular and multimodal access refers to the ways and means in which people access the structure through various modes of transportation.	
Technical Analysis	There should be two clearly defined vehicular entrances and exits.
	The existing street and vehicular circulation pattern should be maintained to minimize disruption to vehicular activity and avoid creating confusion among parking garage users.
Community Input	Bicycle and pedestrian access points should be clearly defined and separated from vehicular access points to ensure user safety from all modes of transportation.
<b>Security &amp; Technology Criteria</b> Security refers to measures implemented for the safety of parkers and other users of the parking garage. Related to security, technology refers to services and applications used to improve parking garage functionality.	

Technical Analysis	The garage should be professionally designed by a firm well-versed in mitigating potential security challenges through functional design attributes.
Community Input	The garage should include both active and passive security measures.
	Customer service and user experience should guide technology and management decisions.
<b>Garage Design &amp; Architecture Criteria</b>	
Garage design and architecture refers to the physical appearance of the garage's visible exterior components.	
Technical Analysis	Visible components of the garage, or their attributes, should not detract from or impede vehicular, pedestrian, or bicycle access.
Community Input	The garage design should be sleek, inconspicuous, and appropriate for the setting.
<b>Park Design &amp; Access Criteria</b>	
Community Input	The park should be clearly publicly accessible and maintained as a typical City of Dallas park.
	The park should be at least partially, if not totally, at-grade, with pedestrian access points at grade.
	The park should include a simple design with no major traffic-generating amenities or programming.
<b>Funding &amp; Organization Criteria</b>	
Technical Analysis	The garage and park design should offer a clear public benefit and be eligible for available funding sources.

## EVALUATING DESIGN CONCEPTS

Design concepts developed as part of this planning process, in addition to design options proposed in the future, should be evaluated based on both quantitative and qualitative factors.

A **quantitative** analysis should include objective numerical considerations, to include, but not necessarily be limited to, the following factors:

1. **Number of Publicly Available Parking Spaces:** How many publicly available spaces are provided in the design proposal. Note that this figure is independent from the total number of spaces provided in the structure; for example, if a parking structure proposal includes 1,200 spaces but 400 of those spaces will be reserved or heavily utilized by occupants of a residential tower.
2. **Size of Public Park:** The size (in square feet and acres) of the publicly accessible park or portion thereof. Note that this figure is independent from the total amount of open/green/recreation space provided, parts of which may be dedicated for use by building tenants.
3. **Cost (Total and Per Space):** The cost to construct the proposed structure, including any architectural elements included in the structure's design, in total and per space provided. Note that this figure is separate from any land acquisition costs or costs associated with constructing accompanying buildings.

A **qualitative** analysis should include an assessment of the extent to which the design concept meets technical criteria and criteria set forth by the community, as outlined in this section. As qualitative analysis generally entails value judgements and objectivity can be challenging to achieve at the surface, this planning process included the development of a methodology to apply objectivity to a qualitative assessment, outlined below.

1. Rank the importance of each criterion based on feedback from the community and the technical analysis, using the ranks outlined in the table below.

Score	Meaning
1	The criterion is essential to ensure success of the project.
0.9	The criterion is very important to the success of the project.
0.8	The criterion is important to the success of the project.
0.7	The criterion is desirable, but not a major factor in success of the project.

2. Score the option's ability to meet the criterion, using the scoring outlined in the table below

Score	Meaning
3	The proposal perfectly meets the criterion.
2	The proposal mostly meets the criterion.
1	The proposal does not meet the criterion.

3. Multiply results from 1 and 2 to obtain the weighted score for each criterion.
4. Add the weighted scores for each criterion to obtain the total weighted score.

Once design for a parking garage is underway, it is recommended that an evaluation committee comprising City staff and officials, representatives of the PCWC, and several (two to three) representatives from the community be established to perform both quantitative and qualitative evaluations of design proposals for the parking structure. Further, it is recommended that equal value be placed on the proposal's quantitative and qualitative scores.

## IMPORTANCE RATIOS BY CRITERION

Based on the above-discussed methodology, ratios for each criterion have been identified as shown in **Figure 5.2**. These criteria are used in the following section to evaluate initial design concepts developed as part of this planning process.

Figure 5.2: Importance Ratios by Criterion

Category	Criteria	Importance Ratio
Garage Sizing	The parking garage should be sufficient to accommodate existing demand and future growth.	1
Garage Sizing	The garage has been right sized to reflect actual needs at the time of construction.	0.8
Access	There are two clearly defined ingress points and two clearly-defined egress points.	1
Access	The proposed design maintains the existing street and circulation pattern.	0.7
Access	There are defined bike and pedestrian access points separate from the vehicular access point.	0.8
Security	There exists potential for both active and passive security in the parking garage.	1
Technology	There exists potential for the installation and inclusion of technology that will improve customer experience and help drivers navigate through the parking garage.	0.7
Garage Design	Visual elements of the garage are sleek, inconspicuous, and congruous with the surrounding neighborhood.	0.8
Garage Design	The visual elements of the garage do not impede vehicular or pedestrian access.	1
Park Design	The park is visibly accessible to the public.	1
Park Design	The park is at least partially at-grade, with pedestrian access at-grade.	1
Park Design	The design is simple in nature with minimal traffic-generating amenities or activities.	0.9
Funding/Org	The proposal offers a clear public benefit and is eligible for available funding sources.	1

## KEY TAKEAWAYS

- A **quantitative** analysis should include objective numerical considerations, to include, but not necessarily be limited to the **number of publicly available parking spaces, size of the public park, and cost.**
- A **qualitative** analysis should include an assessment of the extent to which the design concept meets technical criteria and criteria set forth by the community
- Once design for a parking garage is underway, an evaluation committee comprising City staff and officials, representatives of the PCWC, and several representatives from the community should be established to perform evaluations of design proposals for the parking structure.



# 06

## DESIGN CONCEPTS & RANKINGS

# SECTION 6 - DESIGN CONCEPTS & RANKINGS

Two prospective design concepts were developed based on the design criteria set forth in the previous section. The following section discusses each concept in detail, including concept attributes and design analysis, detailed costing for both the parking structure and park components, and rankings pursuant to quantitative and qualitative criterion.

## DESIGN CONCEPT EVALUATION PROCESS

An essential objective of this plan was to develop a framework for evaluating future plans for the Preston Center Parking Garage site, over and above creating and adopting a specific design proposal. The two concepts developed as part of this planning process best follow, at present, the technical criteria and community vision developed throughout the Preston Center Parking Garage study. However, they represent possible concepts only, and do not represent the only opportunities for the site.

In evaluating any design concept proposed for the Preston Center Parking Garage, a rigorous review and scoring of the concept using the methodology discussed in the previous report section (Section 5) and demonstrated in this report section should be used. If no concept is adopted within five years of issuance of this report, a check-in meeting with the Stakeholder Working Group and the Project Technical Review is recommended to ensure that the community-driven design criteria and importance ratios as written remain relevant to and representative of the vision for the site.

## CONCEPTUAL GARAGE SIZING

A range of garage sizing options were explored for both concepts presented in this section. These sizing options were derived from a variety of sources, including quantitative analysis, community feedback, and recommendations for the Area Plan. Each of the sizing options includes a replacement of the existing 800-stall parking structure, plus additional spaces in varying amounts. They are detailed in the figure below (**Figure 6.1**).

Figure 6.1: Garage Sizing Options

Sizing Scenario	Spaces Added	Primary Source	Description
Low (1,000 Spaces)	200	Absorption of projected parking demand	Based on actual projected parking demand in Preston Center, assuming 0% vacancy rate, as validated by the 2016 Kimley Horn study and the 2018 Walker update of this study
Medium (1,200 Spaces)	400	Absorption of projected parking demand, plus contingency	Based on actual projected parking demand in Preston Center, assuming 0% vacancy, plus an additional 20% industry standard supply cushion for retail centers meant to prevent excessive circulation and congestion
High (1,600 Spaces)	800	Northwest Highway and Preston Road Area Plan	Based on supply recommendation set forth in the Northwest Highway and Preston Road Area Plan, which conceptualized a doubling of the existing garage capacity

### CONCEPT 1: 100% UNDERGROUND WITH FULL-SITE COMMUNITY PARK

The basis for Concept 1, a 100% underground structure with an at-grade community park spanning the whole site, is the Area Plan recommendation for redevelopment of the Preston Center Parking Garage site and was identified as the “most critical element” in implementing the Preferred Vision for the study area. Specifically, these recommendations included an expansion of existing capacity within the garage, provided fully sub-grade, as well as an engagement of the pedestrian environment and at-grade streetscape with a community park.

The original concept rendering<sup>3</sup> from that Area Plan is shown on the next page (**Figure 6.2**).

<sup>3</sup>From Page 27 of the Northwest Highway and Preston Road Area Plan, 2016.

Figure 6.2: Concept 1 Original Concept Rendering (Area Plan)



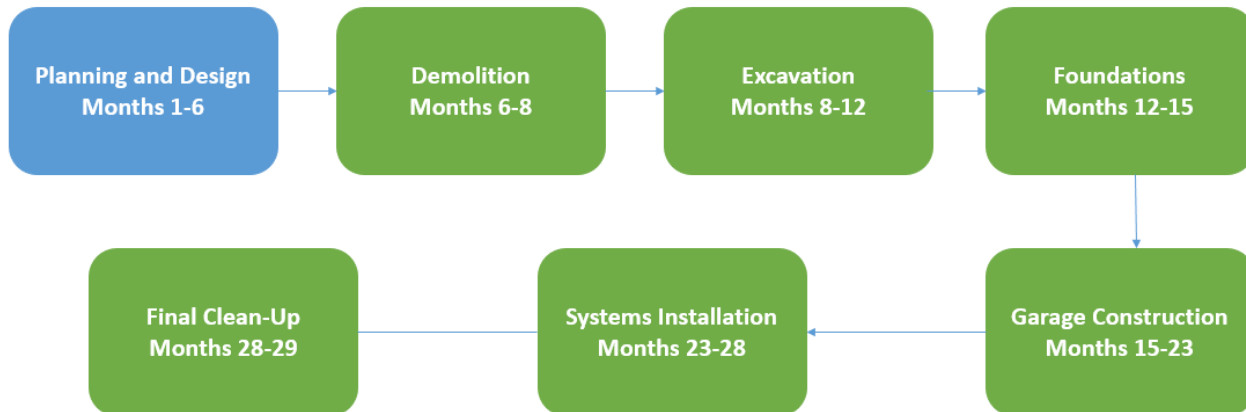
Concept 1 comprises full, unphased demolition of the existing garage for construction of a new below-grade parking garage in the same location. The structure would need to be cast-in-place, post tensioned concrete and would require a lateral earth retention system. A temporary lateral earth retention system would be required during construction, with a permanent system installed for the service life of the project. These two systems could possibly be combined if the desired aesthetic appearance was achieved.

Due to the construction needs of an underground parking structure of this size, such as earth retention and excavation, and safety requirements for on-site workers and patrons visiting Preston Center, construction could not be phased in such a way that a portion of existing parking could be salvaged, or new temporary parking could be built at the site during the construction period. However, there are many ways that adverse impacts from construction, including reduced parking availability, could be mitigated—specific options and projected costs are discussed in Section 7 of this report.

The following figure (**Figure 6.3**) depicts a conceptual construction timeline for the preferred Medium garage sizing scenario. A total duration of 29 months, including 6 months of planning and design, and 23 months of construction is projected. Note that no adverse impacts to the Center or the surrounding community are anticipated during the planning and design phase.



Figure 6.3: Conceptual Design and Construction Timeline



## SIZING SCENARIOS

Concept 1 can be designed to accommodate the sizing scenarios discussed in **Figure 6.1**. Because parking in Concept 1 is provided entirely subgrade and the floor plate consumes the entire site, increasing the size necessitates increasing the number of underground levels provided. With each typical floor plate providing roughly 320 spaces, we envision that a “Low” scenario would require 3 levels, a “Medium” scenario would require 3 full levels and a partial fourth level, and a “High” scenario would require 5 full levels. Of course, adding subgrade levels yields significant implications from both a construction and cost perspective. Detailed cost implications are discussed below.

## PROJECTED CONSTRUCTION COSTS

The following section discusses opinions of probable cost for construction of the parking structure and the community park components for Concept 1.

### Parking Structure

The following figure (Figure 6-4) provides an overview of the opinion of probable hard and soft costs, by cost category, for the Concept 1 parking structure. The methodology for evaluating probable hard and soft costs is as follows:

- Consult per-space and per-cost category pricing database developed from prime design and consulting on over 400 underground parking structures.
- Correct for state- and city-based pricing.
- Correct for any projected year-to-year inflation in unit costs, labor or material costs.
- Verify results using RSMeans, a subscription-based industry publication on construction and materials cost data updated annually.

Note that this is merely an opinion of probable cost based on known conditions and design goals, and not an estimate. Detailed costs (as shown in **Figure 6.4**) are provided for the recommended Medium sizing scenario, with a discussion of projected differences for the Low and High scenarios in **Figure 6.5**.

Figure 6.4: Opinion of Probable Parking Structure Construction Costs – Medium, 1,000 Spaces (Conceptual)

Cost Category	Description	Total Opinion of Cost	Opinion of Cost per Space (Rounded)	% Of Grand Total Cost
CONSTRUCTION COSTS				
General Conditions	General needs for construction, such as insurance, certifications, and equipment rentals.	\$4.8M – 5.0M	\$4,000 - 4,200	91%
Pre-Construction Site Work	Demolition	\$1.5M – 1.6M	\$1,200 – 1,300	
Construction Site Work	Excavation, earth retention, and irrigation.	\$3.6M – 3.7M	\$3,000 – 3,100	
Concrete	Foundations and building concrete for columns, interior walls, parking slabs, core areas, etc.	\$13.3M – 13.6M	\$11,100 – 11,300	
Masonry	Stone work	\$90,000 - 110,000	\$75 - 92	
Metals	Steel work	\$770,000 – 800,000	\$700 - 830	
Moisture Protection	Waterproofing system and sealants	\$1.4M – 1.5M	\$1,200 – 1,300	
Doors, Windows, Glass	Doors and frames for core areas	\$25,000 – 35,000	\$20 - 30	
Finishes	Pavement markings/on-pavement directionals	\$30,000 – 40,000	\$25 - 35	
Specialties	Signage and accessories	\$125,000 – 130,000	\$105 – 110	
Elevators	Electric traction elevators in core areas	\$640,000 – 700,000	\$530 – 580	
Mechanical	Basic mechanical requirements (mechanical ventilation and systems)	\$1.8M – 2M	\$1,500 – 1700	
Electrical	Basic electrical requirements	\$2.9M – 3M	\$2,400 – 2,500	
<b>Total Construction Costs</b>		<b>\$32.0M – 34.1M</b>	<b>\$27,000 – 28,500</b>	

Figure 6.4: Opinion of Probable Parking Structure Construction Costs – Medium, 1,000 Spaces (Conceptual) (CONTINUED)

Cost Category	Description	Total Opinion of Cost	Opinion of Cost per Space (Rounded)	% Of Grand Total Cost
SOFT COSTS				
Design Fees	Fees for professional design of the garage	\$1.7M – 1.8M	\$1,400 – 1,500	7%
Permit Fees	Fees needed to secure necessary permits to build the garage	\$280,000 – 290,000	\$230 – 240	
Quality Control	Independent peer review, etc.	\$550,000 – 575,000	\$460 – 480	
<b>Total Design Costs</b>		<b>\$2.5M – 2.7M</b>	<b>\$2,100 – 2,250</b>	
TECHNOLOGY COSTS				
PARCS	Basic systems needed to control access; assumes gated system with some pay-on-foot and RFI technology	\$180,000 – 200,000	\$150 – 170	2%
APGS	Sensor-based, space-by-space automated parking guidance system (assumed)	\$400,000 – 425,000	\$330 – 350	
<b>Total Technology Costs</b>		<b>\$580,000 – 625,000</b>	<b>\$480 – 520</b>	
<b>Total Cost</b>		<b>\$35.0M – 37.4M</b>	<b>\$29,100 – 31,200</b>	<b>100%</b>
CONTINGENCY COSTS				
Construction Contingency	Allocation to cover unexpected costs and liabilities	\$3.5M – 3.7M	\$3,500 – 3,700	11% of Construction Cost
<b>GRAND TOTAL COST</b>		<b>\$38.5M-41.2M</b>	<b>\$32,000-34,300</b>	

The following figure (**Figure 6.5**) depicts the projected price discount and/or premium (garage total and per space) for the Low and High sizing options.

In addition to general differences in sizing, the premium construction cost for the High sizing option is largely due to the exponential increases in excavation and earth retention costs when levels are added subgrade.

Figure 6.5: Concept 1 Projected Price Discounts or Premiums

Sizing Scenario	Total Discount/Premium	Projected Grand Total Cost	Projected Per Space Cost
Low (1,000 spaces)	\$5.0—5.5M (Discount)	\$33M—35M	\$33,000—35,000
High (1,600 spaces)	\$8.5—11.0M (Premium)	\$48M—54M	\$30,000—34,000

### Community Park

For a simple, 2.9-acre (125,000 sq. ft.) community park, including landscaping, some site furniture, and several shade structures, the projected an overall construction cost of \$45-50 per square foot, or an total cost of \$5.6M to 6.2M, including materials, labor, and contingency. General site preparation and landscaping, such as waterproofing, tree stabilization, soil treatments and installation, mulch, and edging would account for one-third to one-half of the total projected cost. Trees, shrubs, shade structures, lighting, and amenities would account for the other one-half to two-thirds of the total projected cost. Specific line item costing should be confirmed with the City of Dallas Park and Recreation Department. Note that some of the general site preparation needed for the park (e.g. demolition of the existing garage and ground level grading) will be performed as part of the parking garage construction, and as such is included in those cost projections.

## PROJECTED MAINTENANCE COSTS

The following section discusses opinions of probable cost for construction of the parking structure and the community park components.

### Parking Structure

The following figure (**Figure 6.6**) depicts projected annual general operations and maintenance (O&M) costs for the structure by cost category also based on sizing scenario. General maintenance generally includes typical upkeep, such as painting, power-washing, light fixture replacements, concrete repairs, etc. In addition, given the community's prioritization of safety and security in the garage, we have assumed that a full-time security officer would be dedicated to monitoring the garage and its occupants. Note that in general, economies of scale benefits for operations and maintenance increase as garage size increases.



Figure 6.6: Concept 1 Projected Annual General Operations &amp; Maintenance Costs

Sizing Scenario	Total Projected O&M Cost	Per Space Projected O&M Cost
Low (1,000 Spaces)	\$275,000—280,000	\$275—280
Medium (1,200 Spaces)	\$300,000—310,000	\$255—260
High (1,600 Spaces)	\$360,000—370,000	\$230—235

In addition, the industry typically recommends that between \$45-\$55 per space in any sizing scenario be set aside in a reserve fund for structural maintenance. Even the best designed and constructed parking facility requires structural maintenance. For example, expansion joints will need to be replaced and concrete invariably deteriorates over time and needs to be repaired to ensure safety and to prevent further deterioration. The structural maintenance cost typically represents the largest portion of the total maintenance budget. Property owners tend to grossly underestimate the structural maintenance cost and do not budget adequately for timely corrective actions that must be performed to cost-effectively extend the service life of the structure. The cost of structural maintenance is relatively small considering the comparatively high expenditures associated with the failure to perform proper maintenance on a timely basis.

### Community Park

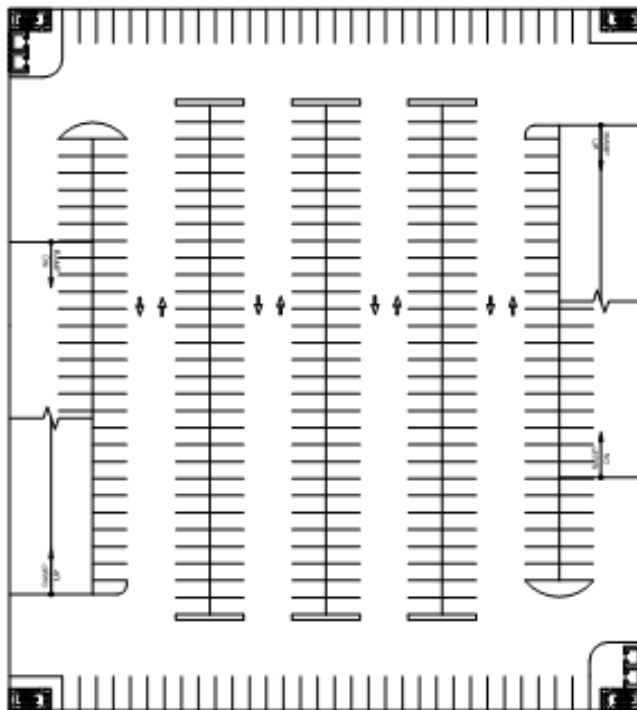
Based on maintenance costs for similar parks an annual park maintenance cost of \$4-8 per square foot per year, or an aggregate total cost of \$500,000 to \$1,000,000 is projected, depending on programming and maintenance level. The responsibility for maintenance costs and potential cost-splitting should be determined by the City of Dallas and Preston Center West Corporation.

## FUNCTIONAL DESIGN & RENDERINGS

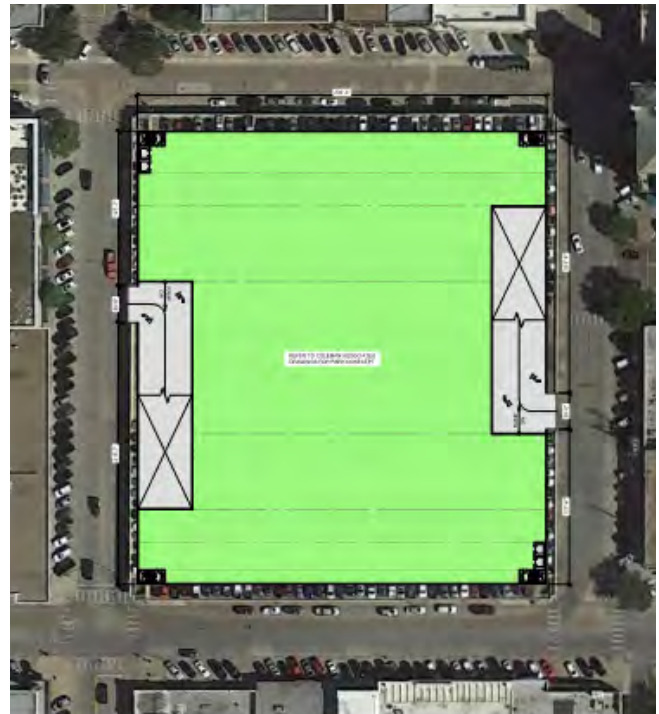
As part of the concept development process, both a functional and artistic concept design rendering were produced, as shown below.

The following figure (**Figure 6.7**) depicts conceptual functional layouts of the ground level and typical floor plate.

Figure 6.7: Concept 1 Conceptual Functional Layouts & Typical Floor Plate



02 LEVEL B1



01 GROUND LEVEL

The following figures (**Figures 6.8 and 6.9**) are artistic concept renderings representing the appearance of the structure and park from an aerial view and a side view.

Figure 6.8: Concept 1 Rendering (Aerial View)



Figure 6.9: Concept 1 Rendering (Side View)



## CONCEPT 2: HYBRID

Concept 2 is in keeping with feedback from the community conveying a desire for ground-level green space, as well as feedback from the PCWC. This concept includes bifurcation of the subject site, with a portion of the site dedicated to ground-level open park space and of the other portion of the site dedicated to at- and above-grade parking with an opportunity to build additional density atop (e.g. a residential tower). This concept would also include sub-grade parking below the entire site footprint. Finally, this concept fulfills the PCWC's desire to maintain at-grade parking for their tenants, while also honoring the community's desire for an at-grade green space or park.

As with Concept 1, three different sizing scenarios are provided for Concept 2.

Concept 2 also comprises a full, unphased demolition of the existing garage for construction of a new below grade parking garage in the same location as well as elevated parking and potential residential building approximately one half the site. The below-grade construction and earth retention system for option 2 would match option 1. The above grade parking for concept 2 would also comprise of long span cast-in-place, post tensioned concrete. The building above could be constructed of either long span post tensioned concrete or structural steel. As with concept 1, it is impractical and infeasible to phase the construction of the new parking structure in such a way that a portion of the existing parking could be utilized during the construction, however, the potential residential building could be constructed in a future phase.

A significant difference in the construction timeline is not anticipated for Concept 2. Construction would include a roughly six-month planning and design schedule and a roughly 23-month active construction period.

## SIZING SCENARIOS

Unlike Concept 1, for which additional spaces generally necessitate additional full and/or partial levels, this option allows flexibility in how to increase space count. While adding full and/or partial levels above- or below-grade is a possibility, increasing the size of each floor plate or footprint of each at- and above-grade garage level is the more cost-effective method. In addition, this method still allows for ample park space for the activities and opportunities desired by the community (seating, some green space, shade structures, etc., with no traffic-generating amenities), although the park size is reduced as the at- and above-grade garage floor plate size increases. This means that increasing size for Concept 2 does not have the same exponential cost increase implications, other than those associated with simply constructing more parking spaces, because there is no need to excavate further or increase the size of an earth retention system, as is needed in Concept 1.

The following figures (**Figures 6.10 through 6.12**) graphically depict the ground level functional design of each sizing scenario for Concept 2, visually demonstrating the decrease in park size and increase in at- and above-grade floor plate size as the number of spaces provided increases.



Figure 6.10: Concept 2 “Low” Sizing Option

**“Low” Garage Sizing Option***Public Parking: 1,000 spaces**Underground (2 Levels): 675**Ground (1 Level): 112**Above-Ground (2 Levels): 213**Public Park: 1.9 Acres**Above-Ground Garage Footprint: 42,000 SF*

Figure 6.11: Concept 2 “Medium” Sizing Option

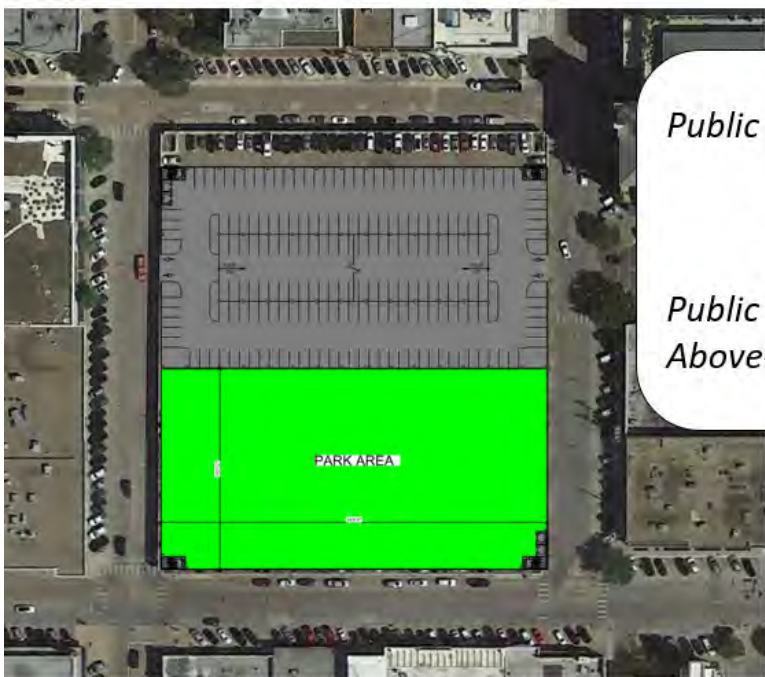
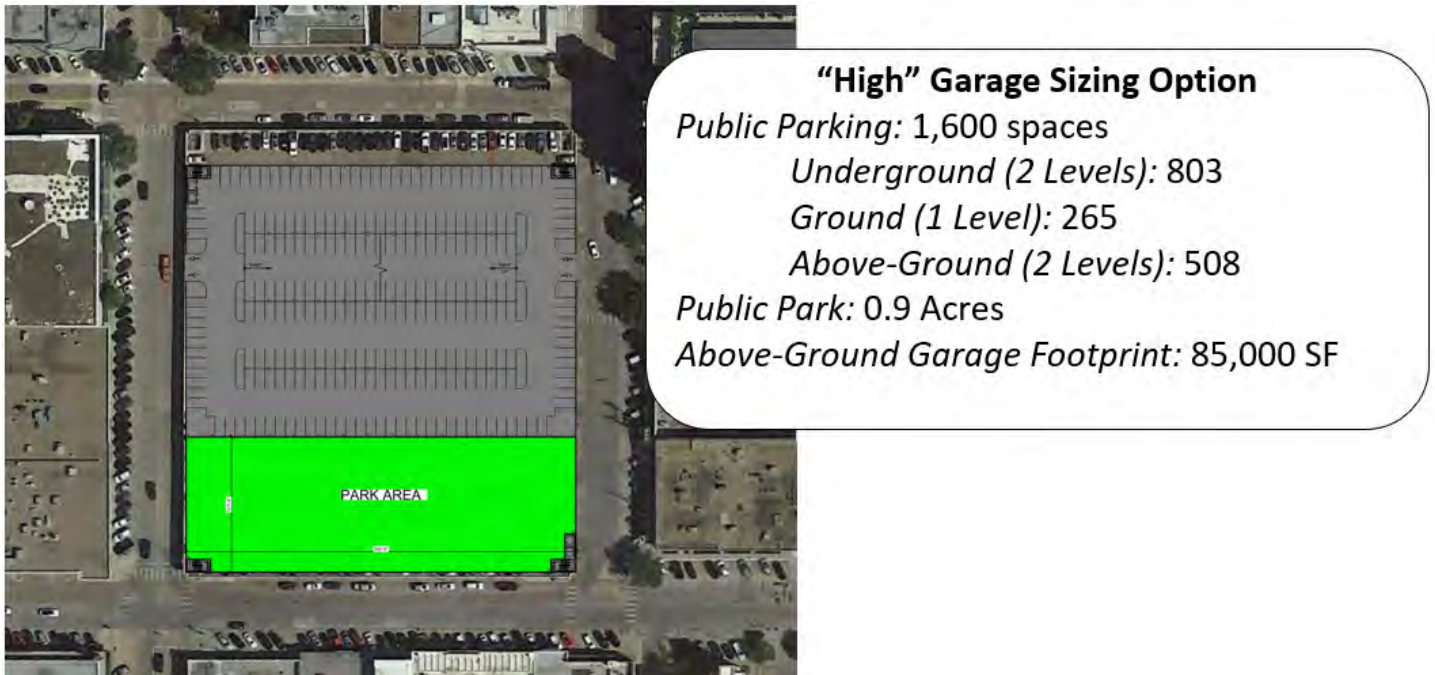
**“Medium” Garage Sizing Option***Public Parking: 1,200 spaces**Underground (2 Levels): 690**Ground (1 Level): 170**Above-Ground (2 Levels): 340**Public Park: 1.4 Acres**Above-Ground Garage Footprint: 63,000 SF*



Figure 6.12: Concept 2 “High” Sizing Option



## PROJECTED CONSTRUCTION COSTS

### Parking Structure

The following figure (**Figure 6.13**) provides an overview of the opinion of probable hard and soft costs, by cost category, for the Concept 2 parking structure.

Note that this is merely an opinion of probable cost based on known conditions and design goals, and not an estimate. Detailed costs (**as shown in Figure 6.14**) are provided for the recommended Medium sizing scenario, with a discussion of projected differences for the Low and High scenarios in **Figure 6.15**.

Figure 6.13: Concept 2 Opinion of Probable Parking Structure Construction Costs – Medium, 1,200 Spaces (Conceptual)

Cost Category	Description	Total Opinion of Cost	Opinion of Cost per Space (Rounded)	% Of Grand Total Cost
<b>CONSTRUCTION COSTS</b>				
General Conditions	General needs for construction, such as insurance, certifications, and equipment rentals.	\$4.4M – 4.6M	\$3,900 – 4,000	91%
Pre-Construction Site Work	Demolition	\$1.5M – 1.6M	\$1,200 – 1,300	
Construction Site Work	Excavation, earth retention, and irrigation.	\$3.2M – 3.4M	\$3,000 – 3,100	
Concrete	Foundations and building concrete for columns, interior walls, parking slabs, core areas, etc.	\$14.0M – 14.3M	\$11,600 – 11,900	
Masonry	Stonework	\$90,000 - 100,000	\$75 – 83	
Metals	Steel work	\$700,000 – 720,000	\$580 – 600	
Moisture Protection	Waterproofing system and sealants	\$1.1M – 1.2M	\$920 – 1,000	
Doors, Windows, Glass	Doors and frames for core areas	\$25,000 – 35,000	\$20 - 30	
Finishes	Pavement markings/on-pavement directionals	\$42,000 – 45,000	\$35 – 38	
Specialties	Signage and accessories	\$125,000 – 130,000	\$100 – 110	
Elevators	Electric traction elevators in core areas	\$800,000 – 810,000	\$670 – 680	
Mechanical	Basic mechanical requirements (mechanical ventilation and systems)	\$2.2M – 2.3M	\$1,800 – 1,900	
Electrical	Basic electrical requirements	\$3.5M – 3.6M	\$2,900 – 3,000	
<b>Total Construction Costs</b>		<b>\$31.7M – 32.8M</b>	<b>\$27,000 – 27,800</b>	
<b>SOFT COSTS</b>				
Design Fees	Fees for professional design of the garage	\$1.7M – 1.8M	\$1,400 – 1,500	7%
Permit Fees	Fees needed to secure necessary permits to build the garage	\$280,000 – 290,000	\$230 – 240	
Quality Control	Independent peer review, etc.	\$550,000 – 575,000	\$460 – 480	
<b>Total Design Costs</b>		<b>\$2.5M – 2.7M</b>	<b>\$2,100 – 2,250</b>	

Figure 6.13: Concept 2 Opinion of Probable Parking Structure Construction Costs – Medium, 1,200 Spaces (Conceptual) (CONTINUED)

Cost Category	Description	Total Opinion of Cost	Opinion of Cost per Space (Rounded)	% Of Grand Total Cost
TECHNOLOGY COSTS				
PARCS	Basic systems needed to control access; assumes gated system with some pay-on-foot and RFI technology	\$180,000 – 200,000	\$150 – 170	2%
APGS	Sensor-based, space-by-space automated parking guidance system (assumed)	\$400,000 – 425,000	\$330 – 350	
<b>Total Technology Costs</b>		<b>\$580,000 – 625,000</b>	<b>\$480 – 520</b>	
<b>Total Cost</b>		<b>\$35.4M – 36.6M</b>	<b>\$29,500 – 30,500</b>	<b>100%</b>
CONTINGENCY COSTS				
Construction Contingency	Allocation to cover unexpected costs and liabilities	\$3.4M – 3.6M	\$3,500 – 3,700	11% of Construction Cost
<b>GRAND TOTAL COST</b>		<b>\$38.1 - 39.7M</b>	<b>\$31,750 - 33,000</b>	

The following figure (**Figure 6.14**) depicts the projected price discount and/or premium (garage total and per space) for the Low and High sizing options.

Figure 6.14: Concept 2 Projected Price Discounts or Premiums

Sizing Scenario	Total Discount/Premium	Projected Grand Total Cost	Projected Per Space Cost
Low (1,000 spaces)	\$8.2M—8.9M (Discount)	\$30M—32M	\$33,000—35,000
High (1,600 spaces)	\$4.8M—5.1M (Premium)	\$44M—45M	\$27,500—28,000

The costs for different sizing scenarios do not vary as greatly for Concept 2 as they do with Concept 1 because the increases in size do not warrant additional excavation or earth retention; sizing increases can be achieved through expansion of the at- and above-grade floor plate.

## Community Park

In the Medium sizing scenario, the conceptual community park is sized at 1.4 acres. For this simple 1.4-acre (60,984 sq. ft) park, including landscaping, some site furniture, and several shade structures, we maintain an overall construction cost of \$45-50 per square foot, or an aggregate cost of \$2.7M to 3.0M.

The following figure (**Figure 6.15**) depicts the projected price discount and/or premium for the Low and High sizing options.

Figure 6.15: Concept 2 Projected Price Discounts or Premiums for Low and High Sizing Option

Sizing Scenario	Park Size	Total Discount/Premium	Projected Grand Total Cost
Low (1,000 spaces)	1.9 Acres (82,764 sq. ft)	\$1.0M—1.1M (Premium)	\$3.7M—4.1M
High (1,600 spaces)	0.9 Acres (39,204 sq. ft)	\$0.8M—1.3M (Discount)	\$1.7M—1.9M

## PROJECTED MAINTENANCE COSTS

We project that operations and maintenance costs for the Concept 2 parking structure will be similar to those projected for Concept 1.

The following figure (**Figure 6.16**) depicts projected operations and maintenance costs for the community park in each sizing scenario.

Figure 6.16: Concept 2 Projected Operations and Maintenance Costs by Sizing Scenario

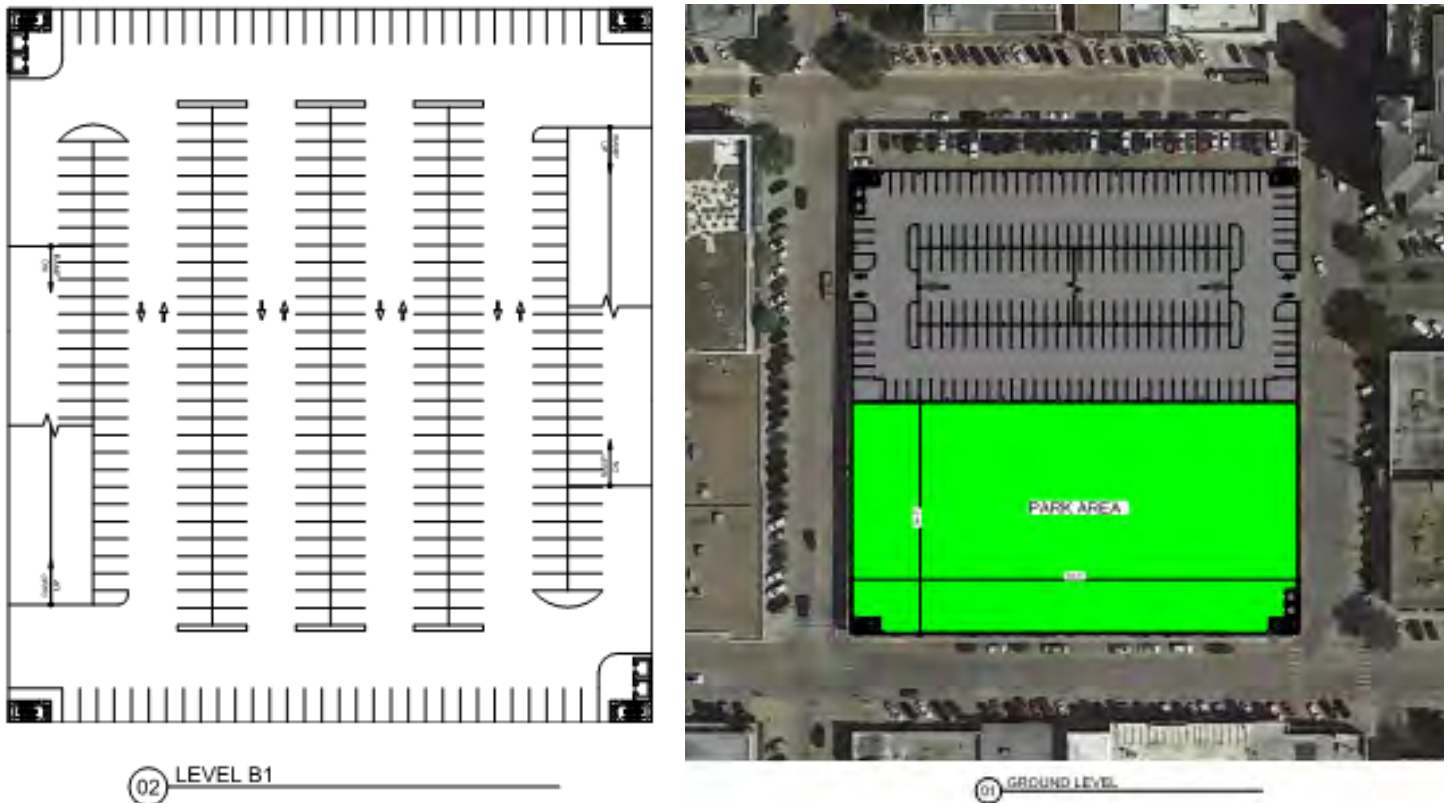
Sizing Scenario	Park Size	Projected Cost
Low (1,000 Spaces)	1.9 Acres	\$331,000—662,000
Medium (1,200 Spaces)	1.4 Acres	\$244,000—488,000
High (1,600 Spaces)	0.9 Acres	\$157,000—314,000

## FUNCTIONAL DESIGN & RENDERINGS

As part of the concept development process, both functional and artistic concept design renderings were produced, as shown below.

The following figure (**Figure 6.17**) depicts conceptual functional layouts of the ground level and typical floor plate.

Figure 6.17: Concept 2 Conceptual Functional Layouts & Typical Floor Plate





The following figures (**Figures 6.18 and 6.19**) are artistic concept renderings representing the appearance of the structure and park from an aerial view and a side view.

Figure 6.18: Concept 2 Rendering (Aerial View)



Figure 6.19: Concept 2 Rendering (Side View)



## QUANTITATIVE COMPARISON

The following figure (**Figure 6.20**) compares key quantitative factors for each concept. Note that the Medium sizing scenario is shown for both concepts.

Figure 6.20: Key Quantitative Factors, Concept 1 vs. Concept 2

Concept	Number of Public Spaces	Park Size	Project Garage Construction Cost	Project Park Construction Cost	Project Total Construction Cost
Concept 1	1,200	2.9 Acres	\$38.5M—41.2M	\$5.6M—6.2M	\$44.1M—47.5M
Concept 2	1,200	1.4 Acres	\$38.1M—39.7M	\$2.7M—3.0M	\$40.8M—42.7M

## QUALITATIVE COMPARISON

The following section discusses the ability of each concept to fulfill the qualitative design criteria set forth in Section 6 of this report. For each scenario, we first provide the qualitative scoring matrix, with a discussion by criteria below.

### CONCEPT 1: UNDERGROUND PARKING WITH PARK ABOVE

Figure 6.21: Concept 1 Qualitative Scoring Matrix

Category	Criteria	A: Importance Ratio (0.7-1.0)	B: Raw Score (1.0-3.0)	Weighted Score (A*B)
Garage Sizing	At least 1,200 public spaces	1.0	3.0	3.0
	Rightsizing to reflect actual needs	0.8	3.0	2.4
Access	Two clearly defined ingress and egress points	1.0	3.0	3.0
	Maintain existing street/circulation patterns	0.7	3.0	2.1
	Defined bike and ped access point	0.8	2.0	1.6
Security	Potential for both active and passive security	1.0	3.0	3.0
Technology	Potential for tech that helps drivers	0.7	2.0	1.4
Design (G)	Sleek and inconspicuous visual elements	0.8	3.0	2.4
	Does not impede vehicle/ped access	1.0	2.0	1.0
Design (P)	Visibly publicly accessible	1.0	3.0	3.0
	At least partially at-grade	1.0	3.0	3.0
	Simple design with minimal traffic generation	0.9	3.0	2.7
Funding	Meets qualifications for funding from city, NCTCOG, etc.	1.0	3.0	3.0
<b>Total</b>				<b>31.6</b>

- **Garage Sizing:** The conceptual garage design can provide a minimum of 1,200 spaces (based on space count for the Medium sizing scenario).
- **Access- Ingress and Egress:** The conceptual garage design enables two clearly defined ingress and egress points, with entry on Berkshire.
- **Access—Street/Circulation Pattern:** While the garage design does not cause major disruption to the existing street/circulation pattern (two one-way couplets), the concentrated ingress and egress locations on Westchester and Kate results in a new intersection of vehicles entering and exiting the garage and thru-traffic. This diverges from the existing pattern of vehicles entering and exiting the garage in various locations along Westchester and Kate. Future phases of the planning process could evaluate the feasibility of broad improvements to the access system, such as optimization of traffic flow through possible one-way to two-way street conversion, greening and parklets, expansion of the pedestrian network, and vehicular and pedestrian connectivity to Northwest Highway, Douglas Avenue, and other surrounding streets.
- **Access—Defined Bicycle and Pedestrian Access:** The conceptual garage design clearly defines and separates pedestrian entry through stair/elevator core locations at each corner of the park. No defined bicycle access is currently conceptualized, although cyclists could enter through pedestrian-centered core locations.
- **Security:** The fully sub-grade option easily enables active security (e.g. security staff) and passive security (e.g. emergency call boxes, lighting, signage and wayfinding, and camera systems) because of clear and singular ingress and access points and consistent floor configuration.
- **Technology:** While customer-focused technology is feasible with this conceptual garage design, implementation can be more challenging and costly in underground parking systems, especially when the technology requires a wireless signal.
- **Garage Design- Visual Elements:** The garage component of the conceptual design is minimally visible, with sleek and inconspicuous visible elements (core locations).
- **Garage Design- Obstruction:** While the conceptual garage design does not directly impede pedestrian or vehicular traffic, the full-site park may increase pedestrian activity and crossings at multiple locations, resulting in possible vehicular/pedestrian conflicts along Westchester and Kate streets.
- **Park Design- Public Access:** The full-site, at-grade park in this concept design is visibly accessible to the public, including those who may have difficulty using stairs or elevators.
- **Park Design- At-Grade Access:** The park in this concept is entirely at-grade.
- **Park Design- Traffic Generation:** The park in this concept is simply programmed with minimal traffic generating elements.
- **Funding:** The concept is entirely focused on providing public amenities within the vision expressed in the Area Plan.

## CONCEPT 2: UNDERGROUND PARKING WITH PARK AND DEVELOPMENT ABOVE

Figure 6.22: Concept 2 Qualitative Scoring Matrix

Category	Criteria	A: Importance Ratio (0.7-1.0)	B: Raw Score (1.0-3.0)	Weighted Score (A*B)
Garage Sizing	At least 1,000 public spaces	1.0	3.0	3.0
	Rightsizing to reflect actual needs	0.8	3.0	2.4
Access	Two clearly defined ingress and egress points	1.0	3.0	3.0
	Maintain existing street/circulation patterns	0.7	2.0	1.4
	Defined bike and ped access point	0.8	2.0	1.6
Security	Potential for both active and passive security	1.0	2.0	2.0
Technology	Potential for tech that helps drivers	0.7	2.0	1.4
Design (G)	Sleek and inconspicuous visual elements	0.8	1.0	0.8
	Does not impede vehicle/ped access	1.0	2.0	2.0
Design (P)	Visibly publicly accessible	1.0	2.0	2.0
	At least partially at-grade	1.0	3.0	3.0
	Simple design with minimal traffic generation	0.9	3.0	2.7
Funding	Meets qualifications for funding from city, NCTCOG, etc.	1.0	2.0	2.0
<b>Total</b>				<b>27.3</b>

- **Garage Sizing:** The conceptual garage design can provide a minimum of 1,200 spaces (based on space count for the Medium sizing scenario).
- **Access- Ingress and Egress:** The conceptual garage design enables two clearly defined ingress and egress points on Berkshire Street. This ingress and egress location was selected based on the overall site development pattern and does not maintain the existing ingress and egress locations.
- **Access—Street/Circulation Pattern:** While the garage design does not cause major disruption to the existing street/circulation pattern (two one-way couplets), the concentrated ingress and egress locations on Westchester and Kate results in a new intersection of vehicles entering and exiting the garage and thru-traffic. This diverges from the existing pattern of vehicles entering and existing the garage in various locations along Westchester and Kate. As with Concept 1, future phases of the planning process could evaluate the feasibility of broad improvements to the access system, such as optimization of traffic flow through possible one-way to two-way street conversion, greening and parklets, expansion of the pedestrian network, and vehicular and pedestrian connectivity to Northwest Highway, Douglas Avenue, and other surrounding streets.
- **Access—Defined Bicycle and Pedestrian Access:** The conceptual garage design clearly defines and separates pedestrian entry through stair/elevator core locations at each corner of the park. No defined bicycle access is currently conceptualized, although cyclists could enter through pedestrian-centered core locations.

- **Security:** In this concept, several factors make active and passive security more difficult, including the inconsistent floor plate configuration and the different options at entry (up to above-grade or down for below-grade).
- **Technology:** While customer-focused technology is feasible with this conceptual garage design, implementation may be more challenging because this option includes the possibility of private parking to serve the residential building and technology sensors and equipment would have to be mutually integrated.
- **Garage Design- Visual Elements:** This concept requires that a significant portion of the structure be visible (all at- and above-grade parking). This could be mitigated through screening, architectural elements, and other features.
- **Garage Design- Obstruction:** While the conceptual garage design does not directly impede pedestrian or vehicular traffic, the park and residential building may increase pedestrian activity and crossings at multiple locations, resulting in possible vehicular/pedestrian conflicts along Westchester, Kate, Luther, and Berkshire streets.
- **Park Design- Public Access:** The partial-site, at-grade park is easily visible, but in practice may be assumed or utilized as a park for only residents of the on-site building.
- **Park Design- At-Grade Access:** The partial-site, at grade park offers street-side, at-grade access. There may be additional opportunities to expand the park footprint by converting adjacent streets into additional park space, or reducing them in size to offer a larger footprint.
- **Park Design- Traffic Generation:** The park in this concept is simply programmed with minimal traffic generating elements.
- **Funding:** The concept offers many of the recommendations set forth in the community vision, including an at-grade park and expanded parking inventory, but also provides a development opportunity for a private entity. As such, it may be more challenging to obtain funding through government sources that require a wholly public benefit.



## KEY TAKEAWAYS

- A range of garage sizing options were explored for both concepts presented in this section. These sizing options were derived from a variety of sources, including quantitative analysis, community feedback, and recommendations for the Area Plan. Sizing options include 1,000 spaces, 1,200 spaces, and 1,600 spaces.
- The basis for Concept 1, a 100% underground structure with an at-grade community park spanning the whole site, is the Area Plan recommendation for redevelopment of the Preston Center Parking Garage site and was identified as the “most critical element” in implementing the Preferred Vision for the study area, including an expansion of existing capacity within the garage, provided fully sub-grade, as well as an engagement of the pedestrian environment and at-grade streetscape with a community park.
- Costs associated with Concept 1 parking structure designed to the medium size scenario, 1,200 spaces, are projected at approximately \$38.5 to 41.2 million, or \$32,000 to \$34,300 per space. Sizing for the high scenario, 1,600 spaces, is projected to increase the project costs by approximately \$8.5 to 11.0 million.
- The community park is projected to add an additional approximately \$5.6 to 6.2 million, or \$45 to 50 per square foot, to the cost of the project.
- Concept 2 includes bifurcation of the subject site, with a portion of the site dedicated to ground-level open park space and of the other portion of the site dedicated to at- and above-grade parking with an opportunity to build additional density atop, in keeping with feedback from the community. This concept would also include sub-grade, while also honoring the community’s desire for an at-grade green space or park.
- Costs associated with Concept 2 parking structure designed to the medium size scenario, 1,200 spaces, are projected at approximately \$38.1 to 39.7 million, or \$31,750 to \$33,000 per space. Sizing for the high scenario, 1,600 spaces, is projected to increase the project costs by approximately \$4.8 to 5.1 million.
- With a small space allocated for green space, the community park is project to add an additional approximately \$2.7 to 3.0 million, or \$45-50 per square foot.
- A total duration of 29 months is projected for both Concept 1 and Concept 2, including 6 months of planning and design, and 23 months of construction. Note that no adverse impacts to the Center or the surrounding community are anticipated during the planning and design phase.
- Operations and maintenance costs associated with both Concept 1 and Concept to include \$255-\$260 per space for the medium sized structure and \$4-8 per square foot for the parking.

**07**

**CONSTRUCTION IMPACT  
MITIGATION**

# SECTION 7 - CONSTRUCTION IMPACT MITIGATION

In any scenario, redevelopment of the Preston Center Parking Garage will result in significant challenges to the surrounding community throughout the nearly two-year active construction schedule—particularly for retail business owners near or adjacent to the site. Specifically, the length of the construction timetable, intensity of construction activity, and the significant temporary loss of parking are all likely to significantly disrupt normal business operations.

Potential impacts resulting from construction activity and loss of parking include, but are not limited to:

- Traffic diversions, detours, and changes in traffic patterns resulting from partial or full road closures and redistribution of parking demand around the Preston Center
- Reduced accessibility for retail patrons resulting from greater distances between parking locations and destination
- Decreased safety around site resulting from the removal of sidewalks, curbs, and gutters
- Decreased ability for pedestrians to find their way to and from alternative parking locations due to sign relocation and removal

This section outlines the recommended construction mitigation strategies as they related to parking, prior to and during the process of constructing a new, underground parking garage facility that completely replaces the existing structure.

## MITIGATION STRATEGIES

Typically, with less complicated parking projects, or projects involving replacing a surface parking lot with an above-grade parking structure, construction can be phased in such a way that maintains some access and existing parking supply through most or all of the construction process. However, the nature of this particular construction project, where the replacement parking facility is to be fully underground, is such that none of the garage's existing parking supply will be available for use during construction. The need and intensity of excavation work will demand that the entire site be unavailable for safety and logistical concerns.

The significant and immediate loss of parking supply will have far-reaching effects for business owners in and around the Preston Center. Though a complete construction mitigation strategy is multi-faceted to address the interrelated nature of issues stemming from construction, the main idea behind successful mitigation is to increase actual or effective parking supply elsewhere to partially make up for the loss of parking supply while decreasing parking demand accordingly in order to bring parking supply and demand back into balance to the greatest extent possible.

The following sections detail options and strategies for minimizing loss of parking supply and minimizing parking demand that are appropriate and potentially feasible for the context of this project and the Preston Center as a whole.

## PARKING SUPPLY

There are three intervention options for minimizing the loss of parking supply due to construction. Because the construction of the garage represents a loss of actual parking supply that cannot be reversed until the new facility opens, these options focus on buttressing the effective capacity of parking elsewhere in the system. Two of these options apply to business owners and members of the general public while the third applies to construction workers only.

- Shared parking/remote parking
- Valet parking
- Remote parking for construction workers

### Shared Parking

Many surrounding properties have private, dedicated parking lots or facilities where there is significant excess parking supply at times throughout the course of a typical day. The parking demand patterns for these facilities are dictated by the nature of the land use or land use combination that they serve.

Typically, retail parking demand peaks during evenings and weekends. Because the existing garage serves mostly retail patrons, the greatest need for supplemental parking supply will be during weekday evenings and weekends. Integrated within the Preston Center complex are a number of office buildings whose parking demand peaks during weekday mornings and afternoons. This makes these surrounding office buildings ideal candidates for shared parking agreements, where retail patrons would be allowed to park in office parking lots outside of business hours on nights and weekends, when retail parking demand is greatest.

There are many opportunities within the Preston Center to pursue temporary shared parking agreements. The following table details the commercial office sites in and around the Preston Center where shared parking agreements would be desirable and could potentially be facilitated.

Figure 7.1: Prospective Shared Parking Candidate Sites

Building Name	Address	Sq. Ft.	Parking Ratio	Est. Parking Inventory	Walking Distance from Existing Garage
The Douglas	8235 Douglas Ave	163,861	3.3/1,000 sf	540	1,056 feet
5944 Luther	5944 Luther Lane	75,186	2.5/1,000 sf	188	1,584 feet
8300 Douglas	8300 Douglas Ave	100,893	5.0/1,000 sf	504	1,056 feet
Preston Commons	8111-8117 Preston Rd	427,799	3.0/1,000 sf	1,283	1,584 feet
One Preston Centre	8222 Douglas Ave	76,600	3.0/1,000 sf	230	1,056 feet

## Shared Parking Agreement Structure

In addition to the above-referenced office buildings, the several houses of worship in the vicinity may be ideal candidates for shared parking agreements given that their weekday schedules are likely to be complementary to Preston Center's peak demand hours. These include Park Cities Baptist Church (3933 Northwest Parkway), Northwest Bible Church (8505 Douglas Avenue), Christ the King Catholic Church (8017 Preston Road), and Saint Michael & All Angels Church (8011 Douglas Ave).

A shared parking agreement should address many contractual items. These items include, but are not limited to, those listed below. An example of such an agreement has been provided in Appendix 7.

- **Length of agreement:** In this case, such agreements would be temporary in nature, with contracts set to expire whenever construction on the new garage is completed and the parking supply no longer suffers from a deficit. Before that time, Preston Center businesses and their customers can share parking with regular office tenants during the construction period.
- **Times and days when shared parking is allowed:** The agreement should specify whether parking is to be shared at all times, or whether sharing will be limited to a certain time window, such as between 5 pm and 8 am on weekdays and all day on weekends.
- **Public access to the parking lot or structure:** The agreement should guarantee public access to the private parking facility, at least during times and days specified by contract. The contract should explicitly establish how public parkers will access the facility, particularly if the facility is gate controlled.
- **Where patrons can park in the structure:** The agreement should establish where in the facility public parkers can park (on what level(s), in what rows, etc.).
- **Signage:** Stakeholders should develop a plan for clear, temporary signage that indicates the availability and location of public parking in private lots where a shared parking agreement applies. The signage should be posted both in and around the shared parking facility as well as in and around the construction site of the new Preston Center parking facility. If there are restrictions on where public parking is available within the facility, that should be clearly marked.
- **Cost:** The agreement should establish whether the shared parking facility owner/operator will be paid a static per-month fee or if public usage in the facility will be monitored, with a variable per-month fee based on use.
- **Liability and indemnification:** Liability and indemnity should be clearly delineated and established in any shared parking agreement.
- **Staffing and security outside of business hours:** The agreement should outline staffing needs if any, including security needs, that may exist at large office parking facilities being used for shared parking by the general public during nights and weekends, when staff and security presence at office buildings may be limited.



## Valet Parking

In certain contexts, or situations where parking demand remains consistently high and there is a very constrained parking supply, valet parking is an option to effectively increase parking supply. Valet operators are able to utilize parking much more efficiently and effectively, as they are able to double-park and tandem park vehicles, as well as park along access aisles and in other areas that would not otherwise be available to members of the public/retail patrons. This represents an increase in effective supply, or in other words, increasing the parking capacity without adding any new physical parking spaces. Though the exact effective increase in supply can vary, typically a parking lot can see a 50% increase in capacity or more when converted from self-park to valet parking.

Preston Center has an existing center-wide valet parking operation that could potentially be scaled up to partially supplement the loss of parking supply resulting from construction. Though valet parking alone could not feasibly mitigate the loss of all 800 spaces from the system, the fact that a system already exists would decrease the considerable up-front capital costs and administrative resources involved with initiating a valet program from scratch.

An expanded valet operation at Preston Center should expand the times that valet parking is available as well as add locations where valet stands are located.

Preston Center could also explore transitioning to a universal valet operation. This is an operation where vehicles can be dropped off at one valet stand and picked up at another. Such an operation requires a single valet operator with a coordinated, unified technology platform deployed across the valet operation. Valet staging could occur at a centralized porte cochere (or entrance) location. Pavilion Garage or Berkshire Court potentially have capacity to act as temporary valet storage options if the owners agree to such a plan. If valet is implemented, a floor or area of the garage or lot should be designated for valet vehicle storage to increase spatial efficiency, as valets can park in tighter spaces and in drive aisles. Alternatively, shared parking agreements could be constructed such that valet could be operated within the shared lots or structures.

Such centralized/universal valet systems are uncommon. One of the first, and the largest, such operation is located in the old-town district in Pasadena, CA. The City offers district-wide valet services in the Old Pasadena district. Customers can drop off and pick up vehicles at any of the 11 valet stands within the district. Various participating merchants allow validation that reduces the price of valet parking. Costs as of 2015 were \$10 per vehicle without validation and \$8 with validation. Retail patron satisfaction rates with Pasadena's valet system are high, and the system has achieved notable usage rates.

## Remote Parking for Construction Workers

There will be a significant presence of construction workers and crews on site during most days and hours, including during peak hours. These workers will be largely arriving in their own passenger vehicles to and from the job site, and they will need to park. Without specific interventions, these workers would be able to park within the Preston Center and/or at shared parking locations according to the same rules as the general public.

Establishing a remote parking location for construction workers, and implementing a policy to require workers to park there, would preserve parking supply for business owners and members of the general public at the Preston Center. Such a policy could be implemented either permanently or on an ad hoc basis during times of both heavy construction activity and peak retail/restaurant/office activity. This would involve locating and securing a site for remote parking for construction workers as well as using a shuttle or van/bus to transport workers into and out of the construction site. Future coordination of DART on existing routes may be needed.

## PARKING DEMAND

Opportunities may exist for the Preston Center to decrease, either temporarily or permanently, the level of parking demand for the area, especially during peak times. Typically, reduction of parking demand, if it can be achieved without any unintended side effects or negative spillover effects, is viewed as generally desirable.

In the case of the Preston Center, such opportunities may exist, primarily in the form of incentivizing the use of Transportation Network Companies (TNCs) that provide convenient and efficient rideshare services.

### Transportation Network Companies

TNCs such as Uber and Lyft have eased parking demand crunches in many high-demand, high-activity shopping areas across the United States. Strategies that boost use of TNCs can marginally decrease parking demand. These strategies include:

- **Uber/Lyft Pick-Up and Drop-Off Areas:** Preston Center business owners should work with the City to construct dedicated TNC pick-up and drop-off areas throughout the shopping district. Dedicated pick-up/drop-off areas will limit impediments to vehicular traffic and make loading and unloading of passengers safer and simpler. Having a number of such areas that are well signed, both at the pickup/drop off locations and on pedestrian level wayfinding signage, will maximize convenience for TNC customers and make TNC usage competitive from a convenience standpoint to self-parking, especially if self-parking must be done in a shared lot located more than 1,000 feet away from the user destination.
- **Uber/Lyft Discount Code Program:** Business owners, in conjunction with the City, can work with TNCs to establish and promote a discount program for Preston Center patrons. Such a program would operate somewhat like a parking validation program, where retail and restaurant patrons may be provided a discount code, perhaps highlighted on customer receipts.

## OTHER CONSIDERATIONS AND STRATEGIES

### COMMUNICATION STRATEGIES

A myriad of communication strategies, both analog and digital, can be employed throughout the course of the project to transparently and effectively inform both business owners and the general public. The following is a list of recommended communication strategies to consider:

- **Monthly bulletin:** the construction project manager should prepare monthly construction update bulletins and continue at least through completion of construction. These bulletins will cover general construction updates, notices for street and sidewalk closures, excessive construction noise, work hour variances, and other construction activities that may affect both immediately adjacent retailers and the Preston Center as a whole. Bulletins prepared by the contractor would be distributed by email and/or mailings.
- **Construction website:** a dedicated webpage can contain general project information, including benefits for both businesses and the general shopping public that will result from the project, design renderings, construction updates, a construction timetable, and other relevant notices and updates. The most prominent aspect of the page, however, should be a map for the general public illustrating where they can park during construction, including all relevant details related to shared parking locations. Also, instructions for valet parking and how to use TNC discount codes should be provided, if applicable. The webpage should be prominently featured on the Preston Center's main website, located at [www.theplazaatprestoncenter.com](http://www.theplazaatprestoncenter.com), and potentially linked from the contractor's project webpage, as well as from some of the businesses' respective sites.
- **Special project updates:** The contractor should provide an additional project update if there is to be any construction activity beyond the usual day-to-day work that will affect the surrounding neighbors. Notices should be sent out at least ten (10) days prior to each phase of construction and at least ten (10) days prior to any one-day or several-day mobility impact that is not a part of the day-to-day construction activities, such as street or sidewalk closures.
- **Project signs:** in the interest of good optics, as well as for aesthetic and marketing purposes, a large, prominent project sign should be placed on all four sides of the construction site. The sign should be aesthetically pleasing, featuring a rendering of the new garage, and containing other promotional information and graphics for the Preston Center and other stakeholders.
- **One-page fact sheet/infographic:** Stakeholders can jointly develop a one-page fact sheet/infographic about the Preston Center Parking Garage plan, including interim improvements, construction phasing, a "where to park" map for each user type (employees, visitors, shoppers, etc.), and the final garage design. This information would be similar to what would be available on the project webpage. The fact sheet can be distributed to local businesses and organizations as needed.

## SAFETY STRATEGIES

- **Pedestrian paths and crossings:** Develop temporary or semi-temporary pedestrian crossings at shared parking facility access points (e.g. removable bollards and signage). Temporary infrastructure at such crossings could include yellow, retroreflective “STATE LAW – YIELD/STOP FOR PEDS” signs, bollards or flexible delineators, as well as signage guiding pedestrians to crossing point on either side. Local regulations and requirements may apply.
- **Temporary safety upgrades at shared parking sites:** The contractor and/or stakeholders can work with owners of shared parking facilities with whom they have contracted to deploy additional lighting, ramps, and other items that will augment safety and perceived comfort levels for shoppers and members of the general public using shared parking, especially during nights and weekends when there may be a decreased staff/security presence at associated office buildings.
- **Detours:** At the construction site, signage needs to be posted in high visible areas and at key decision points that directs both vehicles and pedestrians around the construction site whenever a detour is necessary. Signage can be of a temporary and mobile nature, using weighted bases or A-frames, depending on the length/permanence of the detour.
- **Flaggers:** During times of especially heavy or unusual construction activity taking place during business and retail hours, human flaggers should be deployed around the construction site to amplify and support posted detour signage and ensure proper and safe traffic circulation.

## OTHER SIGNAGE STRATEGIES

Signage and wayfinding have been addressed as they relate to the construction mitigation strategies outlined above. Signage strategies that has not been covered, however, relate to business signage. The city, with input from stakeholders and Preston Center business owners, should consider drafting and implementing a policy that harmonizes existing signage codes with the need for temporary signage in and around the Preston Center. Businesses adjacent to the construction site will be impacted by decreased access, visual obstruction, and reduced drive-by traffic. The freedom for business owners to create and deploy temporary signage of their own allows them to combat those impacts in a manner that they see fit.

- **Temporary signage without permit:** Temporary signage should be allowed without a permit, assuming it meets certain aesthetic and other standards. This should apply to A-frame signage, banners, and pole-mounted signage. This would only apply to affected businesses within the study area, and temporary signs would be required to be removed upon project completion. Sign placement should be permitted within city right of way if needed, and if signs do not obstruct traffic.
- **Standardized business access signage:** If necessary, signage for “business access” should be standardized, and such signs should be provided to impacted business owners free of charge by the general contractor. If access to a business is completely restricted, additional, standardized signage should be provided that indicates that the business is “open during construction.”

## CONSTRUCTION PLANNING

The following table (**Figure 7.2**) represents a recommended planning and notification schedule for construction as it relates to parking.

Figure 7.2: Recommended Notification Schedule

When	Action
6 months prior to construction	Outreach to office facilities where shared parking agreements have been reached, if applicable.
4 months prior to construction	Outreach to business owners and neighboring property owners in and around the Preston Center introducing the project and proposed permit actions (in connection with permit notice standards). Notice will include advance notice of construction activities as well as a tentative plan to move parking to shared facilities and contact information made available for questions and concerns.
10 weeks prior to construction	Follow-up outreach to affected businesses and other Preston Center property owners.
6 weeks prior to construction	Launch construction project webpage and develop a fact sheet containing relevant parking details and outlining alternative transit options.
4 weeks prior to construction	Post flyers in and around the Preston Center Plaza and inside businesses and retailers. Start posting temporary signage and wayfinding guiding self-parkers to shared facilities, if applicable. Include start date for shared parking or keep signs covered until parking garage closure. Contact TNCs to initiate discount code that can be used by Preston Center patrons.
72 hours prior to construction	Place no-parking signs for lane closures as needed, as well as other construction notices and signage. Place signage relating to parking relocation with associated wayfinding, but keep signage covered.
48 hours prior to construction	Uncover parking relocation signage and wayfinding and close existing structure entrances and exits with construction cones.

**6 months prior to construction:** 6 months before construction start, identify appropriate facilities for shared parking agreements and negotiate the details of those agreements with the designated facilities.

**4 months prior to construction:** 4 months before construction start, implement City requirements pertaining to noticing surrounding area residents, property owners, and business owners about the construction activities about to occur. Supplant this required noticing with in-person, door-to-door outreach to residents, property owners, and business owners about the construction scope and timeline.



**10 weeks prior to construction:** 10 weeks before construction start, conduct a second round of outreach to residents, property owners, and business owners about the construction scope and timeline. Include information about replacement parking options, mobility and circulation, and others.

**6 weeks prior to construction:** 6 weeks before construction, push information about the construction scope and timeline, as well as parking and mobility options, to the public. This should include developing and launching a project webpage for the new Preston Center Parking Garage, and a detailed fact sheet (both online and in print) detailing available parking facilities, valet locations, Uber/Lyft codes, etc. The project webpage should include renderings of the new garage, as well as a detailed construction timeline and an interactive map with temporary parking options.

**4 weeks prior to construction:** 4 weeks before construction, push information out on the ground in and around Preston Center, in the form of flyers sharing the construction timeline and parking maps. Begin posting temporary signage (e.g. electronic signage and sandwich boards) directing parkers to shared parking facilities, with date that the facility will be available for parking. Work with local Transportation Network Companies (e.g. Uber and Lyft) to create a discount code for patrons being picked up or dropped off with Preston Center West.

**48-72 hours prior to construction:** In the days immediately preceding construction start, place no parking signs where needed and block of lanes for closure as necessary. Note that this is generally done by the general contractor but should be closely supervised by the City. Place signage and wayfinding directing parkers to shared parking facilities.

## COSTS

Costs for all of the options and strategies outlined above can vary widely. For example, there is no typical market rate, per-space cost for shared parking agreements; costs are typically negotiated among parties and vary depending on many variables. Additionally, valet costs are hugely dependent on hours of operation and staffing.

The following figure (**Figure 7.3**) ranks these strategies as high-cost (red), mid-cost (orange), or low to no cost (green).

Figure 7.3: Interim Intervention Cost Ranking

Strategy	Intervention	Cost Ranking
Parking Supply Mitigation	Expanded Valet Program	High-Cost
	Shared Parking Agreements	High-Cost
	Remote Parking for Construction Workers	High-Cost
Parking Demand Mitigation	Uber/Lyft Pick-Up and Drop-off Areas	Mid-Cost
	Uber/Lyft Discount Code Program	Low-Cost or No Cost
Communication Strategies	Monthly Bulletin	Low-Cost or No Cost
	Construction Website	Low-Cost or No Cost
	Special Project Updates	Low-Cost or No Cost
	Project Sign	Low-Cost or No Cost
	Fact Sheet/Infographic	Low-Cost or No Cost
Safety Strategies	Ped Paths and Crossings	Mid-Cost
	Temporary Safety Upgrades	Mid-Cost
	Detours	Low-Cost or No Cost
	Flaggers	Mid-Cost
Signage Strategies	Safety Strategies	Safety Strategies
	Safety Strategies	Safety Strategies

## KEY TAKEAWAYS

- Potential impacts resulting from construction activity and loss of parking include traffic disruptions, reduced accessibility, safety concerns, and wayfinding.
- There are three intervention options for minimizing the loss of parking supply due to construction; shared/remote parking, valet parking, and remote parking for construction workers.
- Opportunities may exist for the Preston Center to decrease, either temporarily or permanently, the level of parking demand for the area, especially during peak times. Potential parking demand reduction strategies include incentivizing the use of transportation network companies.
- A myriad of communication strategies, both analog and digital, can be employed throughout the course of the project to transparently and effectively inform both business owners and the general public. Such strategies include a monthly bulletin, website, special project updates, signage and one-page fact sheets and infographics.

## CONCLUSION

A central recommendation of the 2016 Area Plan for the neighborhoods surrounding the Northwest Highway and Preston Road interchange developed by the North Central Texas Council of Governments (NCTCOG) was the redevelopment of the aging Preston Center Parking Garage. The redevelopment vision championed by the community included an underground parking structure with an at-grade community park on top.

While the overall Preston Center parking system (including publicly available on-street, surface, and structured parking) experienced peak occupancy on a weekday between 12:00 and 1:00 PM, with a total occupancy of 71%, the Preston Center Garage was 95% occupied at the peak hour. Although several strategies related to enforcement, management structure, and information-sharing could improve the overall efficiency and cohesiveness of the Preston Center parking system as a whole, future parking demands of the study demonstrate a need for approximately 1,200 spaces at the Preston Center Garage site. Additionally, factors such as age, circulation and access, lighting, concrete and striping conditions, and cleanliness impact the garage's ability to serve its patrons well.

Input from community members confirms the Area Plan's indication for a strong preference for a structured parking facility that serves the neighborhood's needs related green space and community in addition to storing parked vehicles, with desire to provide pedestrian and bicycle-friendly amenities in addition to a park at-grade.

A range of garage sizing options were explored for both concepts presented in this section. These sizing options were derived from a variety of sources, including quantitative analysis, community feedback, and recommendations for the Area Plan. Sizing options include 1,000 spaces, 1,200 spaces, and 1,600 spaces. The basis for Concept 1, a 100% underground structure with an at-grade community park spanning the whole site, is the Area Plan recommendation for redevelopment of the Preston Center Parking Garage site and was identified as the "most critical element" in implementing the Preferred Vision for the study area, including an expansion of existing capacity within the garage, provided fully sub-grade, as well as an engagement of the pedestrian environment and at-grade streetscape with a community park. Concept 2 includes bifurcation of the subject site, with a portion of the site dedicated to ground-level open park space and of the other portion of the site dedicated to at- and above-grade parking with an opportunity to build additional density atop, in keeping with feedback from the community. This concept would also include sub-grade, while also honoring the community's desire for an at-grade green space or park.

Costs associated with the project range from approximately \$30 to 54 million, dependent upon the concept and size of the garage chosen, with an additional \$2.7 to 6.2 million projected cost for park space at-grade. A total duration of 29 months is projected for both Concept 1 and Concept 2, including 6 months of planning and design, and 23 months of construction. Note that no adverse impacts to the Center or the surrounding community are anticipated during the planning and design phase. Without the ability to accommodate parking on site throughout construction, transportation demand management and parking demand reduction strategies such as incentivizing usage of TNCs and shared parking agreements are recommended.

# 08

## APPENDICES

## Appendix 2A: Occupancy Tables

Preston Center Inventory and Occupancy Data

		Wednesday 6/13					
Parking Area #	Type	Inventory	Peak Weekday (12:30 PM) Occupancy	Notes	Total Inventory	Total Occupancy	Occ. %
1	2-Hr On-Street	6	6		6	6	100%
2	30-Min On-Street	5	5				
	2-Hr On-Street	29	27		34	32	94%
3	Off-Street Unrestricted	6	6		6	6	100%
4	Off-Street Customer	10	5				
	Off-Street ADA	2	0				
	Off-Street Unrestricted	7	3		19	8	42%
5	Off-Street Unrestricted	17	16		17	16	94%
6	30-Min On-Street	17	16				
	ADA On-Street	1	1		18	17	94%
7	2-Hr On-Street	18	18				
	Loading	1	1		19	19	100%
8	2-Hr On-Street	18	18		18	18	100%
9	Carlo's Reserved Off-Street	2	2				
	Beverly Hills Reserved Off-Street	8	6				
	McNeff Reserved Off-Street	9	4		19	12	63%
10	R Jeweler - Reserved	2	2				
	On-Street no restrictions	14	14				
	ADA	1	1		17	17	100%
11	Anna's Alts - Reserved	2	1				
	On-Street no restrictions	8	7		10	8	80%
12	Ground Level Customer	7	7				
	L2 ADA	2	2				
	L2 Reserved	17	10				
	L2 Visitor	24	21				
	L3 ADA	1	1				
	L3 Reserved	85	35				
	L3 Visitor	13	13				
	L4 ADA	3	0				
	L4 Reserved	96	30				
	L5 ADA	3	1				
	L5 Reserved	51	11				
	L5 Visitor	18	3		320	134	42%
13	CPK	6	2				
	TD Ameritrade	3	2				
	Crudo	4	2				
	Unrestricted on-street	1	1				
	EG Geller	2	1		16	8	50%
14	ADA	2	2				
	2-Hr On-Street	13	13				
	Dermatology Reserved	2	2		17	17	100%
15	ADA On-Street	2	1				
	Dermatology Reserved	4	3				
	2-Hr On-Street	19	20		25	24	96%
15A	Parking Adj Einsteins	2	0		2	0	0%
16	Soulcycle	32	6				
	ADA	2	0				
	Various Reserved	14	7		48	13	27%
17	On-Street no restrictions	6	6				
	Ambulance	1	0				
	White Loading	1	1		8	7	88%
18	2-Hr On-Street	14	13		14	13	93%
19	ADA On-Street	1	1				
	Q Clothier - Reserved	1	1				
	2-Hr On-Street	13	13				
	Other Reserved	3	3		18	18	100%
20	ADA On-Street	1	0				
	2-Hr On-Street	11	10		12	10	83%
21	Reserved (Various)	19	6		19	6	32%
22	Reserved (Clothier)	3	2				
	2-Hr On-Street	5	5				
	15-min On-Street	5	4		13	11	85%
23	1-Hr On-Street	7	7				
	2-Hr On-Street	3	3				
	ADA On-Street	1	1				
	4-Hr On-Street	6	6				
	Reserved (1HR)	2	0		19	17	89%
24	Reserved Customer	19	7				
	Reserved Employee	2	2		21	9	43%
25	2-Hr On-Street	10	10				
	ADA On-Street	1	1		11	11	100%
26	ADA On-Street	2	0				
	2-Hr On-Street	29	29		31	29	94%
27	ADA	7	1				
	Unrestricted Garage	292	86	at least 7 of 86 was construction worker parking (work on new elevator shaft that is affecting inventory)	299	87	29%
28	10-Min On-Street	3	2				
	2-Hr On-Street	17	14		20	16	80%
29	2-Hr On-Street	12	12		12	12	100%
30	ADA Garage	10	8				
	3-Hr Garage	404	404		414	412	100%
31	Unrestricted Garage	388	346		388	346	89%
32	30-Min On-Street	3	3				
	2-Hr On-Street	14	14		17	17	100%
33	2-Hr On-Street	14	14		14	14	100%

Aggregate	1941	1390
Unreserved On-Street Only	305	296
Unreserved Off-Street Only	1114	97%
PC Garage Unreserved Only	792	861
		77%
		750
		95%



## Appendix 2A: Occupancy Tables

Preston Center Inventory and Occupancy Data

		Saturday 6/30					
Area #	Type	Inventory	Peak Weekend (12:30 PM) Occupancy	Notes	Total Inventory	Total Occupancy	Occ. %
1	2-Hr On-Street	6				6	
2	30-Min On-Street	5					
3	2-Hr On-Street	29				34	
3	Off-Street Unrestricted	6					
4	Off-Street Customer	10					
	Off-Street ADA	2					
	Off-Street Unrestricted	7				19	
5	Off-Street Unrestricted	17				17	
6	30-Min On-Street	17					
	ADA On-Street	1				18	
7	2-Hr On-Street	18				19	
	Loading	1				18	
8	2-Hr On-Street	18				18	
9	Carlo's Reserved Off-Street	2					
	Beverly Hills Reserved Off-Street	8					
	McNeff Reserved Off-Street	9				19	
10	R Jeweler - Reserved	2					
	On-Street no restrictions	14					
	ADA	1				17	
11	Anna's Alts - Reserved	2					
	On-Street no restrictions	8				10	
12	Ground Level Customer	7					
	L2 ADA	2					
	L2 Reserved	17					
	L3 Visitor	24					
	L3 ADA	1					
	L3 Reserved	85					
	L3 Visitor	13					
	L4 ADA	3					
	L4 Reserved	96					
	L5 ADA	3					
	L5 Reserved	51					
	L5 Visitor	18				320	
13	CPK	6					
	TD Ameritrade	3					
	Crudo	4					
	Unrestricted on-street	1					
	EG Geller	2				16	
14	ADA	2					
	2-Hr On-Street	13					
	Dermatology Reserved	2				17	
15	ADA On-Street	2					
	Dermatology Reserved	4					
	2-Hr On-Street	19				25	
15A	Parking Adj Einsteins	2				2	
16	Soulcycle	32					
	ADA	2					
	Various Reserved	14				48	
17	On-Street no restrictions	6					
	Ambulance	1					
	White Loading	1				8	
18	2-Hr On-Street	14				14	
19	ADA On-Street	1					
	Q Clothier - Reserved	1					
	2-Hr On-Street	13					
	Other Reserved	3				18	
20	ADA On-Street	1					
	2-Hr On-Street	11				12	
21	Reserved (Various)	19				19	
22	Reserved (Clothier)	3					
	2-Hr On-Street	5					
	15-min On-Street	5				13	
23	1-Hr On-Street	7					
	2-Hr On-Street	3					
	ADA On-Street	1					
	4-Hr On-Street	6					
	Reserved (1Hr)	2				19	
24	Reserved Customer	19					
	Reserved Employee	2				21	
25	2-Hr On-Street	10					
	ADA On-Street	1				11	
26	ADA On-Street	2					
	2-Hr On-Street	29				31	
27	ADA	7					
	Unrestricted Garage	292				299	
28	10-Min On-Street	3					
	2-Hr On-Street	17				20	
29	2-Hr On-Street	12				12	
30	ADA Garage	10					
	3-Hr Garage	404				414	
31	Unrestricted Garage	388				388	
32	30-Min On-Street	3					
	2-Hr On-Street	14				17	
33	2-Hr On-Street	14				14	

Aggregate	1941	0	0%
Unreserved On-Street Only	305	0	0%
Unreserved Off-Street Only	1114	0	0%
PC Garage Unreserved Only	792	0	0%

## Appendix 2A: Occupancy Tables

Type	# Spaces	Occupancy at Peak	Occupancy %
<b>On-Street</b>			
Time Restricted	291	282	97%
Reserved	74	40	54%
Loading	2	2	100%
ADA	12	4	33%
Unrestricted	30	27	90%
<b>Total</b>	<b>409</b>	<b>355</b>	<b>87%</b>
<b>Off-Street Surface</b>			
Regular	109	50	46%
ADA	4	0	0%
<b>Total</b>	<b>113</b>	<b>50</b>	<b>44%</b>
<b>Pavilion Garage</b>			
Regular	292	86	29%
ADA	7	1	14%
<b>Total</b>	<b>299</b>	<b>87</b>	<b>29%</b>
<b>Berkshire Court</b>			
Reserved	249	86	35%
Visitor	62	44	71%
ADA	9	4	44%
<b>Total</b>	<b>320</b>	<b>134</b>	<b>42%</b>
<b>Preston Center Garage</b>			
ADA (1st Fl)	10	8	80%
3-Hr (1st Fl)	404	404	100%
Unrestricted (2nd Fl)	388	346	89%
<b>Total</b>	<b>802</b>	<b>758</b>	<b>95%</b>
<b>Grand Total</b>	<b>1943</b>	<b>1384</b>	<b>71%</b>

Parking Area #	On-Street						Off-Street Surface					Off-Street Garage						Total				
	15M	30M	1H	2H	4H	ADA	Reserved	No Limit	Loading	Total	Unrestrict	Cust	Emp	ADA	Total	ADA	Cust		Res	3HR	no Limit	
1				6						6					0						0	
2			5		29					34					0						0	
3										0	6				6						0	
4										0	7	10		2	19						0	
5										0	17				17						0	
6			17				1			18					0						0	
7					18				1	19					0						0	
8					18					18					0						0	
9								19		19					0						0	
10							1	2	14	17					0						0	
11								2	8	10					0						0	
12										0					0						0	
13								16		16					0	9	62	249			320	
14					13		2	2		17					0						0	
15					19		2	4		25					0						0	
15A									2	2					0						0	
16										0	46			2	48						0	
17								1	6	8					0						0	
18					14					14					0						0	
19					13		1	4		18					0						0	
20					11		1			12					0						0	
21								19		19					0						0	
22		5			5			3		13					0						0	
23				7	3	6	1	2		19					0						0	
24										0		19	2		21						0	
25					10		1			11					0						0	
26					29		2			31					0						0	
27										0					0						0	
28	3				17					20					0	7	292				299	
29					12					12					0						0	
30										0					0						0	
31										0					0	10			404		414	
32			3		14					17					0					388	388	
33					14					14					0						0	
<b>Total</b>	<b>3</b>	<b>5</b>	<b>25</b>	<b>7</b>	<b>245</b>	<b>6</b>	<b>12</b>	<b>74</b>	<b>30</b>	<b>2</b>	<b>409</b>	<b>76</b>	<b>29</b>	<b>2</b>	<b>4</b>	<b>111</b>	<b>26</b>	<b>354</b>	<b>249</b>	<b>404</b>	<b>388</b>	<b>1421</b>

## Appendix 2A: Occupancy Tables

Type	# Spaces	Occupancy at Peak	Occupancy %
<b>On-Street</b>			
Time Restricted	291	293	101%
Reserved	74	40	54%
Loading	2	2	100%
ADA	12	8	67%
Unrestricted	30	30	100%
<i>Total</i>	<i>409</i>	<i>373</i>	<i>91%</i>
<b>Off-Street Surface</b>			
Regular	109	59	54%
ADA	4	1	25%
<i>Total</i>	<i>113</i>	<i>60</i>	<i>44%</i>
<b>Pavilion Garage</b>			
Regular	292	222	76%
ADA	7	1	14%
<i>Total</i>	<i>299</i>	<i>223</i>	<i>29%</i>
<b>Berkshire Court</b>			
Reserved	249	115	46%
Visitor	62	52	84%
ADA	9	5	56%
<i>Total</i>	<i>320</i>	<i>172</i>	<i>42%</i>
<b>Preston Center Garage</b>			
ADA (1st Fl)	10	8	80%
3-Hr (1st Fl)	404	404	100%
Unrestricted (2nd Fl)	388	388	100%
<i>Total</i>	<i>802</i>	<i>800</i>	<i>100%</i>
<b>Grand Total</b>	<b>1943</b>	<b>1628</b>	<b>84%</b>

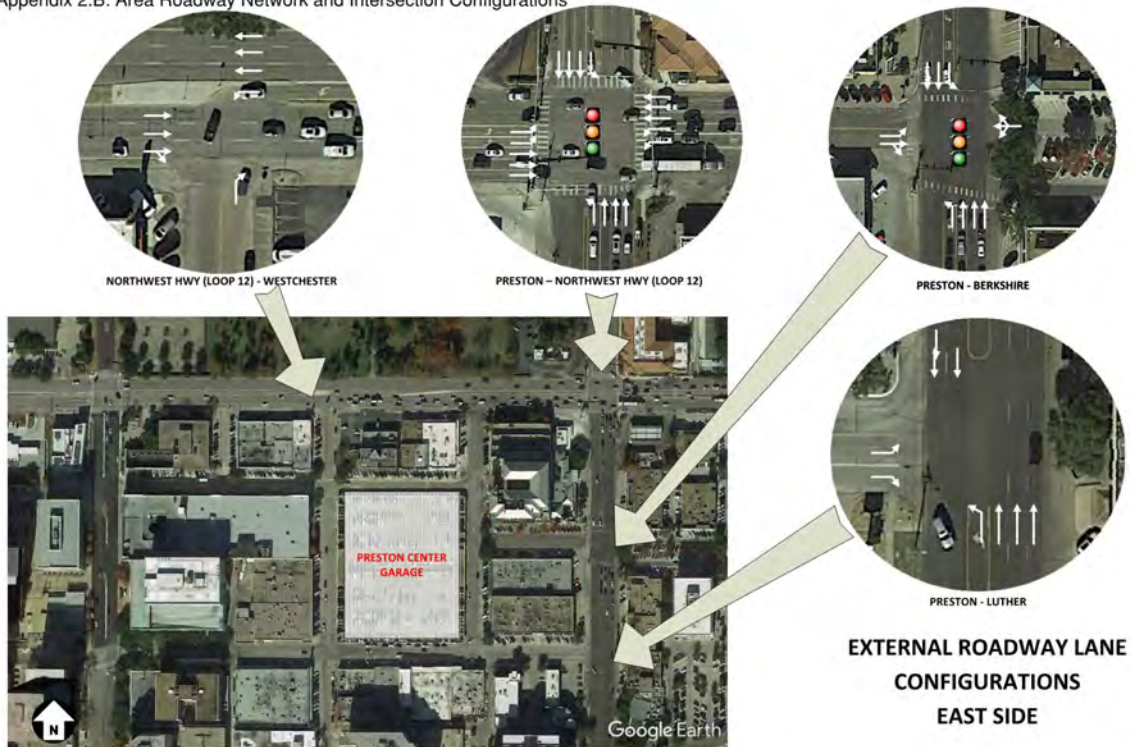
Type	# Spaces	Occupancy at Peak	Occupancy %
<b>On-Street</b>			
Time Restricted	291	263	90%
Reserved	74	40	54%
Loading	2	2	100%
ADA	12	8	67%
Unrestricted	30	30	100%
<i>Total</i>	<i>409</i>	<i>343</i>	<i>84%</i>
<b>Off-Street Surface</b>			
Regular	109	59	54%
ADA	4	1	25%
<i>Total</i>	<i>113</i>	<i>60</i>	<i>44%</i>
<b>Pavilion Garage</b>			
Regular	292	202	69%
ADA	7	1	14%
<i>Total</i>	<i>299</i>	<i>203</i>	<i>29%</i>
<b>Berkshire Court</b>			
Reserved	249	115	46%
Visitor	62	52	84%
ADA	9	5	56%
<i>Total</i>	<i>320</i>	<i>172</i>	<i>42%</i>
<b>New Preston Center Garage</b>			
	<i>1000</i>	<i>850</i>	<i>85%</i>
<b>Grand Total</b>	<b>2141</b>	<b>1628</b>	<b>76%</b>

Appendix 2B: Area Roadway Network and Intersection Configurations



FIGURE 1 – AREA ROADWAY NETWORK

Appendix 2.B: Area Roadway Network and Intersection Configurations





Appendix 2B: Area Roadway Network and Intersection Configurations

Appendix 2.B: Area Roadway Network and Intersection Configurations



Appendix 2.B: Area Roadway Network and Intersection Configurations



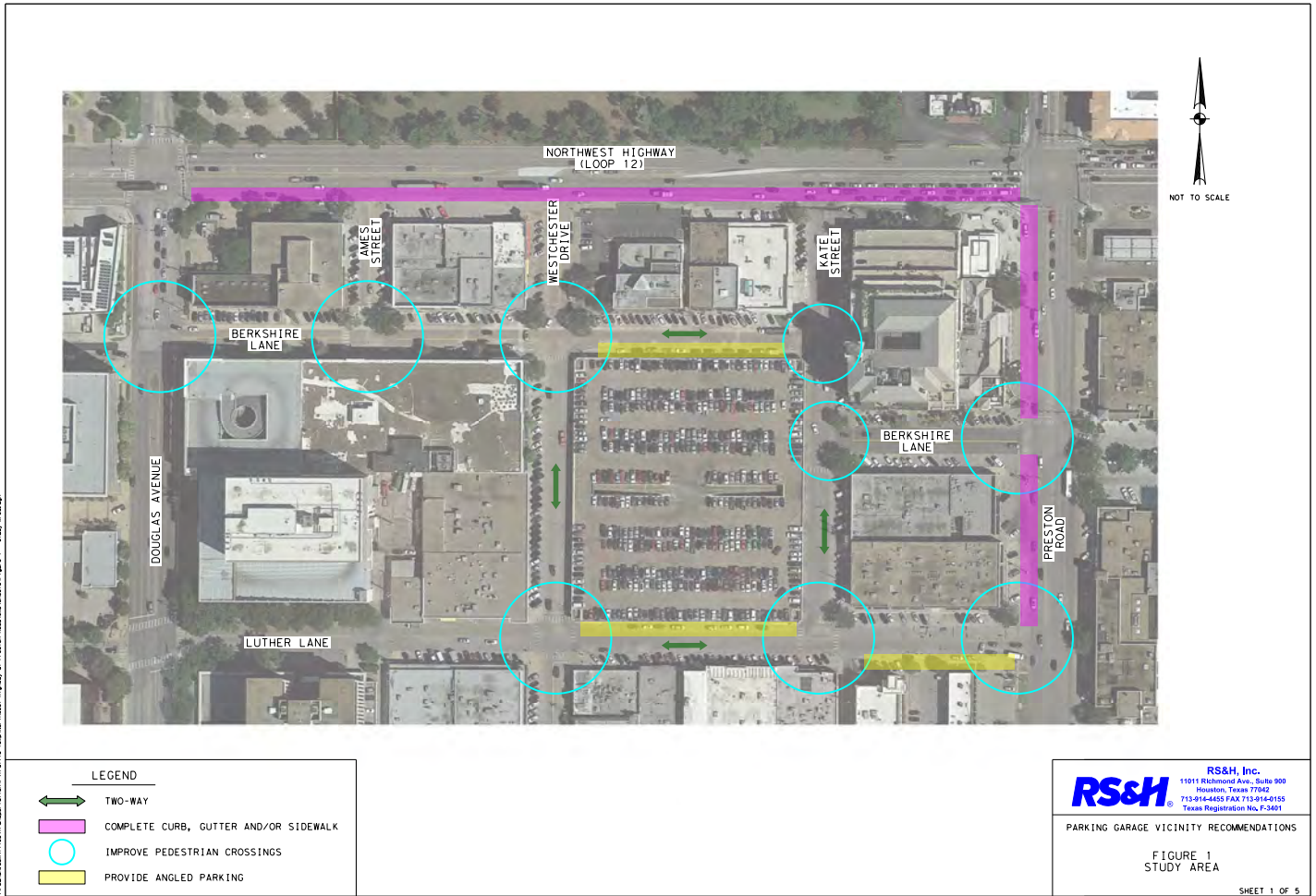


# Appendix 2B: Area Roadway Network and Intersection Configurations

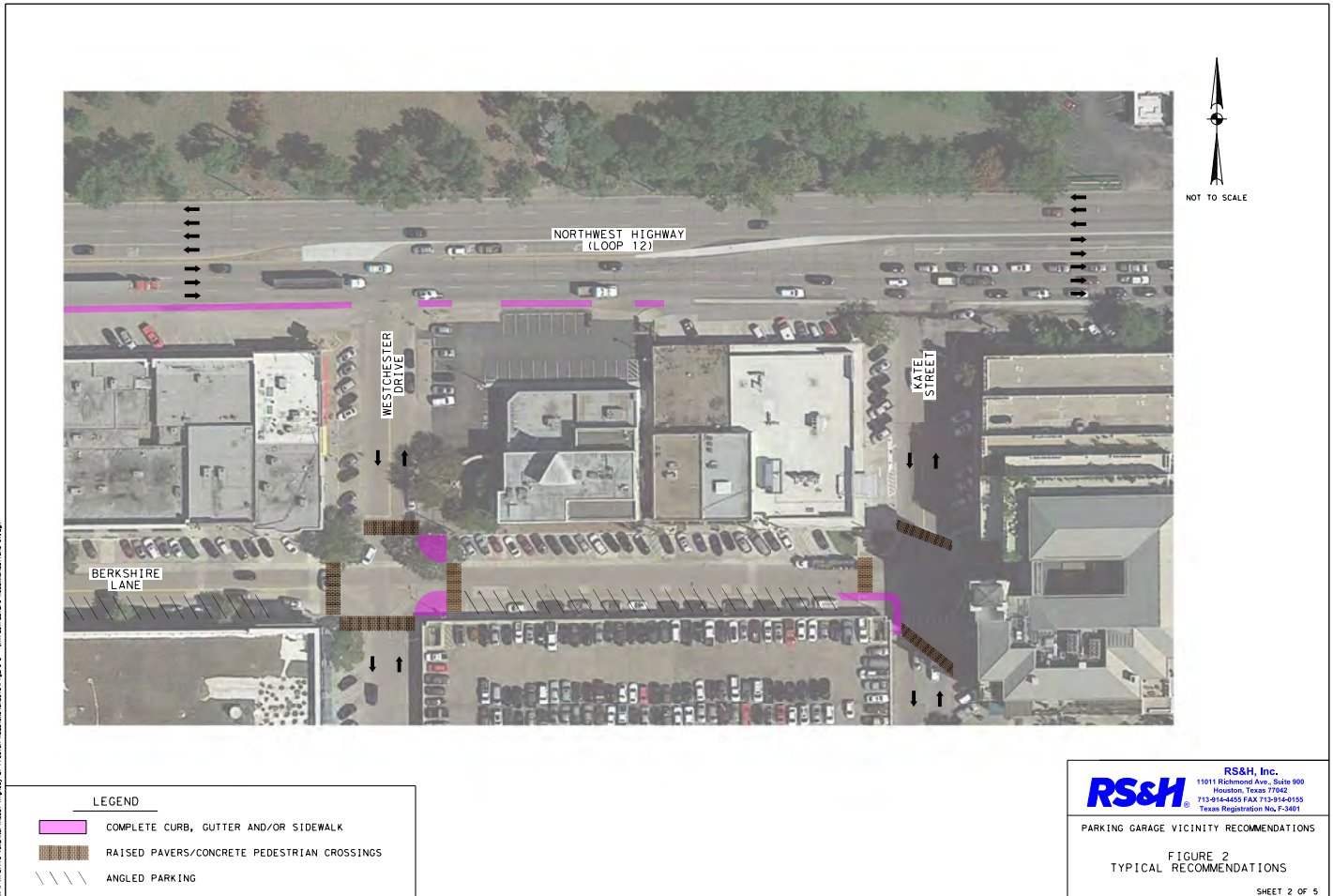
Appendix 2.B: Area Roadway Network and Intersection Configurations



Appendix 2C: Multimodal Improvement Maps

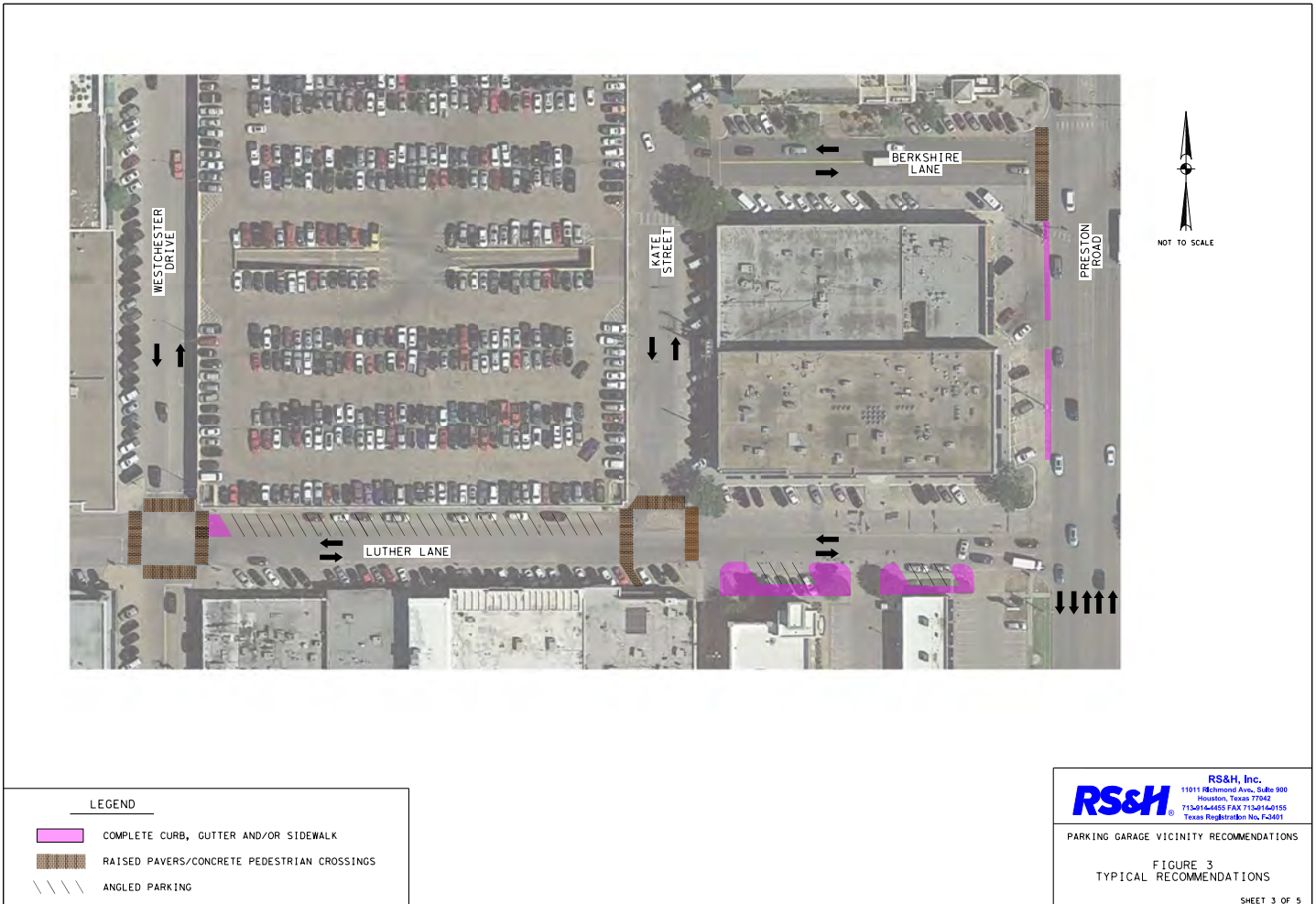


Appendix 2C: Multimodal Improvement Maps

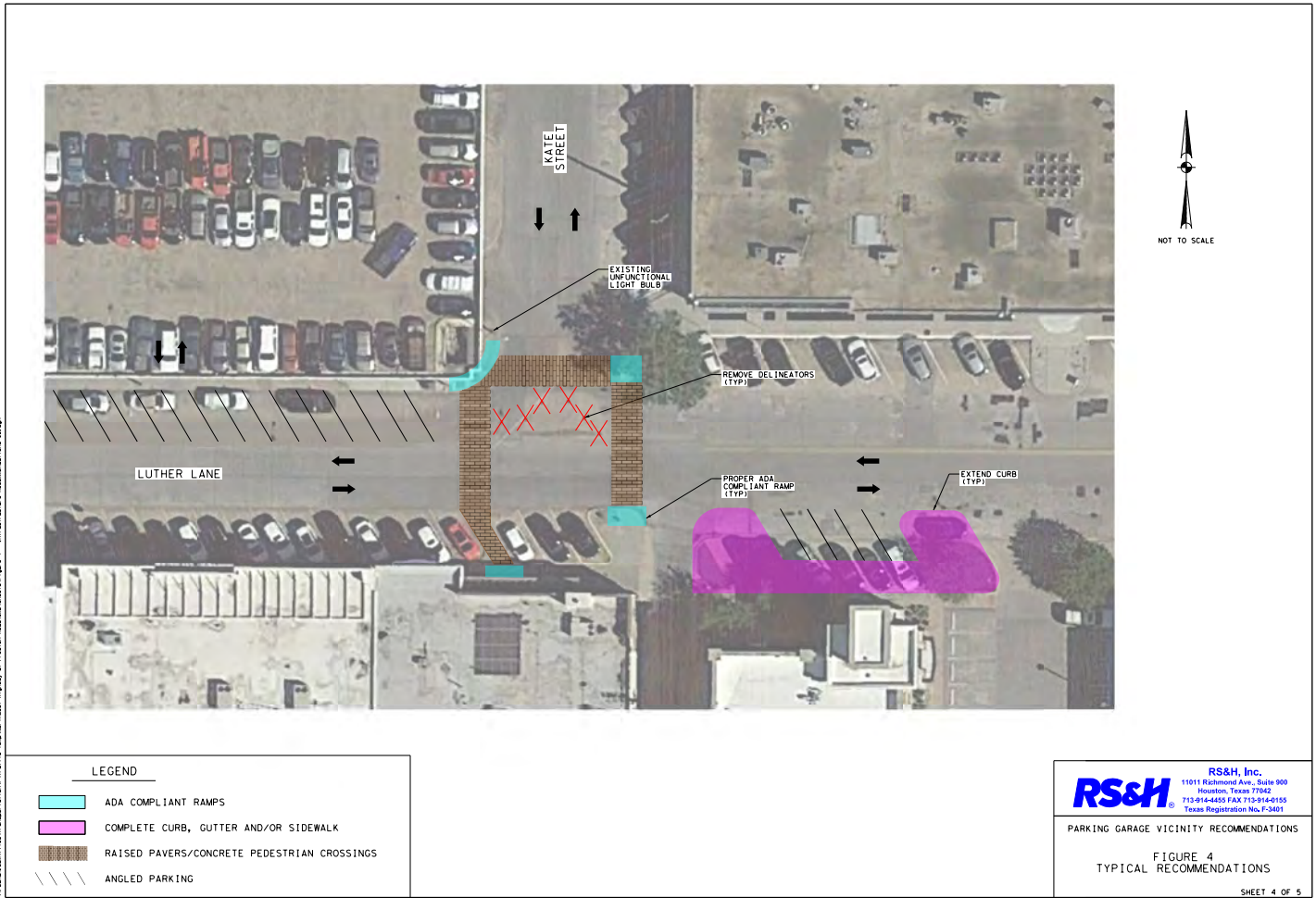




Appendix 2C: Multimodal Improvement Maps

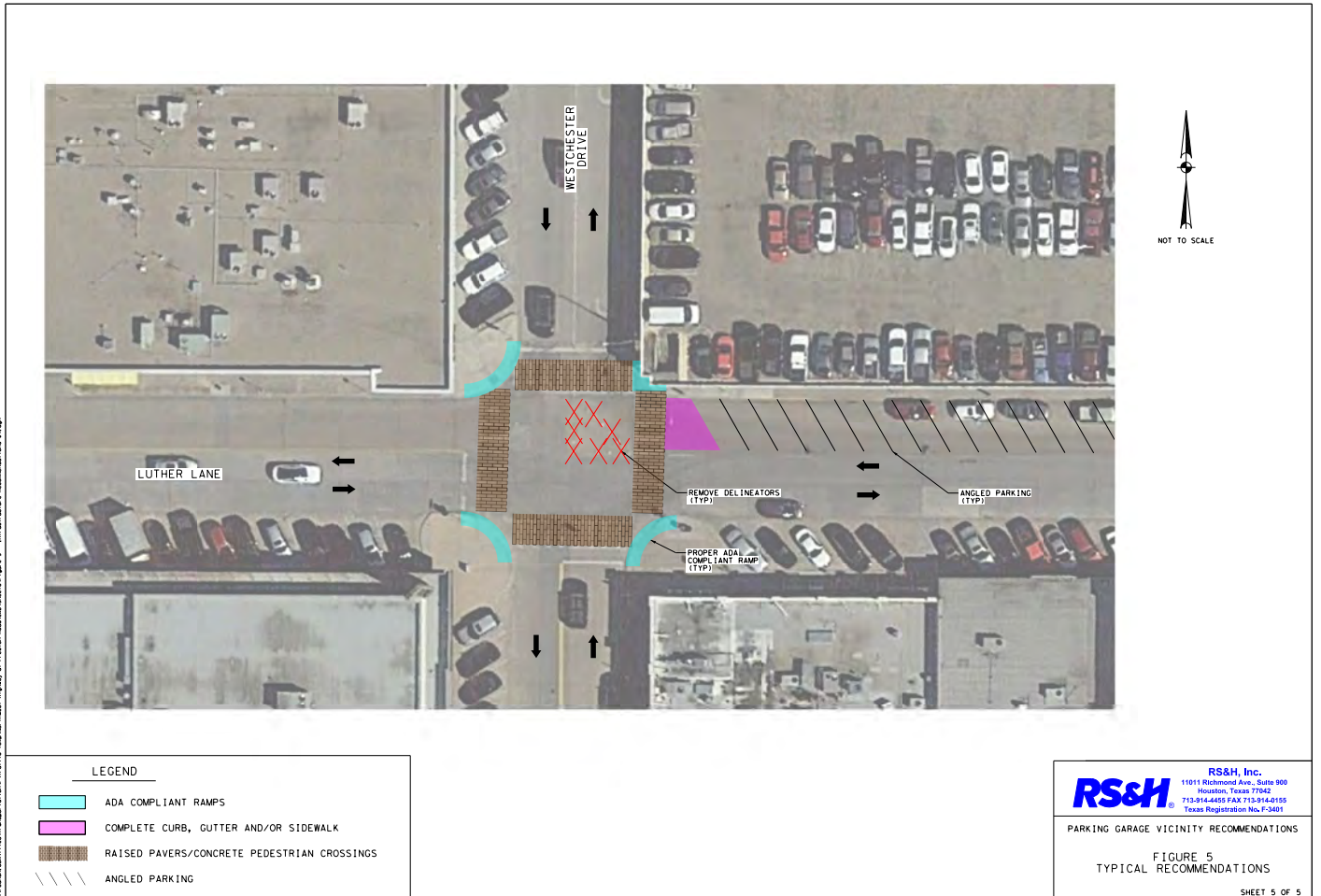


Appendix 2C: Multimodal Improvement Maps





Appendix 2C: Multimodal Improvement Maps



## Appendix 3A: Other Scenarios Explored Narrative

### NCTCOG PARKING GARAGE AND TRANSPORTATION FACILITY INTERFACE STUDY

#### ALTERNATIVE DESIGN OPTIONS EXPLORED

In addition to evaluating the technical attributes and feasibility of the underground garage scenario set forth in the Preferred Vision, Walker analyzed three additional scenarios that had been brought forward by the Preston Center West Corporation as alternative options, including:

- A new above-grade garage on the existing garage site
- Expansion of the existing garage

#### NEW ABOVE GRADE GARAGE

This scenario is not community-supported and has limited support from members of the Preston Center West Corporation. Community members and stakeholders have indicated that they are looking for a parking solution that would result in an amenity that would increase livability, aesthetics, and streetscape engagement; a new conventional one-use parking garage was not seen as an option that would achieve these objectives. Benefits of this scenario chiefly regard construction cost as compared to the cost of building a new underground garage; in addition, some members of the Corporation have indicated support of this scenario due to their desire for at-grade parking for their tenants. Note that the above-grade garage could be sized variably depending on the number of levels, and could provide up to the 1,600 spaces outlined in the Area Plan.

For this scenario, Walker investigated demolishing the existing garage and a constructing a new garage in the same location. The vehicular entries/exits and internal ramping system could be simplified to allow for a more efficient parking layout while improve the vehicular circulation, but demolishing the existing garage would eliminate parking for the area which may create a hardship for some of the local businesses and retail stores. However, following a structural review, we determined that phasing is inappropriate given the age and structural condition of the existing garage. The two construction materials considered included cast in place post tensioned concrete and precast concrete. Cast in place concrete would require a longer construction schedule and additional space for staging. The number of spaces available during the temporary condition would be reduced when compared to the precast option. The precast option would provide parking in a shorter design/construction schedule and would reduce the initial cost for the project. The negative aspect for precast is that the long term maintenance costs would be greater. The initial savings in construction for precast concrete typically breaks even with the reduced maintenance costs of cast in place post tensioned concrete in the Dallas Area at approximately 35 years.

If the new garage was constructed in a single phase, the overall construction schedule could be minimized with a reduction in the construction cost. The construction schedule is anticipated to be in the range of 12 to 14 months with the construction cost anticipated to be in the range of \$15,000 to \$18,000 per parking space or \$19,000,000 to \$23,000,000 total construction cost, assuming three levels of parking. A single phase construction schedule would eliminate all the parking within the site, but would allow parking on the adjacent streets, Berkshire Lane and Luther Lane.

Dividing the construction into two phases would allow some parking on the site which would be beneficial for the local businesses. For phase one, the site could supply approximately 175 parking spaces along with the on-street parking on Berkshire Lane and Luther Lane. The construction schedule is anticipated to be in the range of 8 to 10 months for a precast structure. Once phase one is complete, the parking garage could be placed into operation and supply approximately 540 parking spaces for the local businesses while phase two is constructed. Constructing the project in phases will increase the overall construction schedule and will require

## Appendix 3A: Other Scenarios Explored Narrative

### NCTCOG PARKING GARAGE AND TRANSPORTATION FACILITY INTERFACE STUDY

#### ALTERNATIVE DESIGN OPTIONS EXPLORED

REVISED: NOVEMBER 27, 2018

additional mobilization costs. We anticipate the construction schedule to be in the range of 14 to 16 months with the construction cost to be in the range of \$16,000 to \$19,000 per parking space or \$17,500,000 to \$21,000,000 total construction cost, and design and technology costs between \$700,000 and \$1,000,000.

Public funds identified by the City Bond program (\$10M) for Councilwoman Gates' district and by the Regional Transportation Council (RTC) (\$10M) are not eligible for this option.

#### EXISTING GARAGE IMPROVEMENTS

For this scenario, Walker investigated use/maintenance of the existing structure while constructing an additional level above. This scenario is not community-supported and has little to no support from the Preston Center West Corporation. In addition, it is largely infeasible due to existing known structural integrity issues gleaned from observation by Walker's engineers and a review conducted by the City of Dallas, challenges with the current ramping system, and unknowns in the structural system, foundation capacity and lateral load resisting system. Finally, an addition to the existing garage would not solve key elements such as confusing and ineffective access, pedestrian/vehicular conflicts, streetscape activation and aesthetics, and would merely serve as a way to add capacity.

## Appendix 3B: Other Scenarios Explored Sketch

### NCTCOG PARKING GARAGE AND TRANSPORTATION FACILITY INTERFACE STUDY ALTERNATIVE DESIGN OPTIONS EXPLORED

In addition to evaluating the technical attributes and feasibility of the underground garage scenario set forth in the Preferred Vision, Walker analyzed three additional scenarios that had been brought forward by the Preston Center West Corporation as alternative options, including:

- A new above-grade garage on the existing garage site
- Expansion of the existing garage

#### NEW ABOVE GRADE GARAGE

This scenario is not community-supported and has limited support from members of the Preston Center West Corporation. Community members and stakeholders have indicated that they are looking for a parking solution that would result in an amenity that would increase livability, aesthetics, and streetscape engagement; a new conventional one-use parking garage was not seen as an option that would achieve these objectives. Benefits of this scenario chiefly regard construction cost as compared to the cost of building a new underground garage; in addition, some members of the Corporation have indicated support of this scenario due to their desire for at-grade parking for their tenants. Note that the above-grade garage could be sized variably depending on the number of levels, and could provide up to the 1,600 spaces outlined in the Area Plan.

For this scenario, Walker investigated demolishing the existing garage and a constructing a new garage in the same location. The vehicular entries/exits and internal ramping system could be simplified to allow for a more efficient parking layout while improve the vehicular circulation, but demolishing the existing garage would eliminate parking for the area which may create a hardship for some of the local businesses and retail stores. However, following a structural review, we determined that phasing is inappropriate given the age and structural condition of the existing garage. The two construction materials considered included cast in place post tensioned concrete and precast concrete. Cast in place concrete would require a longer construction schedule and additional space for staging. The number of spaces available during the temporary condition would be reduced when compared to the precast option. The precast option would provide parking in a shorter design/construction schedule and would reduce the initial cost for the project. The negative aspect for precast is that the long term maintenance costs would be greater. The initial savings in construction for precast concrete typically breaks even with the reduced maintenance costs of cast in place post tensioned concrete in the Dallas Area at approximately 35 years.

If the new garage was constructed in a single phase, the overall construction schedule could be minimized with a reduction in the construction cost. The construction schedule is anticipated to be in the range of 12 to 14 months with the construction cost anticipated to be in the range of \$15,000 to \$18,000 per parking space or \$19,000,000 to \$23,000,000 total construction cost, assuming three levels of parking. A single phase construction schedule would eliminate all the parking within the site, but would allow parking on the adjacent streets, Berkshire Lane and Luther Lane.

Dividing the construction into two phases would allow some parking on the site which would be beneficial for the local businesses. For phase one, the site could supply approximately 175 parking spaces along with the on-street parking on Berkshire Lane and Luther Lane. The construction schedule is anticipated to be in the range of 8 to 10 months for a precast structure. Once phase one is complete, the parking garage could be placed into operation and supply approximately 540 parking spaces for the local businesses while phase two is constructed. Constructing the project in phases will increase the overall construction schedule and will require

## Appendix 3B: Other Scenarios Explored Sketch

### NCTCOG PARKING GARAGE AND TRANSPORTATION FACILITY INTERFACE STUDY

#### ALTERNATIVE DESIGN OPTIONS EXPLORED

REVISED: NOVEMBER 27, 2018

additional mobilization costs. We anticipate the construction schedule to be in the range of 14 to 16 months with the construction cost to be in the range of \$16,000 to \$19,000 per parking space or \$17,500,000 to \$21,000,000 total construction cost, and design and technology costs between \$700,000 and \$1,000,000.

Public funds identified by the City Bond program (\$10M) for Councilwoman Gates' district and by the Regional Transportation Council (RTC) (\$10M) are not eligible for this option.

#### EXISTING GARAGE IMPROVEMENTS

For this scenario, Walker investigated use/maintenance of the existing structure while constructing an additional level above. This scenario is not community-supported and has little to no support from the Preston Center West Corporation. In addition, it is largely infeasible due to existing known structural integrity issues gleaned from observation by Walker's engineers and a review conducted by the City of Dallas, challenges with the current ramping system, and unknowns in the structural system, foundation capacity and lateral load resisting system. Finally, an addition to the existing garage would not solve key elements such as confusing and ineffective access, pedestrian/vehicular conflicts, streetscape activation and aesthetics, and would merely serve as a way to add capacity.



## Appendix 4A: Survey Results



### Preston Center Parking Survey

#### Welcome to the Preston Center Parking Survey!

The City of Dallas and the North Central Texas Council of Governments are developing parking solutions for Preston Center. As part of our work, we are conducting a survey of Preston Center visitors, employees, employers, and residents. We want to hear from you! Your response plays a crucial role in our work and helps us to understand your unique perspective on parking in Preston Center. Thank you for your participation.

## Appendix 4A: Survey Results



## Preston Center Parking Survey

### Parking in Preston Center: Your Experience

1. What is your home zip code?

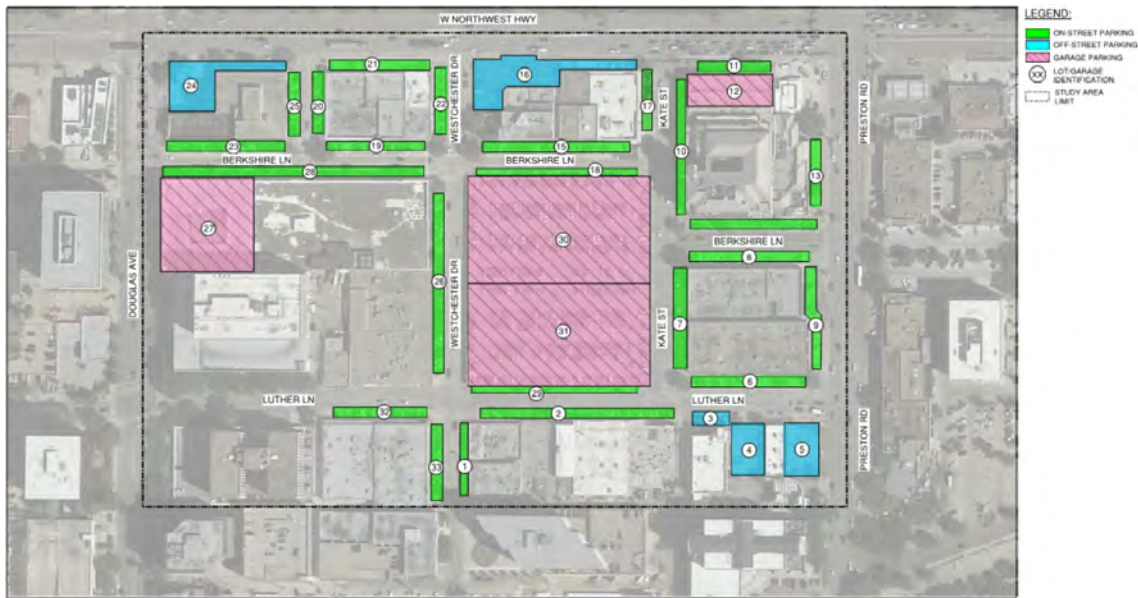
2. What is your work zip code?

3. What is your most common reason for visiting Preston Center (see study area map)?

- I work there.  To shop or run errands.
- I live there.  I don't visit Preston Center.
- Dining or entertainment.
- Other (please specify)

Appendix 4A: Survey Results

Preston Center Study Area



4. How do you typically get to Preston Center?

- Car/truck/van (personal or work vehicle)
- Uber/Lyft
- Walking
- Other (please specify)
- Biking
- Bus (DART)

5. How much time do you typically spend looking for a parking space once you arrive at Preston Center?

- I'm usually able to find parking immediately.
- A few minutes
- 5 to 10 minutes
- More than 10 minutes
- I don't drive to Preston Center.

6. Where do you typically prefer to park at Preston Center?

- The Preston Center Garage
- On-street parking spot
- Off-street parking lot
- One of the other parking garages (Pavilion Garage or Berkshire Court Garage)
- Depends on my destination.

## Appendix 4A: Survey Results

**7. How far from your destination are you typically able to park?**

- Right in front of or next to my destination
- Less than one block away
- 1-2 blocks away
- More than 2 blocks away

**8. Which factor is most important to you when deciding where to park on a typical day at Preston Center?**

- Cost
- My personal safety
- How close the parking spot is to my destination
- How easy the parking spot is to access from main roads
- Condition/appearance of the parking area
- Other (please specify)

**How well do the parking and mobility features in Preston Center work for you? Please rate the following factors.**

**9. Availability of parking spaces**

- Good
- Adequate
- Inadequate

**10. Convenience of parking spaces**

- Good
- Adequate
- Inadequate

## Appendix 4A: Survey Results

**11. Preston Center parking garage signage**

- Good
- Adequate
- Inadequate

**12. On-street parking signage**

- Good
- Adequate
- Inadequate

**13. Directional signage (in the Preston Center parking garage)**

- Good
- Adequate
- Inadequate

**14. Directional signage (throughout the study area)**

- Good
- Adequate
- Inadequate

**15. Preston Center parking garage appearance**

- Good
- Adequate
- Inadequate

**16. Parking enforcement throughout the study area**

- Good
- Adequate
- Inadequate



## Appendix 4A: Survey Results

**17. Availability of pedestrian features, such as street crossings, sidewalks, and benches**

- Good
- Adequate
- Inadequate

**18. Quality of pedestrian facilities**

- Good
- Adequate
- Inadequate

**19. Quality of other transportation types, such as bus (DART), bike lanes and amenities, and other options**

- Good
- Adequate
- Inadequate

**20. If you'd like, please provide comment on your responses here.**

Appendix 4A: Survey Results



## Preston Center Parking Survey

### Parking Best Practices and Technologies: Your Opinion

Please share your level of support for the following parking design practices on a scale of 1 to 5, with 1 meaning no support and 5 meaning very high support.

**21. Underground parking with green space above (on ground level)**

5                      4                      3                      2                      1

**22. Contextual design (architectural details to make parking garages look similar to surrounding buildings)**

5                      4                      3                      2                      1

**23. Integrated parking (parking garages integrated with other community uses, such as shopping or parks)**

5                      4                      3                      2                      1

## Appendix 4A: Survey Results

future, like offices or hotels)

5	4	3	2	1
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

25. Designated loading space for Uber, Lyft, and other loading

5	4	3	2	1
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

26. Green building practices (such as eco-friendly building materials, green roof systems, and energy-efficient lighting)

5	4	3	2	1
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Please share your level of support for the following parking management and technology practices on a scale of 1 to 5, with 1 meaning no support and 5 meaning very high support.

27. Time limits for on-street parking

5	4	3	2	1
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

28. Parking meters/payment systems that accept credit cards

5	4	3	2	1
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

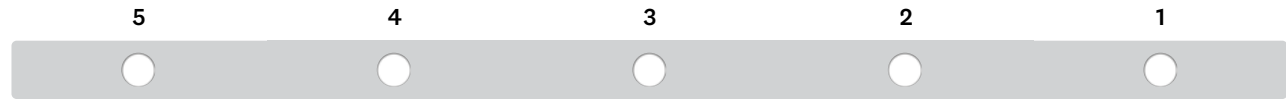
29. Mobile applications that allow users to reserve parking

5	4	3	2	1
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

30. Higher parking rates for the most conveniently-located parking

5	4	3	2	1
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

## Appendix 4A: Survey Results

**31. Access to real-time parking availability on the web or through a smartphone****32. Consistent enforcement of parking regulations****33. Clear signage to help users locate parking****34. Dynamic signage showing real-time parking availability information****35. If you'd like, please provide comment on your responses here.****36. What parking practices have you seen in other communities? In your opinion, would any work well for Preston Center?**

## Appendix 4A: Survey Results



### Preston Center Parking Survey

**Thank you for participating!**

**Thank you for participating in the Preston Center Parking Survey. For additional information on this study, please contact [x person] at [x e-mail].**



Appendix 4B: Narrative Survey Results

**NCTCOG Preston Center Parking Garage Study: Narrative Survey Responses**

Existing Garage Appearance and Functionality	Future Design Wants/Needs
Garage is an eyesore.	Green space/park
One-ways in garage are confusing	Pedestrian bridges
Lighting and security in garage are very poor	Underground garage needs a lot of security and lighting to feel safe
The garage is dark and leaks badly when it rains	Underground parking with pedestrian plaza on top
Not enough ADA parking	Bury the garage and put a park at grade
Garage gives impression that area is run-down and unsafe	Tear it down and build a functional garage
Garage is outdated	Needs a community feel
Dark and off-putting; detracts from customer experience	Worried about expense and construction interruptions with an underground garage
Stairs appear unsafe	Interior of garage is dark and unclean; needs maintenance
Garage looks structurally unsafe	Park should have some sort of children's component
No elevator access to street level	Concerned about incorporating shopping carts into design (e.g. from Target customers)
Difficult to find core access- pedestrians walk up and down ramps	New garage should have controlled vehicular access
Difficult to understand how to access second level of garage	New garage needs to have more capacity than existing garage
	Some interest in integration with retail and/or housing

Parking Management Concerns and Interests	Multimodal/Access Concerns
Parking availability is tight at lunch time- can take over 15 min to find parking	Not pedestrian-friendly
Construction worker parking makes it even more difficult to park	Sidewalks are terrible
Employees need better places to park- not in customer spaces	Kate and Berkshire need pedestrian crossings
Not enough ADA parking throughout study area	Access to/from NW Hwy is challenging
Need better enforcement, especially for employees	Safe walkability from Preston Center East
Most concerned about impacts of new Target on parking availability for others	People drive wrong way down one-way streets to access the garage
Employees are given warnings by security guards even when they park on roof level	Dangerous pedestrian crossings mid-block
Capacity is the main issue	More pedestrian crossings needed
Employee parking is the main capacity issue	More signage for one-way streets needed
Create opportunities for a park once policy	Pedestrian/vehicular conflicts are very dangerous
Interested in valet and real time parking availability signage/apps	Concerned about park space attracting more traffic
Interested in combination of visitor parking and long-term monthly parking	
Interested in space-by-space real time parking availability/sensors	
Paid parking may be needed to cover cost of underground parking	
Interested in free parking for 1-2 hours or validation program	
Some interest in integration with toll tags/ quick and simple access options so lines don't form	

## Appendix 4C: Meeting Descriptions

The following is an overview of the meetings held:

- **Meeting 1—June 12<sup>th</sup>, 2018:** This meeting served as a study kickoff meeting and initial information-gathering session. During this meeting, stakeholders were informed of the scope of work for the study. Input was focused generally on the context and history of the Preston Center West Corporation, as well as general concerns, wants, and needs of the property owners.
  - **Meeting 2—September 5<sup>th</sup>, 2018:** During this meeting, stakeholders provided input on specific garage features, such as design, vehicular and multimodal access, opportunities for community amenities, security, and technology.
  - **Meeting 3—January 30<sup>th</sup>, 2019:** During this meeting, stakeholders prioritized security, technology, and design options, and provided comment on design concepts for both the garage and the park.
  - **Meeting 4—August 6<sup>th</sup>, 2019:** During this meeting, stakeholders discussed the final garage concepts.
- 
- **Meeting 1—September 6<sup>th</sup>, 2018:** This meeting served as a kickoff meeting for the general public, wherein the consultant team shared details on the study context and scope. In addition, this meeting included stations on passive and active security, vehicular access, multimodal access and amenities, and garage and park design. At these stations, attendees were invited to share their comments on various visual prompts in each category.
  - **Meeting 2—January 31<sup>st</sup>, 2019:** This meeting was an opportunity for the public to prioritize various conceptual security, design, and technology options for the garage, as well as programming and aesthetic elements for the park. In addition, meeting attendees were invited to comment on working conceptual designs for the garage and park. Attendees demonstrated preferences on board stations using red and green stickers, indicating like or dislike of various options (such as automated parking guidance systems, manned security booths, various external and internal design options for pedestrian and vehicular access to the garage, and park amenities and appearance).
  - **Meeting 3—August 8, 2018:** At this meeting, the public discussed final garage design concepts.

## Appendix 7: Shared Parking Agreement Example

**STEWART TITLE & TRUST OF PHOENIX  
NON-INSURED**

Recording requested by  
And when recorded return to:

Poli & Ball, P.L.C.  
2999 North 44<sup>th</sup> Street, Suite 500  
Phoenix, Arizona 85018  
Attention: Shawn McLeran

08100067  
1/2

DECLARATION OF COVENANTS  
AND GRANT OF EASEMENTS FOR  
KIERLAND CORPORATE CENTER

OFFICIAL RECORDS OF  
MARICOPA COUNTY RECORDER  
HELEN PURCELL  
20080494774 06/04/2008 02:53  
ELECTRONIC RECORDING

08100067A-23-2-1--  
riosj

This Declaration of Covenants and Grant of Easements for Kierland Corporate Center (“Declaration”) is made as of this 3<sup>rd</sup> day of June, 2008, by BATAA/KIERLAND, LLC, an Arizona limited liability company, hereinafter “Declarant.”

#### RECITALS

- A. Declarant is the owner of certain improved real property located in the County of Maricopa, State of Arizona as the same is legally described on Exhibit “A” (the “Property”).
- B. Declarant is in the process of developing a commercial office center commonly known as Kierland Corporate Center (collectively, the “Project”, as further defined below).
- C. Fee simple title to all or portions of the Property may from time to time hereafter be transferred to third parties, and prior thereto, Declarant wishes (i) to establish and subject each and every portion of the Property to the easements, covenants, conditions, restrictions, servitudes, assessments, liens, charges and development standards hereinafter set forth, (ii) to provide for the use and maintenance of the Property and Project, and (iii) to enhance and protect the value and desirability of the Project by assuring adequate pedestrian and vehicular ingress, egress and circulation throughout the Project and to and from adjacent public rights-of-way.

NOW, THEREFORE, Declarant, as the Owner of the Property, for Declarant and its successors and assigns in interest and title hereby declares, establishes and covenants that the Property and all portions thereof now held and that shall be acquired, held, conveyed, hypothecated, encumbered, leased, used, occupied and improved are subject to the following easements, covenants conditions and restrictions, reservations, servitudes, assessments, liens, charges and development standards, all of which are declared to be in furtherance of a plan for the mutual enjoyment of the Property and the Project as follows:



## Appendix 7: Shared Parking Agreement Example

### ARTICLE 1 DEFINITIONS

Unless the context otherwise requires, defined terms in this Declaration shall have the meanings set forth below.

1.1 Accounting Period. The term “Accounting Period” shall mean any period from January 1st to and including the succeeding December 31<sup>st</sup>, except that the first Accounting Period shall commence as of the date of recordation of this Declaration and shall end on and include the immediately succeeding December 31st.

1.2 Building or Buildings. The terms “Building” or “Buildings” means generally or collectively, buildings constructed on the Property from time to time.

1.3 City. The term “City” means the City of Phoenix, Arizona.

1.4 Common Area. The term “Common Area” means all areas of the Project other than Buildings, encompassing all those facilities within or upon the Property now or hereafter available for the nonexclusive use, convenience and benefit of Owners in common, including, but not limited to, parking areas, service areas, driveways, areas of ingress and egress, sidewalks and other pedestrian ways, perimeter sidewalks adjacent and contiguous to Buildings, roadways, delivery areas, landscaped areas (including, without limitation, planters and areas located between perimeter sidewalks and Buildings or next to exterior Building walls), areas containing signs or structures advertising the name of the Project, together with the signs and structures constructed thereon, and common corridors. Any enlargement of or addition to Common Area as provided herein shall be included in the definition of Common Area for purposes of this Declaration.

1.5 Common Area Maintenance Expenses. The term “Common Area Maintenance Expenses” means all costs and expenses paid or incurred by the Declarant (as defined below) in operating, managing, equipping, lighting, repairing, decorating, insuring, replacing, and maintaining the Common Area. Common Area Expenses shall include, but shall not be limited to costs of, general maintenance and repair; resurfacing, striping, and cleaning the Common Area; installation, maintenance and repair of landscaping and irrigation system; installation, maintenance and repair of signage, lighting systems, curbs, gutters, sidewalks, ramps, traffic islands, walkways, benches, and other items for the comfort and convenience of Owners and their Permittees (as defined below); drainage, sewer systems, and other utility systems located in the Common Area; the cost of water service, electricity, and other utility costs incurred in connection with such activity; the wages and related payroll costs of personnel employed by Declarant to implement or perform such services; premiums for public liability, property damage, and other insurance maintained in connection with the Common Area; license and permit fees; supplies; reasonable depreciation on maintenance and operating equipment and machinery (if owned by the Declarant) and rental paid for such equipment and machinery (if rented); costs and expenses incurred by Declarant enforcing this Declaration; and



## Appendix 7: Shared Parking Agreement Example

costs of maintaining and replacing drywells and other drainage or retention features in the Common Areas. Common Area Maintenance Expenses shall not include (a) real property taxes and assessments, which shall be paid by each respective Owner with relation to its Parcel; and (b) in the absence of default or emergency, costs that are the obligation of individual Owners pursuant to the terms of this Declaration.

1.6 County. The term "County" refers to Maricopa County, Arizona.

1.7 Declarant. The term "Declarant" means BATAA/KIERLAND, LLC, and its successors and assigns, if (a) such successors and assigns acquire any or all of Declarant's interest in the Property, and (b) Declarant has expressly transferred or assigned to such successors or assigns its rights and duties as Declarant to a portion or all of the Property. For any successor or assignee of "Declarant" to be deemed a Declarant under the terms hereof, Declarant shall record in the County a document so designating said successor or assignee as Declarant.

1.8 Declaration. The term "Declaration" means this Declaration of Covenants and Grant of Easements for Kierland Corporate Center, as it may from time to time be amended.

1.9 Default Interest Rate. The term "Default Interest Rate" means the lesser of: (a) three percent (3%) per annum in excess of the "Prime Rate," or (b) the highest lawful rate. The "Prime Rate" shall be the prime or reference rate announced as such from time to time by JPMorgan Chase Bank, N.A. or its successor in its Phoenix, Arizona office. If there shall be no such announced rate of such bank or its successor, then the "Prime Rate" shall be such equivalent rate as is charged from time to time by the Wall Street Journal, or similar national publication.

1.10 Hazardous Materials. The term "Hazardous Materials" means and refer to any toxic substance, material or waste which is or becomes (a) regulated by any local governmental authority, the State of Arizona or the United States Government; (b) defined as a "hazardous waste," "extremely hazardous waste," "restricted hazardous waste," "Non-RCRA hazardous waste," RCRA hazardous waste," recyclable material," under any federal, state or local statute or regulation promulgated thereunder; (c) defined as a "Hazardous Substance" pursuant to Section 311 of the Federal Water Pollution Control Act (33 U.S.C. Section 1251 et seq.); (d) defined as a "Hazardous Waste" pursuant to Section 1004 of the Federal Resource Conservation and Recovery Act, 42 U.S.C. Section 6901 et seq.; (e) defined as a "Hazardous Substance" or "Mixed Waste" pursuant to Section 101 of the Comprehensive Environmental Response Compensation and Liability Act, 42 U.S.C. Section 9601 et seq., and regulations promulgated thereunder; (f) defined as a "Hazardous Substance" pursuant to Section 401.15 of the Clean Water Act, 40 C.F.R. 116; or (g) defined as an "Extremely Hazardous Substance" pursuant to Section 302 of the Superfund Amendments and Reauthorizations Act of 1986, 42 U.S.C. Section 11002 et seq.

1.11 Lessee. The term "Lessee" means each Person (as defined below) who, at any given time, is leasing a Parcel (as defined below) or a Building or a portion of a Parcel or a Building on a Parcel from an Owner under a written lease agreement. An Owner may designate, by an executed, recorded instrument, a Lessee as primarily responsible for the burdens and obligations imposed



## Appendix 7: Shared Parking Agreement Example

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herein during the term of the lease, and may further designate to such Lessee the right to exercise the powers granted to such Owner under this Declaration. Such designation, however, shall not result in a release of such Owner from any responsibility and liability hereunder.

1.12 Mortgage. The term "Mortgage" means any mortgage, indenture of mortgage, or deed of trust of the interest, whether fee or leasehold, creating a lien on a Parcel.

1.13 Mortgagee. The term "Mortgagee" means a mortgagee or trustee and beneficiary under a Mortgage.

1.14 Owner. The term "Owner" or "Owners" as used in this Declaration means Declarant, and all successor fee title owners to all or any portion of the Property and their successors in interest as hereinafter provided, and provided further that:

1.14.1 In the event a Parcel (as defined below) is divided into one or more separate legal lots, each of such separate legal lots shall thereafter be considered to be a "Parcel" and the Owners of each such legal lot shall be an "Owner." Any Parcel or Parcels subdivided as aforesaid shall remain subject to this Declaration; and

1.14.2 In the event any of the Owners shall transfer its present interest in a Parcel or a portion of such interest in such manner as to vest its present interest in such Parcel in more than one Person other than by creation of a separate Parcel, then more than fifty percent (50%) in interest of such transferees may designate one of their number to act on behalf of all of such transferees in the exercise of the powers granted to such Owner under this Declaration. Notwithstanding the foregoing, so long as Declarant owns any interest in a Parcel it shall be designated as the one to act on behalf of all Owners of such parcel in the exercise of the powers granted to such Owners under this Declaration.

1.15 Parcel or Parcels. The terms "Parcel" or "Parcels" means each legal lot comprising the Property from time to time. If the Parcels are subdivided into additional legal lots, then the term "Parcels" shall collectively refer to all such legal lots shown on any such recorded map replat.

1.16 Permittees. The term "Permittees" means each Owner's officers, directors, partners, members, principals, shareholders, agents, tenants, Lessees, subtenants, occupants, employees, contractors, concessionaires, licensees, customers and invitees.

1.17 Permitted Excuse. The term "Permitted Excuse" means (a) labor disputes, acts of God, moratoriums, war, riots, insurrections, civil commotions, inability to obtain labor or materials or reasonable substitutes for either, fire, unusual delay in transportation, adverse weather conditions not reasonably anticipated, casualties and other events, whether similar or dissimilar, beyond the reasonable control of the applicable Owner; (b) unforeseeable acts or failures to act by any governmental entity or their respective agents or employees, unforeseeable governmental restrictions, regulations or controls; and (c) delays caused by the breach or default of any Owner other than the Owner seeking to be excused from performance.

## Appendix 7: Shared Parking Agreement Example

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1.18 Person or Persons. The term “Person” or “Persons” means and includes individuals, trusts, partnerships, firms, associations, joint ventures, corporations, limited liability companies or any other form of business entity.

1.19 Project. The term “Project” means all of the Property and all improvements constructed therein, including, without limitation, all Buildings.

1.20 Property. The term “Property” refers to all of the real property described on Exhibit "A" to this Declaration.

1.21 Proportionate Share. The term “Proportionate Share” means a percentage based on the ratio that the gross square footage of such Owner’s Parcel bears to the total gross square footage of the Project. Declarant may record supplements to this Declaration from time to time stating the actual gross square footage of the Property and the Proportionate Shares that are then applicable to each Parcel.

### ARTICLE 2 EASEMENTS

2.1 Grant of Easements. Intending to benefit and burden each Parcel now existing or as may hereafter be established within the Project, Declarant hereby grants, establishes, conveys, creates and reserves the following easements over the common areas of the Property:

2.1.1 Utility Easements. Nonexclusive, perpetual easements in, to, over, under and across the Property for the benefit of and appurtenant to each of the Parcels for the purposes of installation, repair, maintenance, use and operation (individually and collectively herein referred to as “Utility Use”) of sewers, storm drains and storm drain systems, water line, fire line and gas pipes and systems, electrical power conduits, telephone conduits, lines and wires, and other utilities beneath the ground surface (“Utility Easements”) at a location or locations reasonably approved in writing by the Owner(s) affected by the Utility Use; provided that in the performance of such Utility Use: (a) adequate provision shall be made for the safety and convenience of all Persons using the surface of such areas; (b) the areas and facilities shall be replaced or restored to the condition in which they were prior to the performance of such Utility Use; (c) all costs, fees and expenses incurred as a result of such Utility Use shall be borne solely by the Owner(s) which undertakes such Utility Use; (d) the other Owner(s) affected by the Utility Use shall be notified in writing not less than thirty (30) days prior to commencement of such Utility Use; (e) the schedule for the performance of such Utility Use shall be subject to the reasonable approval of the other Owner(s) affected by the Utility Use; and (f) any construction activities pursuant to such easement rights shall be performed so as not to unreasonably interfere with access to, use, occupancy, or enjoyment of the remainder of the Project. Each Owner agrees to grant such additional easements as are reasonably required by any public or private utility for the purpose of providing the utility lines and facilities described herein provided such easements are not otherwise inconsistent with the provisions of this Declaration;



## Appendix 7: Shared Parking Agreement Example

2.1.2 Construction and Maintenance Easements. Nonexclusive, perpetual easements to enter upon the Property in order to perform any action that may be reasonably required for each Owner to construct, maintain, repair and/or replace (individually and collectively herein referred to as "Construction Use") any improvements on such Owner's Parcel that may be constructed on or near the boundary of such Owner's Parcel ("Construction and Maintenance Easements") at a location or locations reasonably approved in writing by the other Owner(s) affected by such Construction Use; provided that in the performance of such Construction Use: (a) adequate provision shall be made for the safety and convenience of all Persons using the surface of such areas; (b) the areas and facilities shall be replaced or restored to the condition in which they were prior to the performance of such Construction Use; (c) all costs, fees and expenses incurred as a result of such Construction Use shall be borne solely by the Owner(s) which undertakes such Construction Use; (d) the other Owner(s) affected by the Construction Use shall be notified in writing not less than thirty (30) days prior to commencement of such Construction Use; (e) the schedule for the performance of such Construction Use shall be subject to the reasonable approval of the other Owner(s) affected by the Construction Use; and (f) any Construction Use pursuant to such easement rights shall be performed so as not to unreasonably interfere with access to, use, occupancy, or enjoyment of the remainder of the Project. Subject to the foregoing, in connection with the use of the Construction and Maintenance Easements, an Owner may temporarily place scaffolding and other equipment on an adjoining Parcel for so long as such scaffolding and other equipment is reasonably required to perform any such construction, maintenance, repairs and/or replacements on the Owner's Parcel and so long as such Owner removes any trash and/or other debris from the adjoining Parcel that is attributable to such Owner's use of the Construction and Maintenance Easement. The Construction and Maintenance Easements shall be exercised in a manner that does not materially interfere with the use of adjoining Parcels and no Owner shall be entitled to use the Construction and Maintenance Easement to the extent that such Owner can reasonably use such Owner's Parcel for the construction, maintenance, repair and/or replacement of improvements on such Owner's Parcel. Prior to using the Construction and Maintenance Easement, an Owner shall give the Owner of the adjoining Parcel (for such Owner's approval) a statement setting forth (in reasonable detail) the proposed scope and schedule of the Owner's use of the Construction and Maintenance Easement. The adjoining Parcel Owner's approval of such statement shall not be unreasonably withheld, conditioned or delayed;

2.1.3 Ingress and Egress Easements. Nonexclusive easements over and across the driveways, curb cuts and drive aisles located from time to time on the Property (as the same may be reasonably modified and/or altered from time to time) for the purpose of providing ingress and egress between each of the Parcels and the nearest public rights-of-way. (Such easements are hereinafter referred to as the "Ingress and Egress Easements".) The Ingress and Egress Easements may be used by the Owners and their respective successors in interest, assigns, agents, principals, directors, shareholders, and Permittees. The Ingress and Egress Easements shall inure to the benefit of and be appurtenant to the Parcels owned by the present and future Owners; and

2.1.4 Parking Easement. Non-exclusive easements over the Property to use the parking areas on the Property (as such parking areas may be reasonably altered from time to time) for



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the purpose of automotive parking and any other purposes reasonably related thereto. (Such easement is hereinafter referred to as the "Parking Easement".) The Parking Easement may be used by the Owners and their respective successors in interest, assigns, agents, principals, directors, shareholders, and the Permittees. The Parking Easement shall inure to the benefit of and be appurtenant to the Parcels owned by the present and future Owners. Notwithstanding the foregoing to the contrary, an Owner may (subject to the compliance with all applicable governmental requirements) restrict up to [twenty-five percent (25%)] of the parking areas within such Owner's Parcel exclusively for use by the Owner and/or the Owner's assigns, agents, principals, directors, shareholders and Permittees.

2.2 Building Encroachments. Each Owner, as grantor, shall grant to the other Owners, for the benefit of each Parcel belonging to the other Owners, as grantees, a non-exclusive easement for any portion of any building or structure located on any such Parcel which may encroach into or over the grantor's adjoining Parcel(s) and provided the easement for footings, piers, piles, grade beams and building encroachments does not exceed three (3) feet, and the easement for canopies, caves and roof overhangs does not exceed five (5) feet. The easements granted in this Section 2.2 shall survive this Declaration and shall last so long as the encroaching building is standing following its initial construction or following its reconstruction where such building is substantially restored to its prior condition following a casualty or condemnation.

2.3 Fire and Emergency Access. Each Owner, as grantor, shall grant to the other Owners, for the benefit of each Parcel belonging to the other Owners, as grantees, a nonexclusive easement for fire protection and emergency access for pedestrian and vehicular access, ingress and egress over, across, on and through the Parcels for the benefit of the Owners consistent with providing the Property with such fire and emergency access as is required by law.

2.4 Permanent Access Easement. Each Owner, as grantor, shall grant to the other Owners, their respective tenants, contractors, employees, agents, customers, licensees and invitees, and the subtenants, contractors, employees, agents, customers, licensees and invitees of such tenants, for the benefit of each Parcel belonging to the other Owners, as grantees, a perpetual non-exclusive easement for ingress and egress by vehicular and pedestrian traffic upon, over and across that portion of the Common Area located on the grantor's Parcel(s) as vehicular driveways and pedestrian sidewalks that provide for ingress and egress to and from the Parcels.

2.5 Maintenance Easement. Each Owner, as grantor, shall grant to the other Owners, their respective employees, agents, and contractors, as grantee, a non-exclusive easement over and across that portion of the Common Area located on the grantors' Parcel for the purpose of protecting the Common Area and operating or performing any maintenance, repairs, resurfacing or replacements pursuant to the terms of this Declaration.

2.6 Self Help. Each Owner, as grantor (such Owner being referred to in this subparagraph only as "Grantor Owner"), shall grant to the other Owners for the benefit of each Parcel belonging to the other Owners as grantees (such other Owners being referred to in this

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subparagraph only as “Grantee Owners”), a non-exclusive easement to enter the Grantor Owner’s Parcel for the following purposes:

(a) To perform such work on the Grantor Owner’s Parcel as is necessary to cure any default by the Grantor Owner under this Declaration, provided and to the extent the Grantee Owner has the express right to cure said default under this Declaration; and

(b) To perform any obligations or exercise any other rights the Grantee Owner has under this Declaration.

2.7 Character of Easements. The easements created by this Article 2 shall exist in perpetuity and are appurtenant to each Parcel and all future subdivisions thereof, and shall inure to benefit of the present and future owners of each Parcel, and shall burden each other Parcel. The easements created by this Article 2 shall be non-exclusive and shall be for the use and benefit of the parties hereto, their respective successors in interest, assigns, agents, principals, directors and shareholders and Permittees.

ARTICLE 3  
USE RESTRICTIONS

3.1 Prohibited Uses. No Owner shall use any Parcel within the Project or otherwise conduct any operation on the Project that violates any applicable governmental statutes, laws, ordinances, rules and regulations (including, without limitation, any applicable governmental zoning statutes, laws, ordinances, rules and regulations).

3.2 Hazardous Materials. No Owner shall knowingly use, or authorize the use of Hazardous Materials on, about, under or in its Parcel, or the Project, except in the ordinary course of its usual business operations conducted thereon, and any such use shall at all times be in compliance with all environmental laws. Each Owner of a Parcel within the Project shall indemnify, protect, defend and hold harmless the other Owners of a Parcel within the Project from and against all claims, suits, actions, demands, costs, damages and losses of any kind, including but not limited to costs of investigation, litigation and remedial response, arising out of any Hazardous Materials used or permitted to be used by such Owner, whether or not in the ordinary course of business.

3.3 Subdivision. No Parcel within the Project shall be further subdivided without (a) obtaining the prior written consent of the Declarant, and (b) complying with all applicable governmental laws relating to such a subdivision.

3.4 Parking. There shall be no material charge for parking in the Common Area without the prior written consent of all Owners or unless otherwise required by law.

3.5 Prohibited Activities. Picketing and distribution of pamphlets, handbills or similar materials within the Project shall be prohibited.



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3.6 Protection of Common Areas. Each Owner shall have the right to take such steps as it deems necessary to prevent those persons not authorized by this Declaration to use the Common Area from using the Common Area for ingress, egress, parking, or any other purpose. Such steps shall include, without limitation, the construction of fences, walls or barricades along the boundary lines of any portion of the Project except along the common boundary line of any Parcel with any other Parcel; provided, however, that any impairment of access to or from the Project, or any part thereof, shall require the Declarant's prior written approval, which may be withheld in such Declarant's sole and absolute discretion.

### ARTICLE 4 COMMON AREA MAINTENANCE AND OPERATION

4.1 Common Area Maintenance. Except as otherwise provided herein, the Declarant shall have the sole right but not the obligation to operate and maintain, or cause to be operated and maintained, the Common Area in first-class condition and repair, including, without limitation, the following repairs or services:

4.1.1 Resurfacing of walks, drives and parking areas;

4.1.2 Keeping the surface of the Common Area in a smooth and evenly covered condition with the type of surfacing material originally installed or a substitute equal in quality, use and durability;

4.1.3 Cleaning, painting, striping, disposal of incidental rubbish and debris, and generally maintaining the Common Areas in a clean, safe and orderly condition;

4.1.4 Maintenance of all curbs, parking dividers, landscape enclosures, fences and retaining walls in good condition and repair;

4.1.5 Placing, keeping in repair and replacing any necessary and appropriate directional signs, markers and lines;

4.1.6 Installation and maintenance of all landscaped areas, including, without limitation, making such replacements of shrubs and other landscaping as is necessary, and keeping such landscaped areas at all times adequately weeded, fertilized and watered, all consistent with the landscape plan and maintenance guide for the Project;

4.1.7 Maintenance and repair of Project entrance features, including signs, and of the monument sign;

4.1.8 Maintenance of all exterior lighting (not affixed to Buildings) for the illumination of the Common Areas and payment of utility costs for the same; and

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4.1.9 Maintenance of all utility lines in the Common Areas that are not the responsibility of the utility company or an Owner as set forth herein. Maintenance of other utility lines shall be the responsibility of the Owners upon whose Parcels such lines are located.

4.2 Common Area Liability Insurance. As part of the operation of the Common Area, the Declarant shall obtain and maintain general public liability insurance insuring all Owners and such other persons who now or hereafter hold portions of the Project or any leasehold estate or other interest therein, including, without limitation, any lender, as their respective interests may appear, against all claims for personal injury, death or property damage occurring in, upon or about the Common Area. Such insurance shall be written with an insurer licensed to do business in the State of Arizona. The limits of liability of all such insurance shall be at least Three Million Dollars (\$3,000,000.00) combined single limit, and may be increased or modified by the Declarant in its discretion from time to time. The Declarant shall cause to be issued certificates of insurance to each of the Owners upon request and have such certificates provide that such insurance shall not be canceled without fifteen (15) days prior written notice to each of the Owners.

4.3 Payment of Common Area Maintenance Expenses. Notwithstanding anything to the contrary contained in this Declaration to the contrary, each Owner shall be responsible for paying its Proportionate Share of all Common Area Expenses. The Declarant shall contract and pay for, on behalf of the Owners, all Common Area Maintenance Expenses. Prior to the commencement of each Accounting Period, the Declarant shall establish and deliver to each Owner a budget ("Budget") of estimated Common Area Maintenance Expenses for such Accounting Period, including, without limitation, reasonable reserves for repairs and replacements. The Budget shall indicate the estimated Proportionate Share of Common Area Maintenance Expenses of each Owner. Each owner shall pay its Proportionate Share of Common Area Maintenance Expenses in equal monthly installments due on or before the first (1st) day of each calendar month during the Accounting Period (or on such other periodic schedule as the Declarant shall determine). The Declarant shall have the right to modify the Budget and the amount of the monthly payments from time to time during the Accounting Period, by written notice to the Owners, if actual expenditures are reasonably anticipated to exceed the estimated amounts set forth in the Budget. Within one hundred twenty (120) days after the close of each Accounting Period, the Declarant shall deliver to each Owner an accounting ("Statement") indicating: (a) the actual Common Area Maintenance Expenses incurred during such Accounting Period; (b) each Owner's Proportionate Share of actual Common Area Maintenance Expenses; and (c) the amount of any overpayment or underpayment by each Owner based upon such Accounting Period. Any amounts due from an Owner based upon such accounting shall be paid within thirty (30) days after receipt of the accounting. Any overpayments by an Owner shall be credited against installments subsequently payable by such Owner. Declarant shall maintain, at Declarant's principal place of business, books and records or account indicating Common Area Maintenance Expenses and shall retain such records for a period of one (1) year after the applicable Accounting Period. Any challenge to or dispute with the Declarant's calculations shall be raised during such one (1) year period or shall be deemed waived. Each Owner shall have the right to inspect and audit such books and records during regular business hours, subject to reasonable prior notice. Notwithstanding anything contained herein to the contrary, the failure of the Declarant to furnish a Statement setting



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forth Common Area Maintenance Expenses within the time periods set forth above shall not constitute a default hereunder by the Declarant or a waiver of the Declarant's right to receive payment of an Owner's Proportionate Share of Common Area Maintenance Expenses, except that the Declarant shall be deemed to have waived its right to receive payment as to any Common Area Maintenance Expenses that are not set forth in a Statement delivered to the Owners within one (1) year after the date upon which they were incurred.

4.4 Damage to Common Area. In the event of damage to or destruction of the Common Area, provided insurance proceeds are available, the Declarant shall have the sole right but not the obligation to restore, repair and rebuild the Common Area to its former condition to the extent reasonably practicable, and shall assess any Owner for the entire uninsured cost thereof (excluding therefrom any deductible from an insured casualty event) if such Owner or Permittee of its Parcel was the cause of the damage or destruction, including, without limitation, damage caused by construction vehicles servicing any such Owner's Parcel. In the event an Owner or Permittee of its Parcel was not the cause of such damage or destruction, then each Owner shall pay its Proportionate Share of all costs and expenses of such restoration, repair and rebuilding, after applying thereto all insurance proceeds paid by reason of such damage and payment thereof shall be in addition to the payment of Common Area Maintenance Expenses.

4.5 Agents. In performing the duties of the Declarant hereunder, the Declarant may utilize such agents and independent contractors (including, without limitation, management companies) as the Declarant may designate from time to time, including, without limitation, entities related to or affiliated with Declarant; provided that the fees paid to such agent or contractor do not exceed those paid by similarly situated property owners to unrelated parties in arms-length transactions for such services in the north Phoenix, Arizona area.

4.6 Owners' Duty to Maintain Common Area. Upon receipt of written notice from the Declarant or its assignee that Declarant or such assignee will not longer manage and maintain the Common Area as provided in this Declaration or Declarant or such assignee fail to manage and maintain the Common Area as set forth in this Declaration each Owner shall have the obligation to maintain its Parcel(s) in a manner consistent with the provisions of this Declaration. If any such Owner shall fail to so maintain its own Parcel, then any other Owner shall have the right to give the defaulting Owner written notice of such default specifying the particulars thereof pursuant to Article 6.

4.7 Rules and Regulations. The Declarant from time to time may promulgate reasonable rules and regulations of general application for the supervision, control and use of the Common Area, in which event, the Declarant shall make and use its best efforts to enforce the same or cause the same to be enforced uniformly.

### ARTICLE 5 OWNER MAINTENANCE

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5.1 Operational. Each Owner shall maintain the Building on its Parcel in good and clean condition and repair in a quality and condition comparable to the quality and condition of first class office Buildings within the general area in which the Project is located and in accordance with the management and maintenance standards otherwise set for the in this Declaration good condition and repair and in accordance with all applicable laws and shall not allow graffiti or broken, cracked or boarded windows on any Building on its Parcel. Chain link fences shall not be allowed except in conjunction with temporary construction. All garbage or trash receptacles shall be screened from view by opaque masonry walls with access gates, and garbage and trash removal from each Parcel shall be the responsibility of such Parcel's Owner.

5.2 Damage and Destruction. In the event of any damage or destruction to any Building, rebuilding, replacement or repair, if any, shall be completed with all due diligence and as soon as possible after the event of damage or destruction occurs. The work of rebuilding, replacement or repair shall be undertaken by the Owner in accordance with all the terms of this Declaration and such rebuilding, replacement or repair that results in material changes to the location or design of the Buildings or other improvements shall be subject to the reasonable approval of Declarant. Such Owner shall prosecute completion of the Building as expeditiously as possible. In the event that the Owner elects not to repair or rebuild, such Owner shall promptly (and, in all events, within ninety (90) days) raze the damaged Building, clear all rubble and debris, fill any excavation and restore the surface of the Parcel to a safe, clean and attractive condition and shall be covered by a one-inch minimum asphalt dust cap at such Owners sole cost and expense.

5.3 Utilities. All utilities servicing a Building shall be separately metered, and all costs in connection therewith, including, without limitation, costs of maintenance and repair of utility lines located on a Parcel, shall be borne by the Owner of such Parcel at no cost or expense to the other Owners unless otherwise specifically provided herein or specifically agreed to in writing by the parties in question.

5.4 Taxes and Assessments. All Owners shall pay, prior to delinquency, all taxes and assessments on the Parcel owned or leased by them. Notwithstanding the foregoing, until such time as separate tax bills are obtained for each of the Parcels, each Owner shall pay or cause to be paid its Proportionate Share of real estate taxes levied against the Project. Any assessment for public improvements levied against the entire Project, rather than against individual Parcels, shall be paid by all Owners in accordance with such Owner's Proportionate Share. In the event an Owner fails to pay when due all taxes and assessments described in this Section 5.4 above, which failure continues for a period of ten (10) days after receipt of written notice thereof, such failure shall constitute a default and any other Owner ("Curing Owner") may thereafter pay such taxes if such taxes are delinquent and the owing Owner has not commenced and is not duly prosecuting any contest of such taxes. The Curing Owner shall then bill the defaulting Owner for the expenses incurred. The defaulting Owner shall have fifteen (15) days within which to pay the bill. If the defaulting Owner does not so pay, the Curing Owner shall have a lien on the Parcel of the defaulting Owner for the amount of the bill, which amount shall bear interest at the Default Rate from the date of expiration of said fifteen (15) day period until paid; provided, however, that if there be a bona fide dispute as to



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the existence of such default or of the amount due and all undisputed amounts are paid, there shall be no right to place a lien on such Owner's Parcel until ten (10) days after such dispute is settled by final court decree or mutual agreement and payment thereof to the Curing Party has not been made.

5.5 No Waiver. The failure of a person to insist upon strict performance of any of the terms, covenants, conditions or agreements contained in this Article 5 shall not be deemed a waiver of any rights or remedies that said person may have, and shall not be deemed a waiver of any subsequent breach or default in the performance of any of the terms, covenants, conditions or agreements contained herein by the same or any other person.

5.6 Security. Each Owner shall be responsible for the maintenance of reasonable security arrangements on its Parcel consistent with the use of such Parcel.

5.7 Casualty and Condemnation. In the event all or any portion of any Building in the Project is taken or damaged as a result of the exercise of the power of eminent domain or any transfer in lieu thereof, the Owner of such building shall promptly restore or cause to be restored the remaining portion of such building and such rebuilding, replacement or repair that results in material changes to the location or design of the Buildings or other improvements shall be subject to the approval of Declarant, or in lieu thereof, shall remove or cause to be removed the damaged portion of such building together with all rubble and debris related thereto. All areas on which buildings are not reconstructed following a casualty or condemnation shall be graded or caused to be graded by the Owner thereof to the level of the adjoining property and in such a manner as not to adversely affect the drainage of the Project or any portion thereof, and shall be covered by a one-inch minimum asphalt dust cap and shall be kept free and clean at such Owner's sole cost and expense until buildings are reconstructed thereon.

### 5.8 Lighting.

5.8.1 Common Area lighting is currently separately metered for each Parcel. However, if Common Area lighting is not and other utilities to the extent not separately metered in the future, costs for Common Area lighting shall be a Common Area expense and each Owner shall pay its Proportionate Share thereof.

5.8.2 The artificial lighting for the Common Area shall remain on between the hours of seven (7:00) a.m. and six (6:00) p.m. at a minimum while a majority of the businesses in the Project are open for business. If any Owners or occupants of the Parcels need artificial lighting for a time other than the foregoing ("After Hours Lighting"), then such artificial lights to service such Owners or occupants shall be separately metered or otherwise measured or reasonably estimated such that none of the expenses for the After Hours Lighting shall be included within Common Area Expenses (said expenses to be paid solely by the Parcel Owner or occupant[s] needing the After Hours Lighting).

5.8.3 If the artificial lighting on any Parcel is separately metered for any reason, the Owner or occupant(s) thereof shall pay a reduced proportion of the expense of lighting the balance of



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the Common Area based upon the extent to which such Owner or occupant(s) are lighting the Common Area on their Parcel(s) by separately metered lights.

5.8.4 All artificial lighting shall comply with restrictions established by law.

ARTICLE 6  
REMEDIES

6.1 Nonexclusive Remedies. Except as otherwise provided and in addition to the remedies set forth elsewhere in this Declaration, if any Owner defaults under or breaches any of the covenants under this Declaration, and such default or breach is not cured within thirty (30) days of receipt of written notice thereof from Declarant (or, if applicable, any non-defaulting Owner), Declarant shall have the right, but not the obligation, to pursue all remedies available to Declarant at law or in equity in respect of such breach of default, including, without limitation, a proceeding at law or in equity against any such defaulting Owner (or its Permittee) to collect amounts due under and pursuant to this Declaration. Declarant (or, if applicable, a non-defaulting Owner) shall also have the right to prosecute any proceedings at law or in equity against any Owner, Permittee, or any other Person, attempting to violate any of the provisions contained in this Declaration. The remedies available under this Section 6.1 shall include, by way of illustration but not limitation, ex parte applications for temporary restraining orders, preliminary injunctions and permanent injunctions enjoining any such violation or attempted violation or attempted violation or default, and actions for specific performance of this Declaration. Each Owner shall be responsible for the defaults of any Permittee on its Parcel(s).

6.2 Right to Cure. In addition to the remedies described in Section 6.1, if any Owner (including Declarant) defaults in the performance of any of its obligations under this Declaration, and such default or breach is not cured within thirty (30) days of receipt of written notice thereof from Declarant or, if applicable, any non-defaulting Owner, Declarant or such notifying Owner shall have the right to cure such default for the account of and at the expense of the defaulting Owner; provided, however that in the event of emergency conditions constituting default, any non-defaulting Owner acting in good faith shall have the right to cure such default upon such advance notice as is reasonably possible under the circumstances or, if necessary, without advance notice, so long as notice is given as soon as possible thereafter. Any notice hereunder shall specify with particularity the nature of the default claimed and shall set forth in detail the action which the notifying party proposes to take in order to cure the claimed default. To effectuate any such cure, Declarant (or, if applicable, a non-defaulting Owner) shall have the right to enter upon the Parcel of the defaulting Owner to perform any necessary work or furnish any necessary materials or services to cure the default, including, without limitation, the following specific rights:

6.2.1 to perform maintenance and repair of Common Area features;

6.2.2 to replace or remove landscape plants, repair irrigation, and provide for irrigation service, if necessary, installing new lines and meters; and/or

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6.2.3 to repair and replace exterior lighting and establish electrical service to maintain exterior lighting as provided in this Declaration.

6.3 Costs and Expenses. All costs and expenses reasonably incurred by Declarant, or if applicable any non-defaulting Owner, under the provisions of this Article 6, together with interest thereon, at Default Interest Rate, including all costs and expenses of any proceedings at law or in equity, including reasonable attorney's fees shall be assessed against and paid by the defaulting or violating Owner, whether or not suit is filed. Costs of ongoing irrigation service and electrical service, if incurred to maintain landscaping or lighting, shall be specifically recoverable.

### 6.4 Liens.

6.4.1 Establishing Lien. In addition to the remedies set forth in this Article 6 Declarant and each Owner shall also have the right to lien the Parcel of a defaulting Owner after the expiration of the notice and cure period set forth above. The liens provided for in this Declaration shall only be effective when filed for record by Declarant or a non-defaulting Owner as a claim of lien against the defaulting Owner in the office of the Maricopa County, Arizona recorder, signed and acknowledged, which shall contain the following information: (a) an itemized statement of all amounts due and payable pursuant hereto; (b) a description sufficient for identification of that portion of the real property of the defaulting Owner which is the subject of the lien; (c) the name of the defaulting Owner; and (d) the name and address of the Curing Owner or Curing Party.

6.4.2 Priority. The lien, when so established against the real property described in the lien, shall be prior and superior to any right, title, interest, lien or claim which may be or has been acquired or attached to such real property after the time of filing the lien. The lien shall be for the use and benefit of the person curing the default of the defaulting Owner and may be enforced and foreclosed in a suit or action brought in any court of competent jurisdiction.

6.5 Waiver and Remedies Cumulative. No waiver of any default under this Declaration shall be effective or binding unless made in writing and no such waiver shall be implied from any omission by Declarant (or a non-defaulting Owner) to take action in respect to such default. No express written waiver of any default shall affect any other default or cover any other period of time other than any default and/or period of time specified in such express waiver. One or more written waivers of any default under any provision of this Declaration shall not be deemed to be a waiver of any subsequent default in the performance of the same provision or any other term or provisions contained in this Declaration. All of the remedies permitted or available under this Declaration or at law or in equity shall be cumulative and not alternative, and invocation of any such right or remedy shall not constitute a waiver or election of remedies with respect to any other permitted or available right or remedy.

6.6 Enforcement by Owners. In addition to any other rights specifically granted by this Declaration, if Declarant is the defaulting party, or if there is no Declarant or if Declarant declines or fails to enforce a breach of this Declaration after fifteen (15) days' notice from a non-defaulting Owner, only then may any non-defaulting Owner have the right, but not the obligation, to take all



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enforcement measures provided for under this Article 6 against the defaulting Owner. Notwithstanding anything contained herein to the contrary, the failure of the Declarant to manage and maintain the Common Area on behalf of all Owners as provided herein shall not constitute a waiver of the Declarant's right to receive payment of an Owner's Proportionate Share of Common Area Maintenance Expenses previously incurred by Declarant, and shall not act as a waiver of Declarant's obligation to maintain the Common Area located on Parcels that it owns.

6.7 Estoppel Certificate. Any Owner may, at any time and from time to time (but not more frequently than two (2) times within any twelve (12) months period), in connection with the sale or transfer of the Owner's Parcel, or in connection with the financing or refinancing of the Owner's Parcel by mortgage, deed of trust or sale-leaseback made in good faith and for value, deliver written notice to the other Owners requesting such Owners to certify in writing that to the knowledge of the certifying Owner, the requesting Owner is not in default in the performance of its obligations under this Declaration, or, if in default, to describe therein the nature and amount of any and all defaults. Each Owner receiving such request shall execute and return such certificate within fifteen (15) days following the receipt thereof. Failure by an Owner to execute and return such certificate within the specified period shall be deemed an admission on such Owner's part that the Owner requesting the certificate is current and not in default in the performance of such Owner's obligations under this Declaration. The Owners acknowledge that such certificate may be relied upon by transferees, mortgagees, deed of trust beneficiaries and leaseback-lessors.

ARTICLE 7  
INDEMNITY/INSURANCE

7.1 Indemnities. Each Owner shall indemnify, defend, protect and hold harmless the other Owners from and against any and all demands, liabilities, damages, expenses, causes of action, suits, claims and judgments (including reasonable attorneys' fees) to the extent that such matters arise out of or result from (a) a breach or default of the Owner of its obligation under this Declaration, and/or (b) the negligence and/or willful misconduct of the Owner. Notwithstanding the foregoing, in no event shall an Owner be entitled to indemnification or any rights hereunder for any damage caused by reason of such Owner's own negligence, or willful misconduct.

7.2 Liability Insurance. Each Owner shall at all times during the term of this Declaration, maintain or cause to be maintained in full force and effect a commercial general liability insurance policy (on an occurrence and a per location basis) insuring against all claims for personal injury, death or property damage occurring upon, in or about the Owner's Parcel, with combined single limits as may be reasonably required from time to time, which insurance shall include broad form blanket contractual coverage covering the insured's obligations hereunder. All such insurance policies shall be issued by a financially responsible insurance company or companies authorized to issue insurance policies in the State of Arizona. Each Owner shall, upon the request of another Owner, furnish to the other Owners evidence that the Owner maintains insurance in accordance with the terms of this Declaration. In no event shall the limits of any coverage maintained by any Owner

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or pursuant to this Declaration be considered as limiting such Owner's liability under this Declaration.

7.3 Blanket Insurance. Any insurance required to be carried pursuant to this Article may be carried under a policy or policies covering other liabilities and locations of an Owner; provided, however, that such policy or policies apply to the Parcels required to be insured by this Article in an amount not less than the amount of insurance required to be carried by such Owner with respect thereto, pursuant to this Article.

7.4 Casualty and Fire Insurance. Each Owner shall be responsible for procuring and maintaining full replacement cost casualty and fire insurance in amounts not less than one hundred percent (100%) of the full replacement value of the improvements located on such Owner's Parcel. Such insurance shall be written with an insurer licensed or authorized to do business in the state in which the Project is located, and shall have an A.M. Best rating of not less than A-VII. Each Owner shall provide the Declarant or its assignee with proof of insurance upon demand. In the event an Owner fails to obtain or maintain such insurance as provided herein, and such failure continues for a period of thirty (30) days after receipt of written notice thereof, such failure shall constitute a default and any other Owner ("Curing Owner") may thereafter obtain and maintain such insurance. The Curing Owner shall then bill the defaulting Owner for the expenses incurred. The defaulting Owner shall have fifteen (15) days within which to pay the bill. If the defaulting Owner does not so pay, the Curing Owner shall have the remedies available under Article 6.

### ARTICLE 8 MISCELLANEOUS

8.1 Notices. Any notice, payment, demand, offer, or communication required or permitted to be given by any provision of this Declaration shall be deemed to have been sufficiently given or served for all purposes if sent by registered or certified mail (return receipt requested), postage and charges prepaid, or by Federal Express or other reputable overnight delivery service requiring a signature upon receipt, addressed as follows:

To Declarant:

c/o Calvin Enterprises, Inc.  
3050 67th Avenue, Suite 200  
Greeley, Colorado 80634  
Attention: Linda Naticchioni

The address for each Owner shall be the address at which such Owner receives real property tax statements for such Owner's Parcel from the County of Maricopa.

Any such notice shall be deemed to be given on the date on which it is received or receipt thereof is received. A successor Owner may require notices to be delivered to such successor Owner by



## Appendix 7: Shared Parking Agreement Example

delivering a notice, in writing, notifying the then current Owners of such addresses in accordance herewith.

8.2 Binding Effect. All of the limitations, covenants, conditions, easements, and restrictions contained herein shall attach to and run with the Parcel(s), and shall, except as otherwise set forth herein, benefit or be binding upon the successors and assigns of the current Owner and respective Owners. This Declaration and all the terms, covenants and conditions herein contained shall be enforceable as mutual, equitable servitudes in favor of said Parcels and any portion thereof, shall create rights and obligations as provided herein between the respective Owners and shall be covenants running with the land. Each deed, lease or conveyance of all or any portion of the Property, or any interest therein, shall expressly reference and be subject to all provisions of this Declaration. Every person who now or in the future owns or acquires any right, title or interest in or to any Parcel or portion thereof shall be conclusively deemed to have consented to and agreed to every covenant, restriction, provision, condition and right contained in this Declaration, whether or not the instrument conveying such interest refers to this Declaration.

8.3 Attorneys' Fees. In the event of any action (which includes arbitration proceedings) between the Owners hereto for breach of or to enforce any provision or right hereunder, the non-prevailing Owner in such action shall pay to the prevailing Owner all costs and expenses expressly including, but not limited to, reasonable attorneys' fees incurred by the prevailing Owner in connection with such action.

8.4 Breach Shall Not Permit Termination. It is expressly agreed that no breach of this Declaration shall entitle any Owner to cancel, rescind, or otherwise terminate this Declaration, but such limitation shall not affect in any manner any of the rights or remedies which the Owners may have by reason of any breach of this Declaration.

8.5 Breach Effect on Mortgagee and Right to Cure. Breach of any of the covenants or restrictions contained in this Declaration shall not defeat or render invalid the lien of any Mortgage made in good faith, but all of the foregoing provisions, restrictions, and covenants shall be binding and effective against any Owner of any portion of the Property, or any part thereof, who acquires title by foreclosure or trustee's sale or by deed in lieu of foreclosure or trustee's sale. A Mortgagee of any Owner in default hereunder shall be entitled to receive notice of said default, in the same manner that other notices are required to be given under this Declaration; provided, however, that said Mortgagee shall have, prior to the time of the default, notified the Owner hereto giving said notice of default of the Mortgagee's mailing address. In the event that any notice shall be given of the default of an Owner and such defaulting Owner has failed to cure or commence to cure such default as provided in this Declaration then and in that event the Owner giving such notice of default covenants to give such Mortgagee (which has previously given the above stated notice to such Owner) under any Mortgage affecting the Parcel of the defaulting Owner an additional notice given in the manner provided above, that the defaulting Owner has failed to cure any such default and such Mortgagee shall have twenty (20) days after said additional notice to cure any such default, or, if such default cannot be cured within twenty (20) days, diligently to commence curing within such time and

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diligently pursue such cure to completion within a reasonable time thereafter. Giving of any notice of default or the failure to deliver a copy to any Mortgagee shall in no event create any liability on the part of the Owner so declaring a default.

8.6 Modification. No modification, waiver, amendment, discharge, or change of this Declaration shall be valid unless the same is in writing and signed by Declarant so long as Declarant owns at least fifty percent (50%) of the total gross area of the Property. After such time as the Declarant no longer owns fifty percent (50%) of the total gross area of the Property, this Declaration may only be amended by the agreement of the Owners who own at least eighty percent (80%) of the total gross area of the Property. Any change, modification, amendment or rescission which is made without the written consents required above shall be null and void and of no effect. All changes, modifications, amendments or rescissions must be recorded in the records of the Maricopa County Recorder.

8.7 Severability. In the event any term, covenant, condition, provision, or agreement contained herein is held to be invalid, void, or otherwise unenforceable, by any court of competent jurisdiction, such holding shall in no way affect the validity of enforceability of any other term, covenant, condition, provision, or agreement contained herein.

8.8 Governing Law. This Declaration and the obligations of the Owners hereunder shall be interpreted, construed, and enforced in accordance with the laws of the State of Arizona.

8.9 Terminology. All personal pronouns used in this Declaration, whether used in the masculine, feminine, or neuter gender, shall include all other genders; the singular shall include the plural and vice versa.

8.10 Captions. Article and section titles or captions contained herein are inserted as a matter of convenience and for reference, and in no way define, limit, extend, or describe the scope of this Declaration or any provisions hereof.

8.11 Consent. In any instance in which any Owner shall be requested to consent to or approve of any matter with respect to which such Owner's consent or approval is required by any of the provisions of this Declaration, such consent or approval shall be given in writing, and shall not be unreasonably withheld or delayed, unless the provisions of this Declaration with respect to a particular consent or approval shall expressly provide otherwise. In any instance in which the consent of a majority of the Owners is required under this Declaration, the Owner of each Parcel shall have one vote; if an Owner owns more than one Parcel, such Owner shall have a number votes equal to the number of Parcels owned by such Owner.

8.12 Not a Public Dedication. Nothing herein contained shall be deemed to be a gift or dedication of any portion of the Property to the general public or for the general public or for any public purpose whatsoever, it being the intention of the Owners hereto that this Declaration shall be strictly limited to and for the purposes herein expressed.



## Appendix 7: Shared Parking Agreement Example

8.13 Release. If an Owner shall sell, transfer or assign its entire Parcel or its interest therein, it shall, except as provided otherwise in this Declaration be released from its unaccrued obligations hereunder from and after the date of such sale, transfer or assignment.

8.14 Entire Declaration. This Declaration and the exhibits hereto contain all the representations and the entire agreement between the Owners with respect to the subject matter hereof. Any prior correspondence, memoranda or agreements are superseded in total by this Declaration and Exhibits hereto. The provisions of this Declaration shall be construed as a whole according to their common meaning and not strictly for or against any Owner.

8.15 Excuse for Non-Performance. Each Owner shall be excused from performing any obligation or undertaking provided in this Declaration, except any obligation to pay any sums of money under the applicable provisions hereof (unless such payment is conditioned upon performance of any obligation or undertaking excused by this Section), in the event and so long as the performance of any such obligation is prevented or delayed, retarded or hindered by a Permitted Excuse.

8.16 Duration. This Declaration and each term, easement, covenant, restriction and undertaking of this Declaration will remain in effect for a term of ninety (90) years from the recordation date hereto and will automatically be renewed for successive ten (10) year periods unless a majority of the Owners of the Parcels elect by written notice to the other not to so renew.

8.17 Not a Partnership. The provisions of this Declaration are not intended to create, nor shall they be in any way interpreted or construed to create, a joint venture, partnership, or any other similar relationship between the Owners.

8.18 Third Party Beneficiary Rights. This Declaration is not intended to create, nor shall it be in any way interpreted or construed to create, any third party beneficiary rights in any party, except as to an Owner or unless otherwise expressly provided herein.

8.19 Recordation. This Declaration shall be recorded in the office of the recorder of the county in which the Project is located.

8.20 Interpretation. Whenever the context so requires, all words used in the singular shall be construed to have been used in the plural (and vice versa), each gender shall be construed to include any other genders, and the word "person" shall be construed to include a natural person, a corporation, a firm, a partnership, a joint venture, a trust, an estate or any other entity. This Declaration shall be interpreted and construed only by the contents hereof, and there shall be no presumption or standard of construction in favor of or against the Declarant or any Owner.

8.21 Joint and Several Obligations. In the event any Owner is composed of more than one Person, the obligations of said Owner shall be joint and several.

Appendix 7: Shared Parking Agreement Example

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8.22 Dates of Performance. Whenever a date for an action required to be performed or any other period of time set forth in this Declaration falls on a Saturday, Sunday, or federal holiday, then such date shall be extended to the following business day.

8.23 Time is of Essence. Time is expressly made of the essence of all the provisions of this Declaration.

IN WITNESS WHEREOF, Declarant has executed this Declaration as of the date first above written.

BATAA/KIERLAND, LLC,  
an Arizona limited liability company

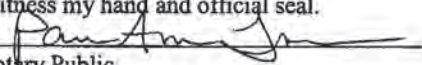
By: BATAA/OIL, INC.,  
a Colorado corporation

By:   
Name: David J. Calvin  
Its: President

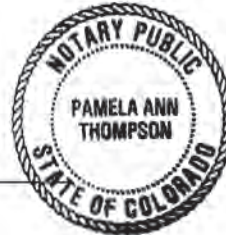
STATE OF COLORADO )  
 ) ss.  
COUNTY OF WELD )

The foregoing instrument was acknowledged before me this 3 day of June, 2008, by David J. Calvin, President of BATAA/OIL, INC., the sole member of BATAA/KIERLAND, LLC, on behalf of the company.

Witness my hand and official seal.

  
Notary Public

My Commission Expires: 6/11/09





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EXHIBIT "A"

LEGAL DESCRIPTION

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**Exhibit "A"**

**Lot 3, Kierland Commerce South, according to Book 465 of Maps, Page 10, records of Maricopa County, Arizona.**