University District Parking Study – Phase I Final Report

FINAL

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1 PROJECT OVERVIEW

Spokane's University District is a current and long-term focal point of reinvestment and revitalization in the city. Its variety of academic institutions, long-standing residential neighborhoods, commercial corridors, and emerging innovation clusters put the University District at the forefront of Spokane's future. Its recent and ongoing growth, however, has led to concerns about the availability of parking and increased demand for mobility to, from, and within the University District.

The City of Spokane, in partnership with the University District Development Association (UDDA), commissioned the **University District Parking Study** to proactively assess the inventory of parking facilities (number and type of spaces) in the University District area. The inventory assessment is the first phase, establishing a shared understanding of current parking assets and their regulation in the district. A future second phase is proposed to examine the utilization of parking, as well as development of a set of comprehensive recommendations. The ultimate goal is the creation of a new district-based management approach that supports the district's development and mobility ambitions.

The UDDA and stakeholders understand that parking is but one part of an integrated approach to support improved mobility, access, and connectivity to, from and within the University District. A second phase of the parking study, or other planning efforts in the University District, will need to comprehensively address the University District's development, mobility, and access challenges and opportunities.

WHAT IS THE STUDY AREA?

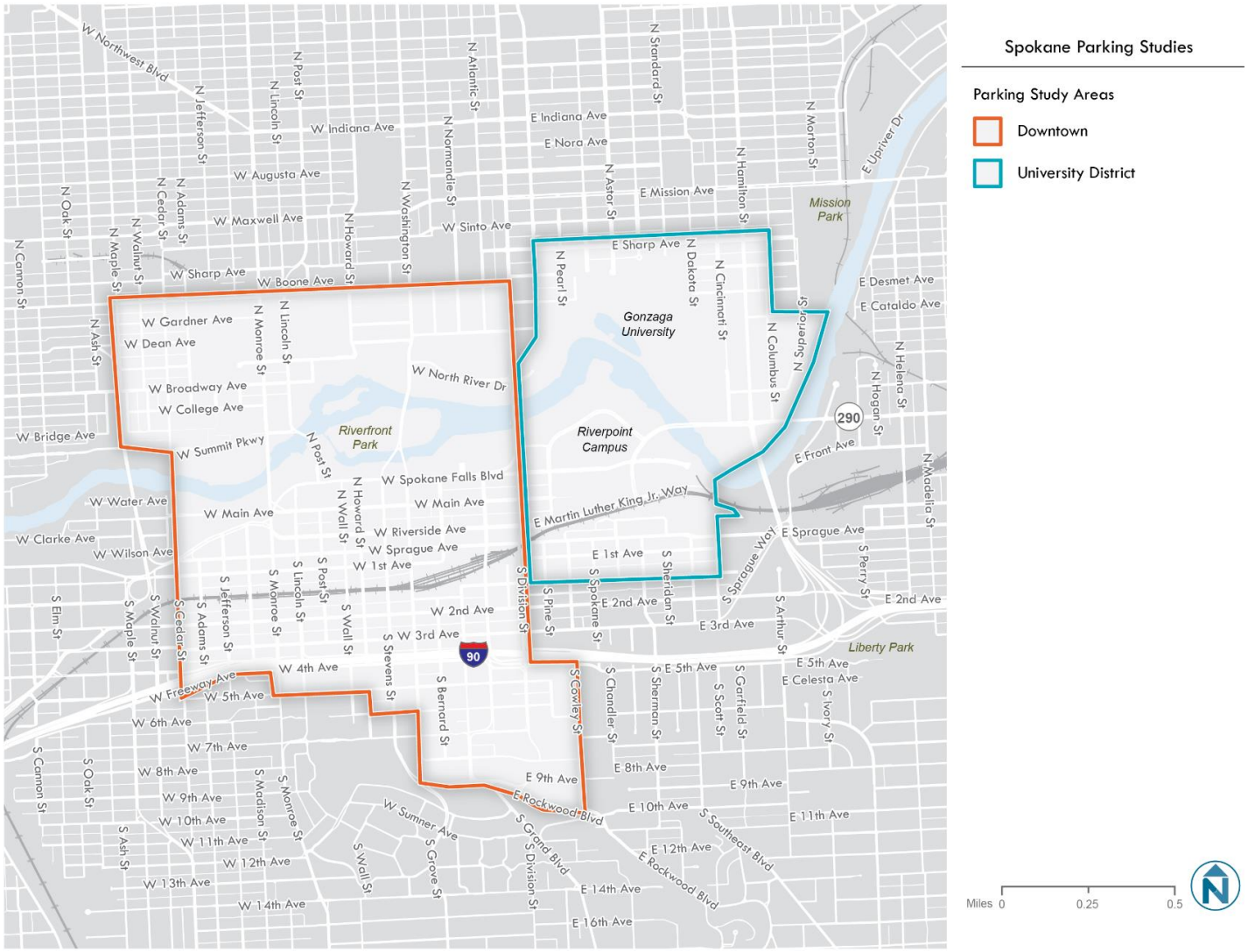
The **project study area** is shown in Figure 1-1. It generally is bounded by Sharp Avenue to the north, Columbus Street and the Spokane River to the east, Pacific Avenue to the south, and Division Street to the west. Note that these boundaries do not demarcate the entire 770-acre University District area. It is also important to note that a parking study is underway in Downtown Spokane.

WHAT IS THE PROJECT APPROACH?

There are two primary phases to the University District Parking Study. This document summarizes the **first phase** of work, which includes an assessment of the current parking inventory; the identification of key issues, challenges, and opportunities through data collection and analysis; and an initial solicitation of community feedback. The **second phase** will focus on utilization and strategy development, crafting a comprehensive and diverse set of recommendations to improve integrated parking and mobility over the short- and long-term. That phase is anticipated for 2018-19.

As part of the first phase of work, the project team provided several input opportunities for the **community and stakeholders,** including stakeholder interviews and an online survey. The City of Spokane also hosts a project website.

Figure 1-1 Project Study Areas



Note: The Downtown Parking Study Area differs slightly from the formal Downtown Spokane boundaries. The University District Parking Study Area does not comprise the entire University District.

2 WHAT WE HEARD – STAKEHOLDER INPUT

This chapter summarizes the key findings from the University District outreach conducted thus far, including stakeholder interviews and the online parking survey. This input was used to deepen the project team's understanding of the key issues and opportunities.

STAKEHOLDER INTERVIEWS

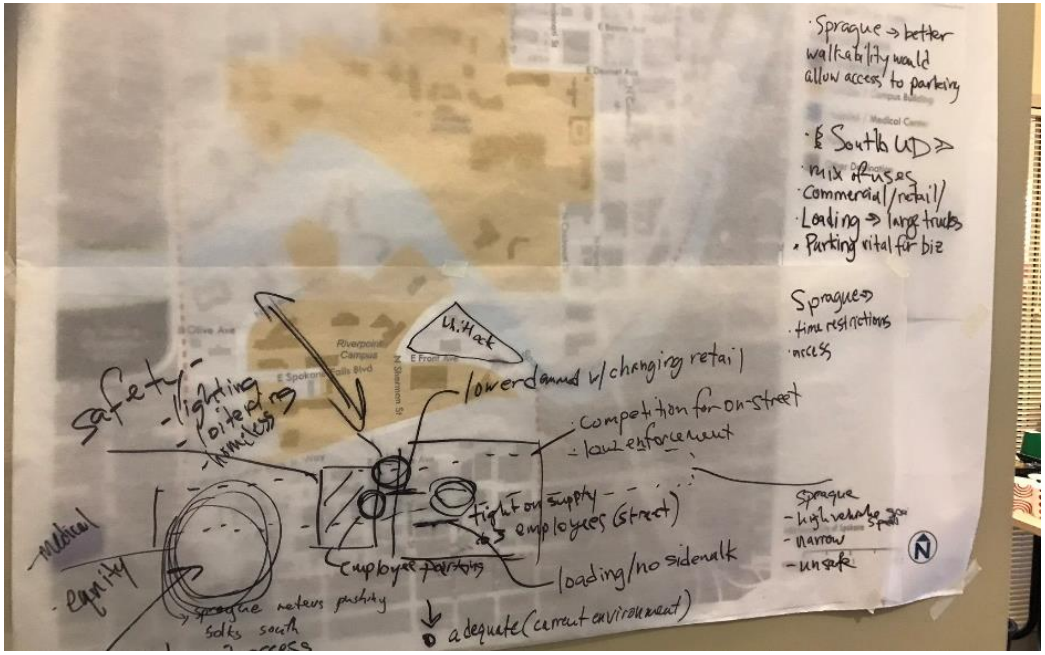
In collaboration with the outreach conducted for the Downtown Parking Study, the project team conducted individual and small group interviews to capture a cross-section of perspectives in the University District. The summary of the interviews presented below also draws on feedback from both study areas. The following stakeholder groups' feedback is summarized below:

- Businesses and employees
- City staff, including planning, transportation, enforcement, and operations
- Residents
- Staff from University District partners, including major universities
- Transit, bicycle, and pedestrian advocacy groups
- UDDA staff

Summary of Stakeholder Interviews

Below is feedback received from stakeholders, distilled and summarized by the consultant team to provide a sample of parking perceptions, opinions, and experiences by the greater University District community. In general, there were a diversity of challenges and preferences, some of which will not be addressed in the parking study, but must be considered by future mobility and access planning efforts for the University District.

- **Additional planning for the land use and transportation vision** in the University District is necessary, so that present and future planning processes can be in line with that long-term vision.
- **New growth is coming to the district,** and a comprehensive supply and management strategy is needed to ensure that development is successful.
- In general, **parking is seen as a "problem,"** generating overall frustration and strong opinions.
- Depending on the stakeholder/user, however, the "problem" **was defined in many different ways.** For some it was a "supply" problem, while others felt that parking was generally available, but not easy to access and/or managed as well as it could be. For some, it was a combination of factors.
- The **new pedestrian and bicycle bridge** connecting the University District over the railway has the potential to transform the way people travel within the University District, making walking and biking between the areas seamless.
- The **Central City Line** was seen as a great opportunity for improving connections to and from downtown and the University District without a vehicle.
- **Special events** can contribute to spillover parking and high demand in key locations.
- The University District must balance existing resident, university, and long-standing business needs with **emerging commercial corridors,** whose customers have different parking needs.



Workshops with City and UDDA staff, as well as various stakeholder groups, allowed participants to identify key parking issues and concerns.

- The parking supply and district as a whole is **fragmented by distinct physical barriers**. These barriers impact travel and parking within the district.
- **Equity is a key concern** within the district. Social service providers highlighted the access challenges of their constituents, and the need to provide an equitable mobility and parking approach.
- Multiple stakeholders expressed concern about the need for **employee and customer parking for businesses on Sprague Avenue**. High traffic, vehicle speeds, and overall pedestrian comfort were also reported as key issues.
- There is substantial **concern about on-street loading**, both for commercial deliveries and passenger loading. This is of particular concern in the southern part of the district, where businesses require ample loading space.
- The parking "experience" can be improved.
  - There is a lack of a **visible "brand" and coordinated information/wayfinding** for finding a parking spot.
  - **Payment technologies are inconsistent** (i.e. multiple systems) and can be inconvenient for both meters and off-street surface lots. New parking technology and real-time information can be used to a greater degree.
  - **Safety and comfort issues** discourage walking and limit the reach of the parking system.
- **Part of the parking challenge in Spokane is about "culture,"** and the expectation for free, front-door parking at all times.

ONLINE PARKING SURVEY

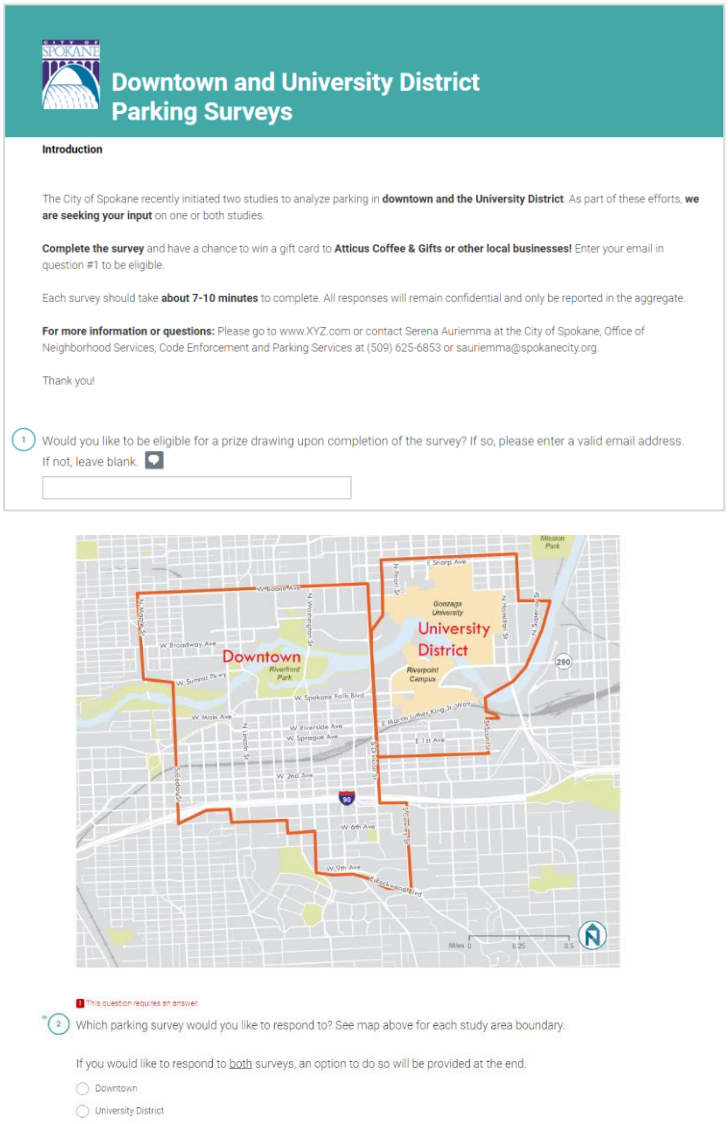
An online survey was conducted to capture additional input from University District stakeholders and the broader Spokane community. The **goals of the survey** include:

- Collect information about parking behavior in the University District
- Provide insight into public perception of the parking system
- Identify major issues for students, visitors, residents, employees, and business owners
- Leverage other data collections efforts to develop a more holistic understanding of parking conditions, perceptions, and needs

The survey was open from **May 4th to May 31st**. It was distributed via the following methods.

- Emails to City of Spokane, University District, and partner outreach lists
- Social media and web advertising
- Press releases
- Project website
- Distribution of flyers and bookmarks with survey link throughout study area

A **total of 663 responses** were provided to the University District survey. Key findings are summarized below. The full results of the survey are presented in in a separate Survey Analysis Memorandum.



The survey collected information about typical travel and parking patterns and preferences, while also asking respondents questions that helped analysts sort them into user groups.

Summary of Key Findings

Respondent Profile

- **Nearly half of respondents work in the University District.** Fifteen percent shop, run errands, or visit friends/family. Nine percent are students.
- **The majority of respondents park in the WSU/EWU Campus area,** but this area only accounts for a quarter of the spaces. Responses in the three zones were weighted up or down based on the proportion of parking spaces counted in each area.
- **Over two-thirds of respondents who work in the University District are employed in educational services (e.g., university faculty, staff).** Ten percent work in professional, scientific, and technical services.
- **Nearly two-thirds of those educational services respondents work for Gonzaga University.** Twelve percent work for Eastern Washington University, 9% work for the Community Colleges of Spokane, and 9% work for Washington State University Health Sciences.
- **Over one-third of student respondents study at Whitworth University, and a quarter each study at EWU and GU.** Ten percent study at WSU Health Sciences.

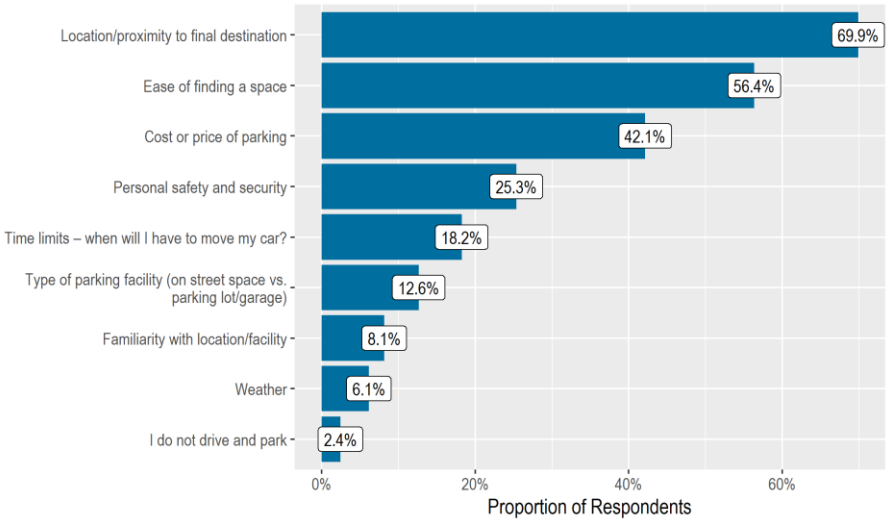
Travel Patterns

- **Half of respondents travel to the University District very frequently (5 days per week or more).** One-fifth visit 1-4 days per week, and another visit a few times per month.
- **Nearly 80% of respondents drive alone and park for most of their trips to/in the University District.** Twelve percent carpool with others.
- **Nearly one-third of respondents have access to a free or discounted bus pass.** Over one-fifth have access to bike parking at their employer or residence, and nearly one-fifth have access to free vehicle parking.

Parking Patterns

- **One-third of parkers utilize a lot or garage with a purchased recurring permit –** likely through one of the universities in the study area. Another third park in an on-street non-metered space. Fifteen percent park in a lot or garage at a free or reduced price provided by

Figure 2-1 Top 3 Factors in Determining Where to Park



their employer or residential unit. Over half of employees, and over one-third of students, parking in the University District park in lots or garages for which they purchase a recurring permit.

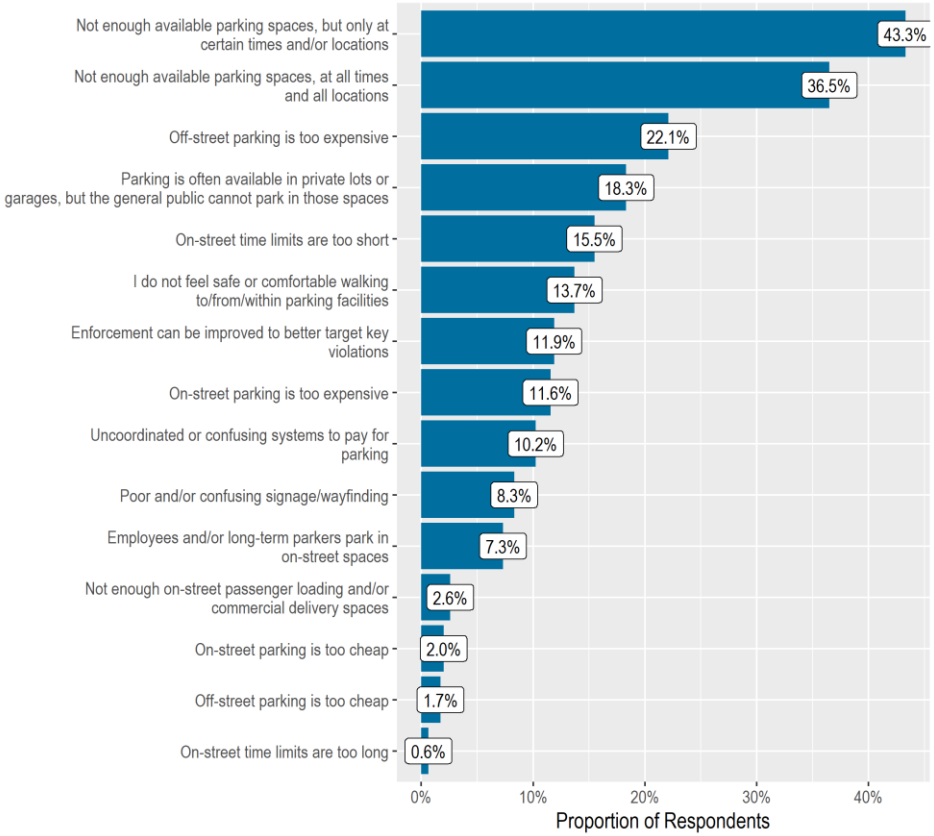
  - Nearly one-third of students indicated they have access to free or reduced price parking.

- **Over 40% of parkers park on-site or on the same block.** One-fifth park one block away, 17% park two blocks away, and another 17% park three or more blocks away.
- **Over half of parkers park for four hours or longer, with most of those parking for eight hours or more.**

Parking Issues and Preferences

- **Over two-thirds of respondents** prioritized proximity to their destination among their top three factors in selecting where to park. The second and third most important factors were ease of finding a space (56%) and the price of parking (42%), respectively. A quarter indicated personal safety and security, and 18% indicated time limits.
- **Nearly three-quarters of respondents would prefer to park further from their destination for free or cheaper parking.** Only one-quarter would be willing to pay more to park closer to their destination.
- **Over 40% of respondents indicated a lack of parking at specific locations or times was among their most important parking issues.** Over one-third of respondents indicated a lack of supply at all locations was among their top three issues, and one-fifth indicated off-street parking was too expensive.

Figure 2-2 Respondent Top 3 Parking Issues



Sample of Stakeholder Input

The quotes on this page represent a broad sample of direct feedback heard throughout stakeholder meetings and/or the online survey. They are intended to highlight stakeholder perceptions and opinions about the parking system.

"Add more bike parking so people can ride their bike instead of driving."

"Make it cheaper for regular users and make pricing consistent. GU parking is 1/4th of the price of WSU parking.

"Make parking flexible on the weekends, winter, and low-parking times."

"Transition some lots to student/workforce housing or other uses. There is no need to dedicate the current level of land to parking lots."

"It's weird that all the parking is surface parking. It adversely impacts both the appearance and the walkability of the campus."

"Consistent brand identification for public parking. It's often hard to distinguish parking for the general public from parking that is reserved for the Gonzaga or WSU communities.

"The University District needs a public parking garage. There are so many fun businesses but so little parking."

"Gonzaga needs to provide more free parking. People attending events on campus don't have enough on-campus parking and cause parking problems in the neighborhood."

"Open up private lots to public parking. There is a lot of parking space available in this area, but it is private access only. The general public is left to fight for on-street spaces, while the private lots sit empty and unavailable after the business hours have passed."

TOP FIVE TAKEAWAYS

Stakeholder Interviews

1. **Additional planning for the land use and transportation vision** in the University District is necessary, so that present and future planning processes can be in line with that long-term vision. Many of the challenges identified by stakeholders must be addressed through a more holistic mobility planning process that considers more than just parking.
2. **New growth is coming to the district,** and a comprehensive parking supply and management strategy is needed to ensure that development is successful.
3. The University District must balance existing resident, university, and long-standing business needs with **emerging commercial corridors,** whose customers have different parking needs.
4. **The parking experience in the University District needs improvement and coordination.** Stakeholders indicated that payment technologies (especially between University, City, and private facilities) can be inconsistent and signage uncoordinated.
5. The **new pedestrian and bicycle bridge**, as well as the Central City Line, have the potential to transform the way people connect to downtown and throughout the district.

Online Survey

1. **Four out of five respondents drive alone** – this is notably higher than the downtown respondent single occupancy vehicle (SOV) rate (68%). Additional survey efforts that include a larger number of students will likely shift the commute mode shares. Nevertheless, transitioning SOV trips to other modes will be a key part of a holistic parking management strategy in the University District.
2. **Special events** can contribute to spillover parking and high demand in key locations. One of the top issues for survey respondents was finding parking at certain times and locations – so improving peak management practices can be an alternative to additional parking supply.
3. **The majority of people parking in the University District park on-site or within a block of their destination.** Changing expectations and culture will need to be part of the growing pains of parking in the University District.
4. **Proximity to destination and ease/convenience of the parking experience** were more important to respondents in the University District than price.
5. **As in downtown Spokane, respondents would prefer to park further away and pay less.** Most on-street parking in the University District is not currently priced, but pricing critical corridors and locations may be a way to balance demand throughout the area. Nevertheless, as noted above, convenience is a higher priority than price – this should be a key consideration in deciding parking policy within the University District.

3 PARKING INVENTORY

This chapter summarizes the University District parking inventory within the study area boundaries. It documents the number of spaces for both on-street and off-street parking, as well as how those spaces are both priced and regulated.

It is important to emphasize that the inventory presented represents **a "snapshot" summary.** The number of parking spaces in the study area on any given day or time is constantly changing due to street closures, construction activity, and/or additions/reductions in parking. The information presented is based upon the best available data to date. The inventory does not include parking spaces associated with single-family driveways or garages.

METHODOLOGY

The IDAX team began the data collection effort by using a combination of existing data from the City of Spokane and University District partners, in addition to aerial imagery, to develop a geometry database of all on- and off- street parking in the study area. A team of surveyors then field checked the numbers and types of parking spaces based on manual counts and observations of signage.

As part of the field work, parking space types were detailed in terms of their public availability, when they were reserved, who they were reserved for, and the typical charges for parking in those spaces. As noted on Figure 3-3, an estimated 8% of the parking inventory was unable to be field checked due to access issues by surveyors.

Figure 3-2 illustrates the study area. For analysis purposes, **the study area was broken up into three sub-zones.** Phase 2 of the parking study may revisit the sub-zone boundaries, and may not limit the number to three. These analysis zones have similar land uses and travel patterns and are useful for making distinct policy decisions in future phases. **The zone names and boundaries are specific to this project only**.

Figure 3-1 Parking Inventory, by On- and Off-street Spaces

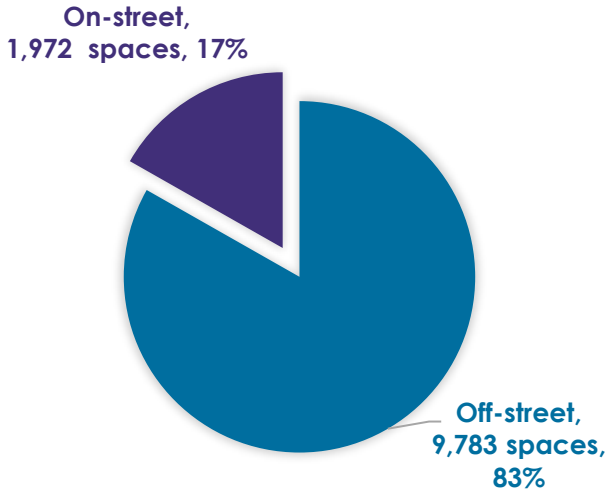
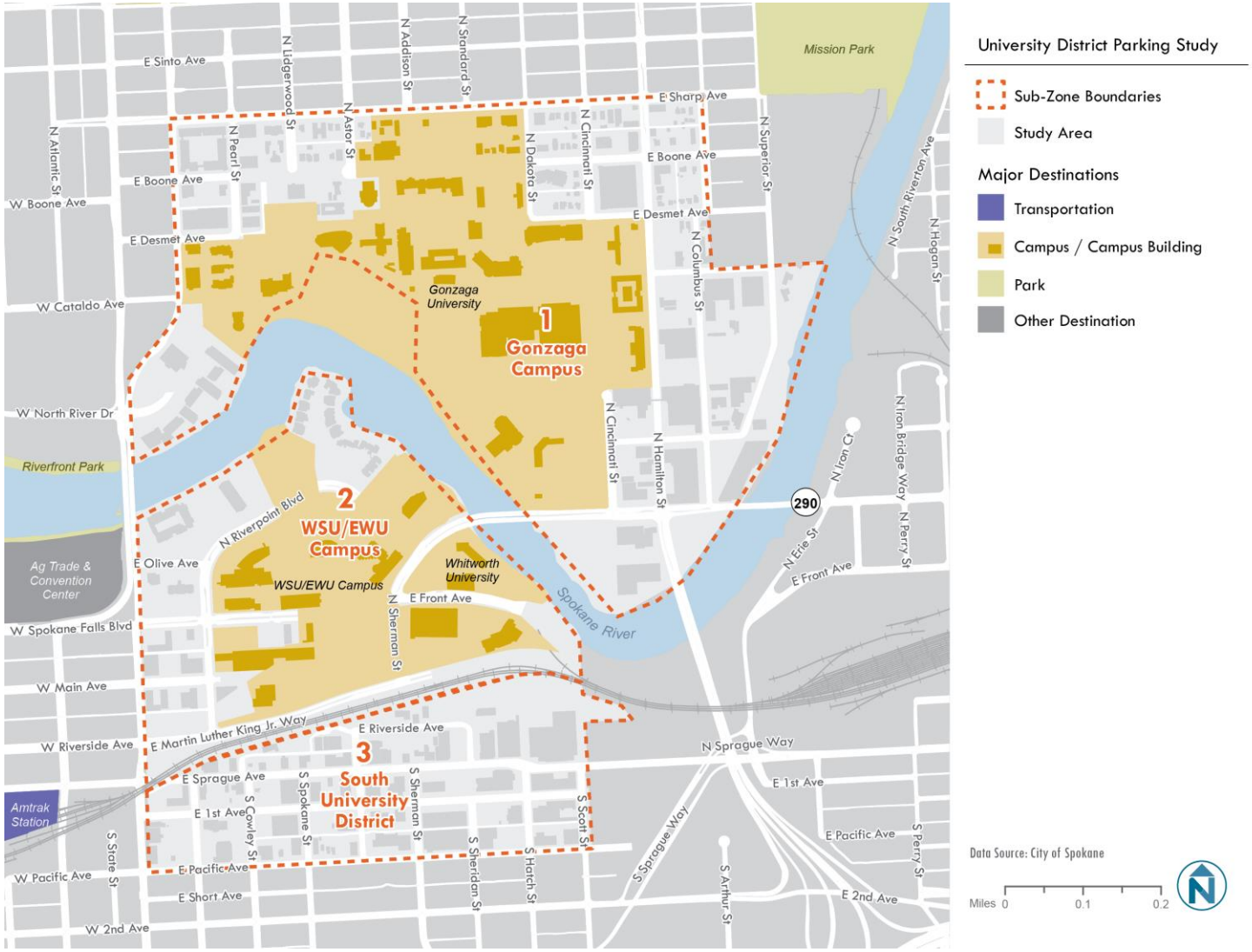


Figure 3-2 University District Parking Study Area and Sub-Zone Boundaries



Note: Study area does not include all 770 acres of the University District.

TOTAL INVENTORY

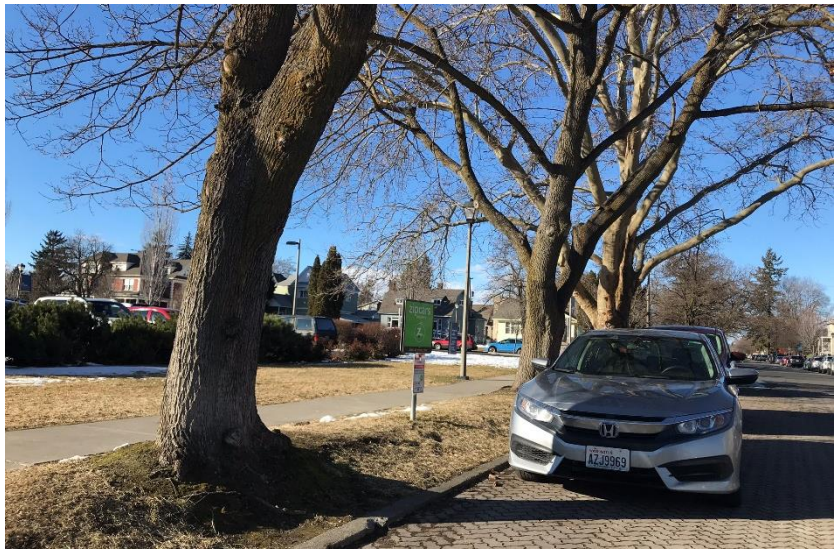
The University District study area has **a total of nearly 12,000 parking spaces**. The inventory by space type and zone is presented in Figure 3-3. How those spaces occupy land in the study area is shown in Figure 3-4. Figure 3-5 illustrates the density of parking spaces throughout the study area in a simplified map. Key findings are highlighted below.

Space Type

- One-third of parking in the study area is parking reserved for the use of university students, faculty, and visitors. Nearly **two-thirds of these spaces are in the Gonzaga Campus area**, while the other third are in the WSU/EWU Campus area.
- One-fifth of parking in the study area is available to **customers of businesses only**.
- **Fifteen percent (over 1,700 spaces) are on-street spaces** open to the general public.
- The remaining quarter of spaces are mostly **split among special uses** (e.g., employee, resident) and not available to the general public for all or a part of the day.

Parking as a Land Use

- Overall, a **quarter of land in the University District** is occupied by parking.
- The **lowest rate of parking land consumption is in the Gonzaga Campus** zone at just over one-fifth. This is the only area with structured parking, leading to the lowest average land occupied per off-street space (389 SF per space).
- The **highest rate of parking land consumption is in the Southern University zone**, where parking occupies nearly one-third of land area.
- The average land area consumed per space in the University District (415 SF per space) is **substantially higher than that in downtown** (306 SF per space), given the lack of structured parking facilities.
- As illustrated in Figure 3-5, the **highest densities of parking** are along the Cincinnati/Hamilton Corridor, adjacent to the Gonzaga sports complex, over the entire WSU/EWU Campus, and on the east side of North Ruby Street adjacent to several hotels.



Reserved Zipcar parking space on the Gonzaga Campus

Figure 3-3 Overall Parking Inventory, by Zone

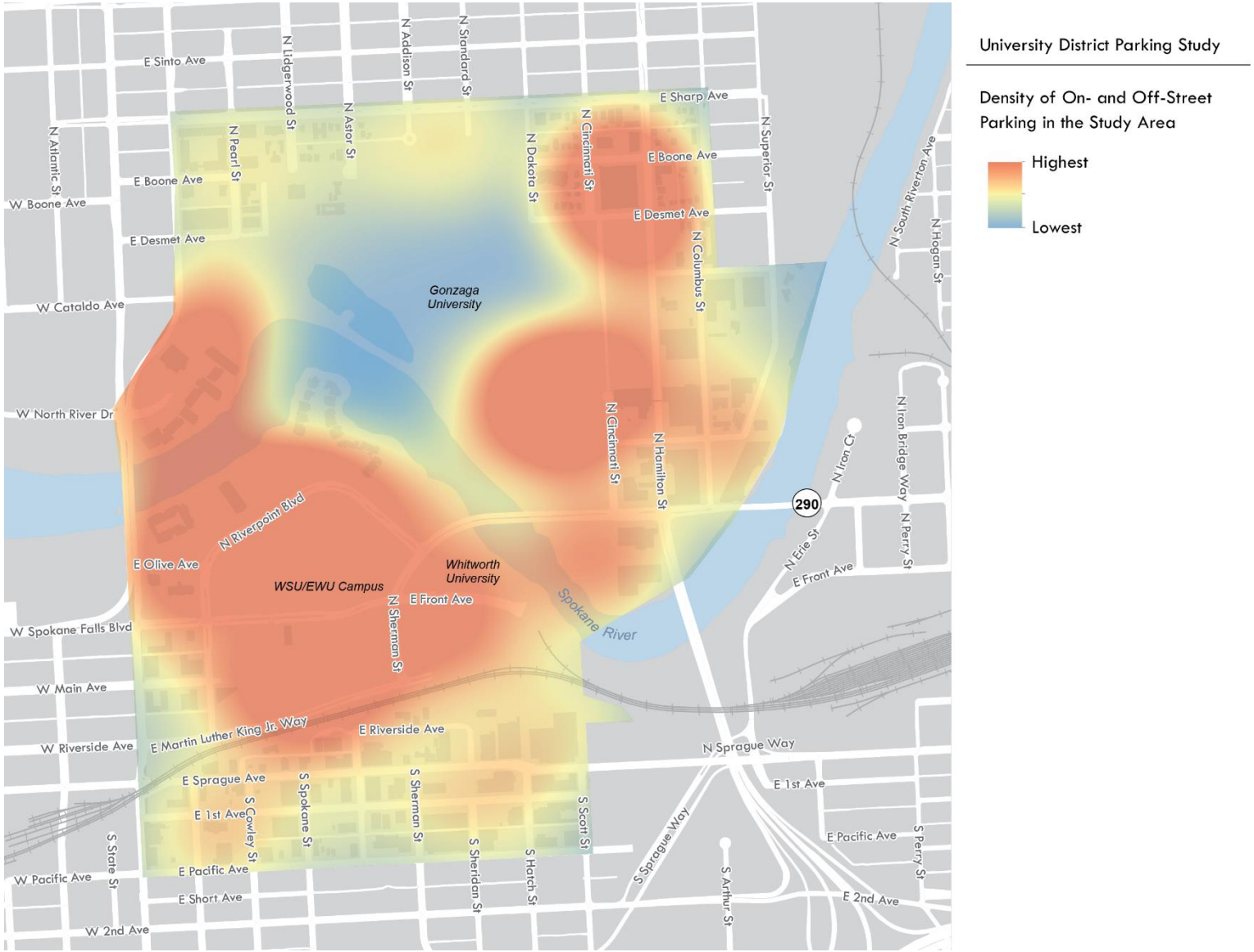
Space Type	Total Spaces	Proportion of all Spaces	1	2	3
			Gonzaga Campus	WSU/EWU Campus	South University District
On- and Off-street: University/School	3,867	33%	2,513	1,354	0
Off-street: Customer	2,161	18%	1,019	358	784
On-street: Open (Free)	1,723	15%	855	197	671
Off-street: Not Field Checked*	978	8%	639	48	291
Off-street: Private	652	6%	61	20	571
Off-street: Reserved	520	4%	74	197	249
Off-street: Resident	414	4%	131	202	81
Off-street: Employee	326	3%	0	326	0
On- and Off-street: ADA	305	3%	189	94	22
On- and Off-street: Service Vehicles	295	3%	156	101	38
Off-street: Medical	168	1%	161	7	0
On-street: Metered	151	1%	12	133	6
Off-street: Public Paid	81	1%	0	81	0
On- and Off-street: Other	63	1%	41	12	10
On- and Off-street: Loading	51	0%	35	8	8
Total	**11,755**	**100%**	5,886	3,138	2,731
Proportion of All Spaces			**50%**	**27%**	**23%**

* Off-street, not field-checked spaces include all spaces data collectors were unable to gain access to for field checking. Multiple attempts were made to access each site.

Figure 3-4 Land Area Allocated to Parking, by Zone

Zone Name	Off-street					On-street		Total Parking (On + Off) Land Area	Total Zone Land Area	Proportion Land Area Occupied by Parking
	# Structured Spaces	# Surface Spaces	# Total Spaces	Land Area (SF)	Land Area per Space	# Spaces	Land Area (160 SF per space)			
1) Gonzaga Campus	668	4,226	4,894	1,899,445	389	992	158,720	2,058,165	9,650,226	21%
2) WSU/EWU Campus	0	2,844	2,844	1,329,309	468	294	47,040	1,376,349	4,785,113	29%
3) South University District	0	2,045	2,045	827,960	405	686	109,760	937,720	3,010,959	31%
Total (Entire Study Area)	**668**	**9,155**	**9,783**	**4,056,714**	**415**	**1,972**	**315,520**	**4,372,234**	**17,446,299**	**25%**

Figure 3-5 Parking Inventory Density



ON-STREET INVENTORY

Figure 3-6 presents an overall summary of the on-street parking space types in the study area. All on-street parking is managed by the City of Spokane.

In all, there are **nearly 2,000 on-street spaces**. The vast majority (89%) of those spaces are **open to the general public free of charge with no time limits.** A small portion (4%), on the western edge of the WSU/EWU campus area, are metered spaces.

Figure 3-7 illustrates how spaces are distributed over the study area geographically, with additional detail about loading zones illustrated in Figure 3-8.

Figure 3-9 summarizes the spaces and space types by zone. **Half of on-street spaces are in the Gonzaga campus area**, while another third are in the South University District area. The lowest share of on-street spaces is in the WSU/EWU campus area and this is the only zone with metered parking. On vacated streets within the Gonzaga University campus, there are 59 spaces reserved for Gonzaga affiliates.

Commercial and 10-minute on-street loading zones are very few in number (7 and 5, respectively). There are no 10-minute zones in the South University District, and no commercial loading zones in the Gonzaga campus area. Passenger/Taxi loading zones are mainly located in the Gonzaga campus area.

Figure 3-6 On-street Inventory, by Space Type

Regulation Type	# Spaces	% Spaces
Open (Free)	1,723	89.6%
2-hour Metered ($1.20/hr.)	59	3.1%
University Reserved	59	3.1%
Other	20	1.0%
All-Day Metered ($0.40/hr.)	18	0.9%
Passenger/Taxi Loading Zone	14	0.7%
Other Loading & Delivery	10	0.5%
Commercial Loading Zone	7	0.4%
10-minute Loading Zone	5	0.3%
4-hour Metered ($0.80/hr.)	4	0.2%
Total	**1,919**	**100%**

Figure 3-7 On-street Regulations and Pricing

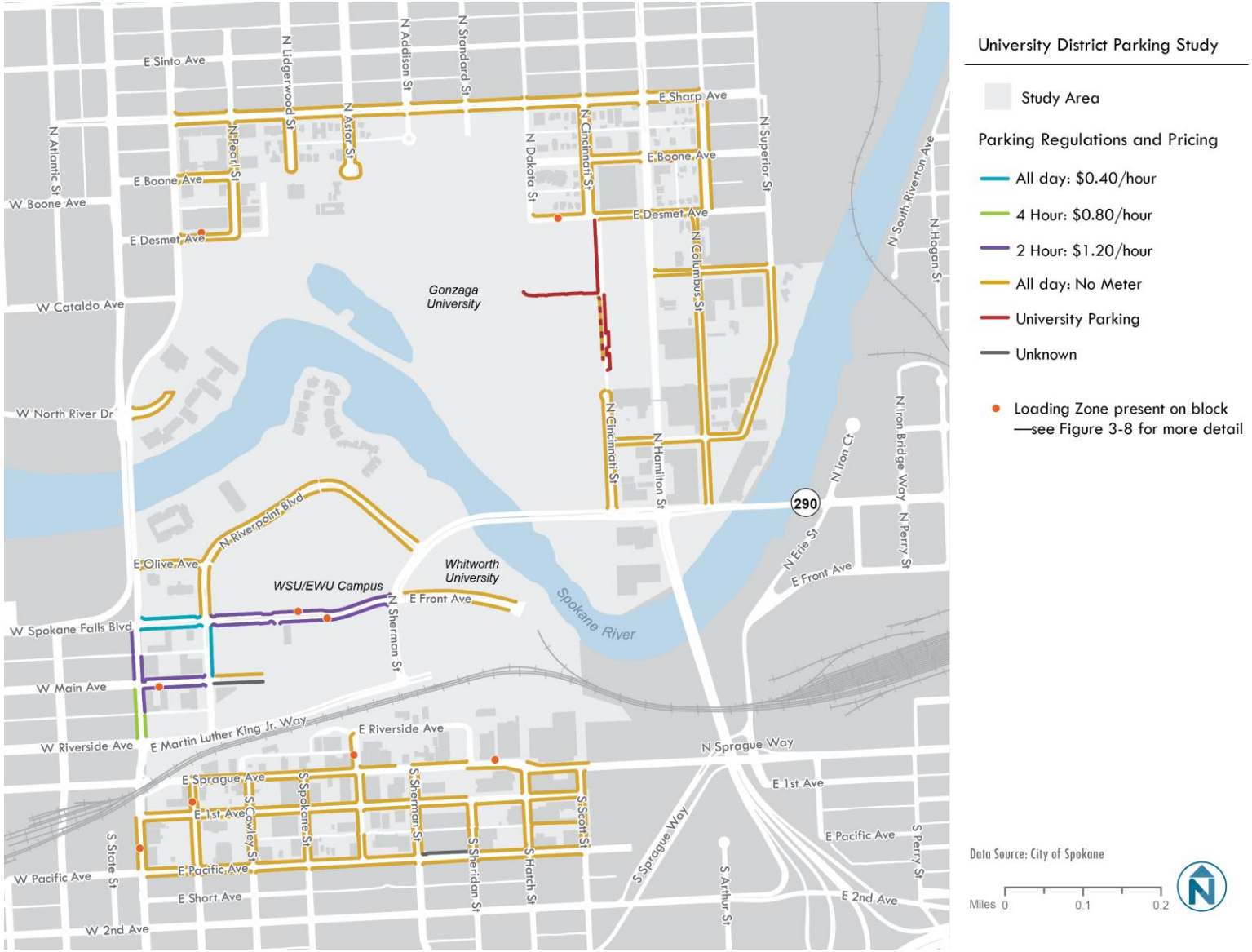


Figure 3-8 On-street Loading Zones

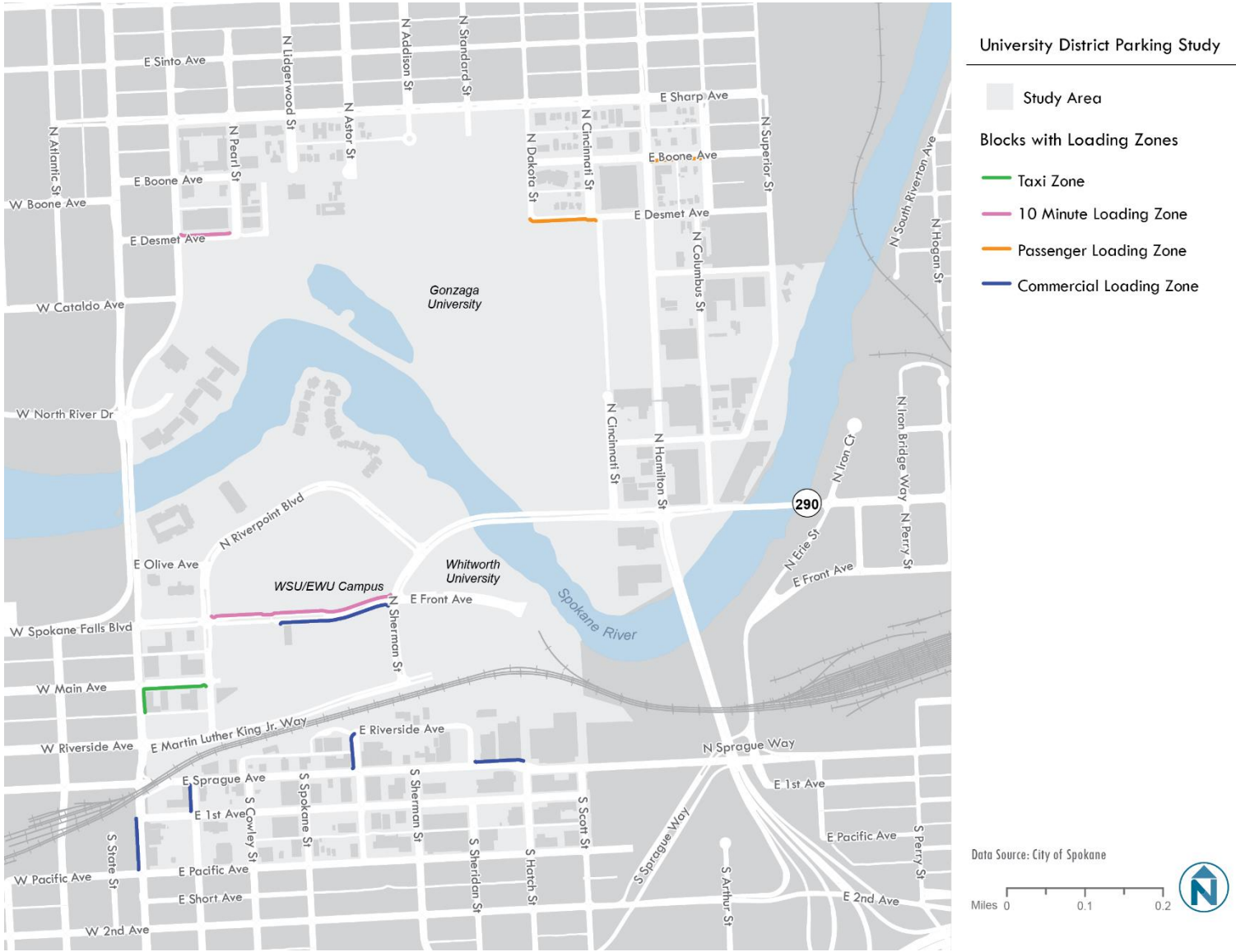


Figure 3-9 Summary of On-street Space Types and Pricing, by Zone

Regulation Type	# Spaces	1	2	3
		Gonzaga Campus	WSU/EWU Campus	South University District
Open (Free)	1,723	855	197	671
2-hour Metered ($1.20/hr.)	59	0	59	0
University Reserved	59	59	0	0
Other	20	10	10	0
All-Day Metered ($0.40/hr.)	18	0	18	0
Passenger/Taxi Loading Zone	14	12	2	0
Other Loading & Delivery	10	0	0	10
Commercial Loading Zone	7	0	2	5
10-minute Loading Zone	5	3	2	0
4-hour Metered ($0.80/hr.)	4	0	4	0
Total Spaces	**1,919**	**939**	**294**	**686**
Proportion of Total Spaces	**100%**	**49%**	**15%**	**36%**

OFF-STREET INVENTORY

There is a total of **9,783 off-street spaces** in the University District study area. Figure 3-10 presents a breakdown of the *unique space types* by zone. It is important to emphasize that unique space types is different than earlier tables. Many off-street spaces (about 15%) are shared between different uses. Therefore, the number of counted unique space *types* (10,343) adds up to more than the number of unique field checked *spaces* (8,805).

The total estimated number of spaces is also shown. This number includes non-institutional spaces that were unable to be field-checked because of access issues for surveyors. In a variety of cases, surveyors attempted to gain access, but were unable to do so. A total of 978 estimated spaces were not field checked in the study area – this accounts for 10% of the total off-street inventory.

Key findings include:

- **Nearly 45% percent of off-street parking is reserved for university students and staff.** Of that parking, the majority (27%) is shared between university visitors, students, and staff. Students and employees purchase a permit, while visitors use pay-by-plate kiosks to park in those lots. Ten percent of parking is reserved for university staff only, and 7% is reserved for students only (mostly adjacent to residence halls). Three percent is reserved specifically for visitors.
- Most remaining parking is reserved for specific uses. **Sixteen percent is reserved for customers/clients.** Five percent of spaces is for hotels, and 3% is reserved for specific apartment residents.
- The only **paid, general public spaces** (601 spaces, 6%) are located in the WSU/EWU campus area.

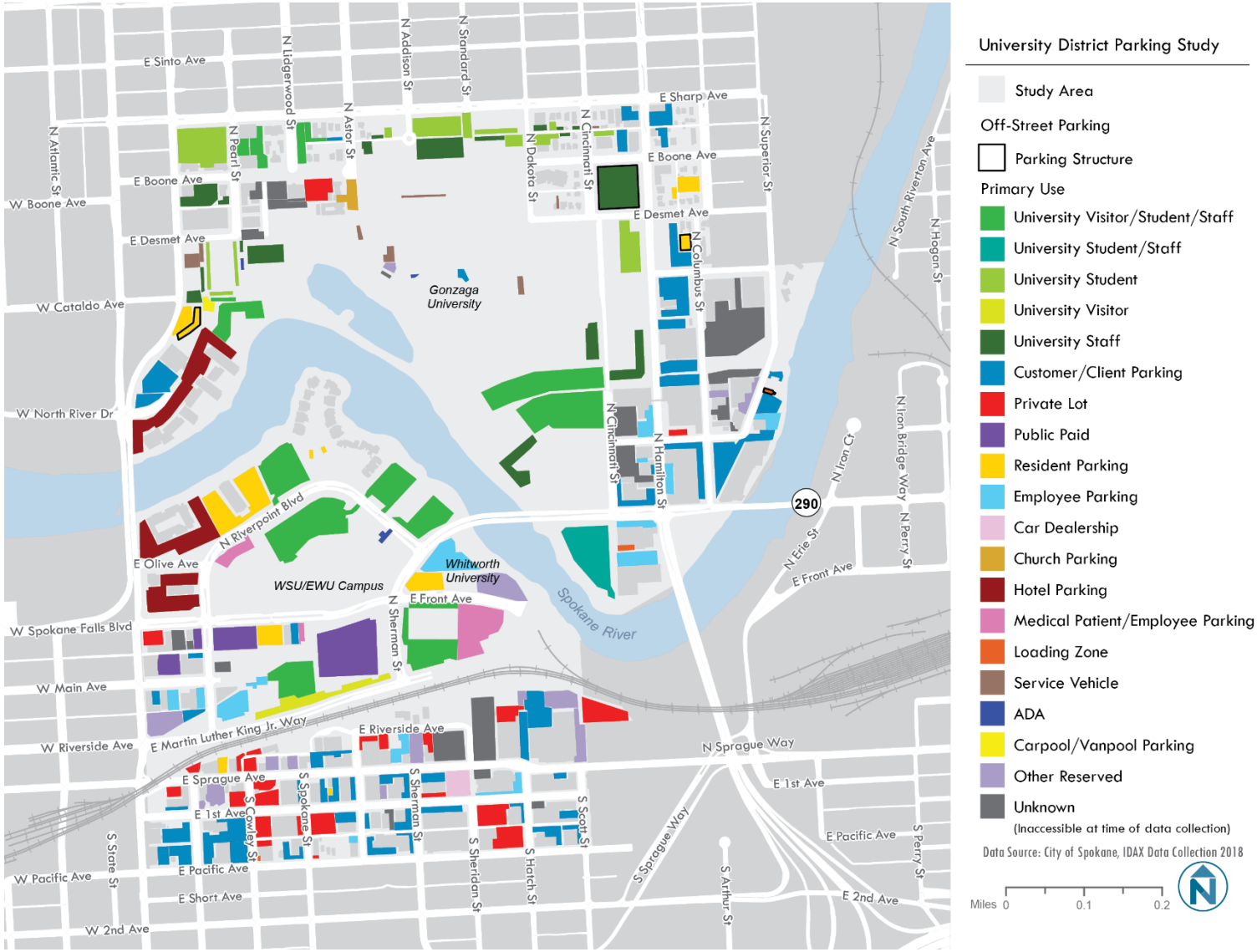
Reserved visitor parking on the Gonzaga Campus

Figure 3-10 Off-street Inventory, by Space Type and Zone

Space Type	# of Spaces	% of Total	1	2	3
			Gonzaga Campus	WSU/EWU Campus	South University District
University Shared Visitor / Student /Employee Parking	2,635	25.5%	358	2,277	0
Customer/Client Parking	1,638	15.8%	768	86	784
Staff Parking	1,041	10.1%	1,041	0	0
Student Parking	770	7.4%	762	8	0
Public Paid	601	5.8%	0	601	0
Other Reserved	561	5.4%	74	238	249
Private Lot	542	5.2%	61	20	461
Hotel Parking	522	5.0%	235	287	0
Employee Parking	414	4.0%	131	202	81
Resident Parking	305	2.9%	189	94	22
ADA	295	2.9%	156	101	38
University Visitor Parking	280	2.7%	24	256	0
Shared Student/Staff Parking	269	2.6%	269	0	0
Medical Patient/Employee Parking	151	1.5%	12	133	6
Service Vehicle	115	1.1%	108	7	0
Car Dealership	110	1.1%	0	0	110
Church Parking	36	0.3%	36	0	0
Other	34	0.3%	51	4	3
Number of Space Types	10,343	100%	4,275	4,314	1,754
Proportion of Space Types			41%	42%	17%
Number of Unique Spaces	8,805		4,255	2,796	1,754
Number of Shared Spaces	1,538		20	1,518	0
% Shared	14.9%		0.5%	35.2%	0.0%
Est. # of Non-Field-Checked	978		639	48	291
Est. Total Spaces	9,783		4,894	2,844	2,045

Note: Uncounted spaces estimated based on average area per space by facility type (structured or surface) and zone

Figure 3-11 Off-street Inventory, by Primary Use*



* "Primary Use" refers to the largest proportion of spaces for each facility

PUBLIC ACCESSIBILITY

Figure 3-12 summarizes the public and private ownership and access to parking by zone.

- Over half of all parking in the study area is **privately owned and reserved for private users** – most of these spaces are reserved for university students and staff.
- Nearly one-quarter is privately owned and **available to the public on a limited basis** – typically this is university visitor, customer, client, or patient parking.
- Fifteen percent of parking spaces are **on-street spaces available to the public free of charge**. Another 81 spaces (1%) are available as metered spaces.
- **Only 3% of spaces** are available to the general public in paid, off-street lots.

Figure 3-12 Public Accessibility of Parking

Public Accessibility	# of Spaces	% of Spaces	1	2	3
			Gonzaga Campus	WSU/EWU Campus	South University District
Privately Owned, Privately Available	6,903	59%	3,548	2,144	1,214
Privately Owned, Limited Public Use	2,445	21%	1,141	511	793
Publicly Owned, Publicly Available (Free, On-street)	1,753	15%	865	207	681
Privately Owned, Publicly Available (Paid, Off-street)	376	3%	156	182	38
Loading/Service Vehicles	197	2%	176	13	8
Publicly Owned, Publicly Available (Paid, On-street)	81	1%	0	81	0
Total	**11,755**	**100%**	**5,886**	**3,138**	**2,731**
Proportion of Spaces			**50%**	**27%**	**23%**

TOP FIVE TAKEAWAYS

1. **There are almost 12,000 parking spaces in the University District study area.** On-street parking spaces make up about 15% of the overall parking inventory.
2. **Parking occupies one-quarter of all land in the University District study area.** The vast majority of parking is in surface lots, resulting in a much higher square foot per space than in downtown. Conversely, the Gonzaga campus zone has a lower share of land dedicated to parking than the other zones, providing a more walkable campus core.
3. **Only one-fifth of parking in the area is available to the general public at all times.** The vast majority of these spaces are free and unregulated on-street spaces. The largest share of parking in the study area (34%) is reserved for the use of university students, faculty, and visitors. There is likely high competition for free and unregulated on-street spaces, leading to high parking frustration, especially for special events and on weekends. Future utilization studies would confirm such trends.
4. **There are few dedicated on-street loading zones in the University District study area.** This issue has been expressed by stakeholders in the South University District, which only has eight dedicated on-street loading spaces.
5. **The South University District and WSU/EWU Campus parking inventories are separated by the railway** – this separation will be mitigated by the new pedestrian and bicycle. Sharing parking, especially in evenings and on weekends, between the two areas should be a consideration.

The vast majority of parking in the University District is in off-street lots. In all, parking occupies 25% of land area.

4 USER PROFILE SUMMARY

METHODOLOGY

This chapter summarizes a **user profile for the University District**, describing general types of user groups, how much parking is available to them, as well as their opinions of the parking system provided via an online survey.

The user profile was developed based on the parking inventory, the online survey results, and feedback received from the City and stakeholders. Every parking space in the inventory was assigned a type (identified in Chapter 3), and these types were used to understand proportions of the inventory allocated to specific user groups. The survey result cross-tabulations presented in this chapter further define visit frequency and typical facility type by user group.

It is important to note that it is difficult to specifically define at any given time how each parking space in the University District is allocated to the different users of the parking system. **Within a mixed-use setting, and as discussed in Chapter 3, much of the inventory is shared among multiple users.** For example, an on-street parking space can be used by a student during the day, a restaurant goer in the evening, and a resident at night, making it difficult to pinpoint exactly how much parking is allocated and utilized by different users.

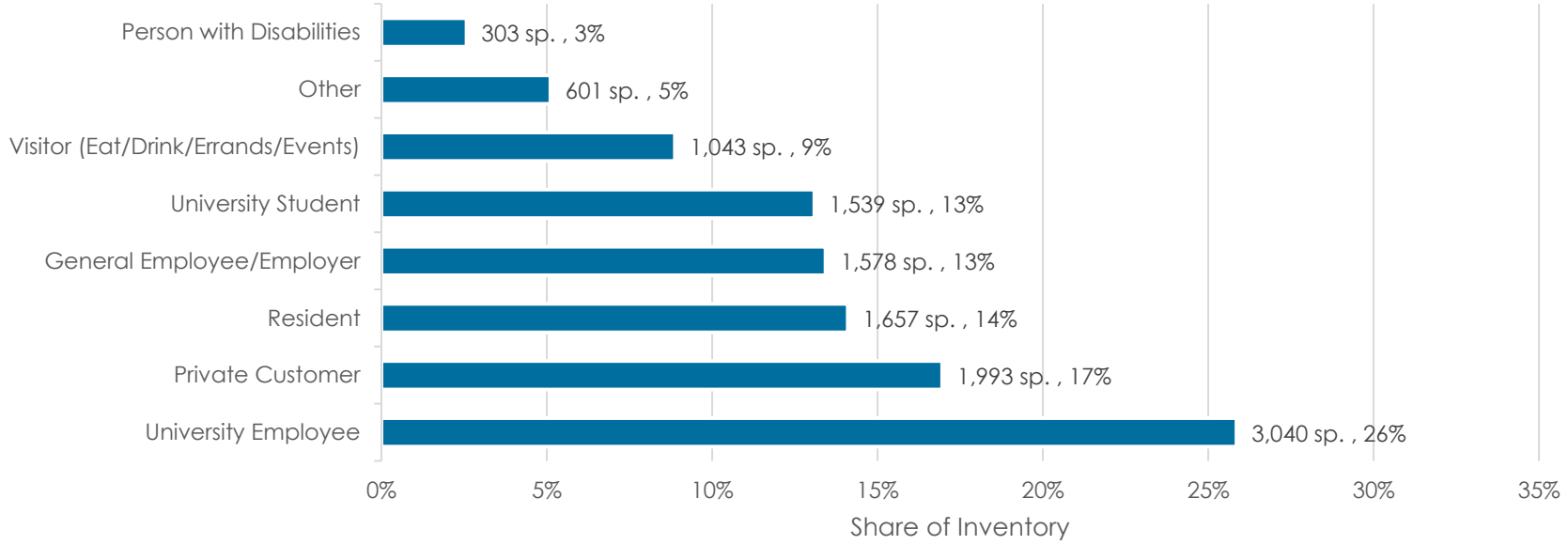
The user profile summarizes the best estimation based upon available data. Phase II of the University District Parking Study will offer further supporting data for assembling the user profiles by enabling an empirical understanding of the utilization of spaces by different users.

USER PROFILES

The profiles developed are defined and summarized below.

- **University employee.** These users park near their place of work, typically in off-street facilities for which they have permits. These users park in the University District very frequently (i.e. five or more times per week).
- **University student.** Students parking in the University District include both commuters and students living on campus. Survey respondents indicated that approximately two-thirds of students park in reserved facilities with permits. The remainder park in on-street spaces and publicly available off-street spaces (at their own expense). These users park in the University District very frequently (i.e. five or more times per week).
- **General employee/employer.** These users park near their place of work very frequently (i.e. five or more times per week). Two-thirds of these users park in facilities reserved for their use, either with a paid permit or at their employer's expense. A quarter of these users park in free on-street spaces.
- **Visitor.** These users come to the University District to eat, drink, run an errand, or meet with a friend or family member approximately 2-3 times per week. One-third of these users park in free on-street spaces, another third park in on-street metered spaces, and the remaining third park in off-street facilities which they pay for.
- **Resident.** These users live in the University District, and typically park in off-street facilities reserved for their use by their residence or in on-street parking available to the public.
- **Private Customer.** These are motorists visiting restaurants or other businesses with off-street parking reserved solely for their customers. These users park approximately twice per week.
- **Person with Disabilities.** ADA spaces are provided for persons with disabilities throughout the study area – the vast majority of these are off-street, and are distributed throughout the district lots and garages.
- **Other.** There are other users not highlighted above which represent a small, but important segment of overall parking activity – this includes loading/delivery zone users, service vehicle drivers (e.g., police, county), electric vehicle drivers, and others.

Figure 4-1 Estimated Inventory Distribution, by User Group



SURVEY CROSS TABULATIONS

The following figures (Figure 4-2, Figure 4-3, and

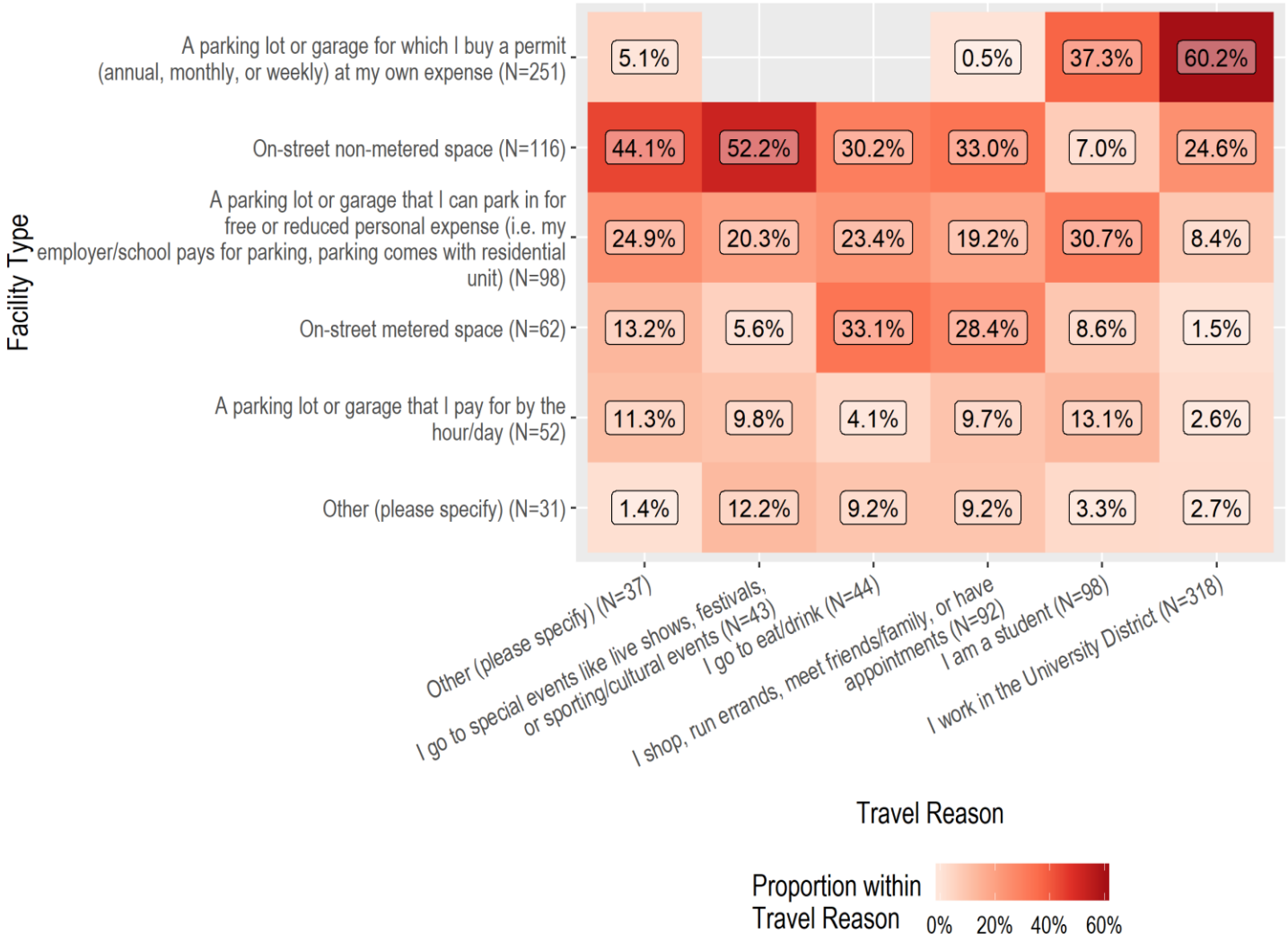
Figure 4-4) cross-tabulate survey respondents' primary travel reason (i.e. user group) with their top three parking issues, parking facility type, and visitor frequency. Key trends include:

- **University and general employees** expressed that there is a shortage of parking available for their use and that off-street parking is too expensive.
- **Students** expressed concern about the perceived shortage of parking available for their use. They also expressed that on-street parking time limits are too short and the rates are too expensive.
- **Visitors** expressed that there is a shortage of parking available for them as well, but also that there is private parking available but the general public often cannot park there.
- **Employers** identified long-term parkers using on-street spaces and enforcement as key issues after availability of parking spaces.

Figure 4-2 Respondent User Group vs. Top Parking Issues

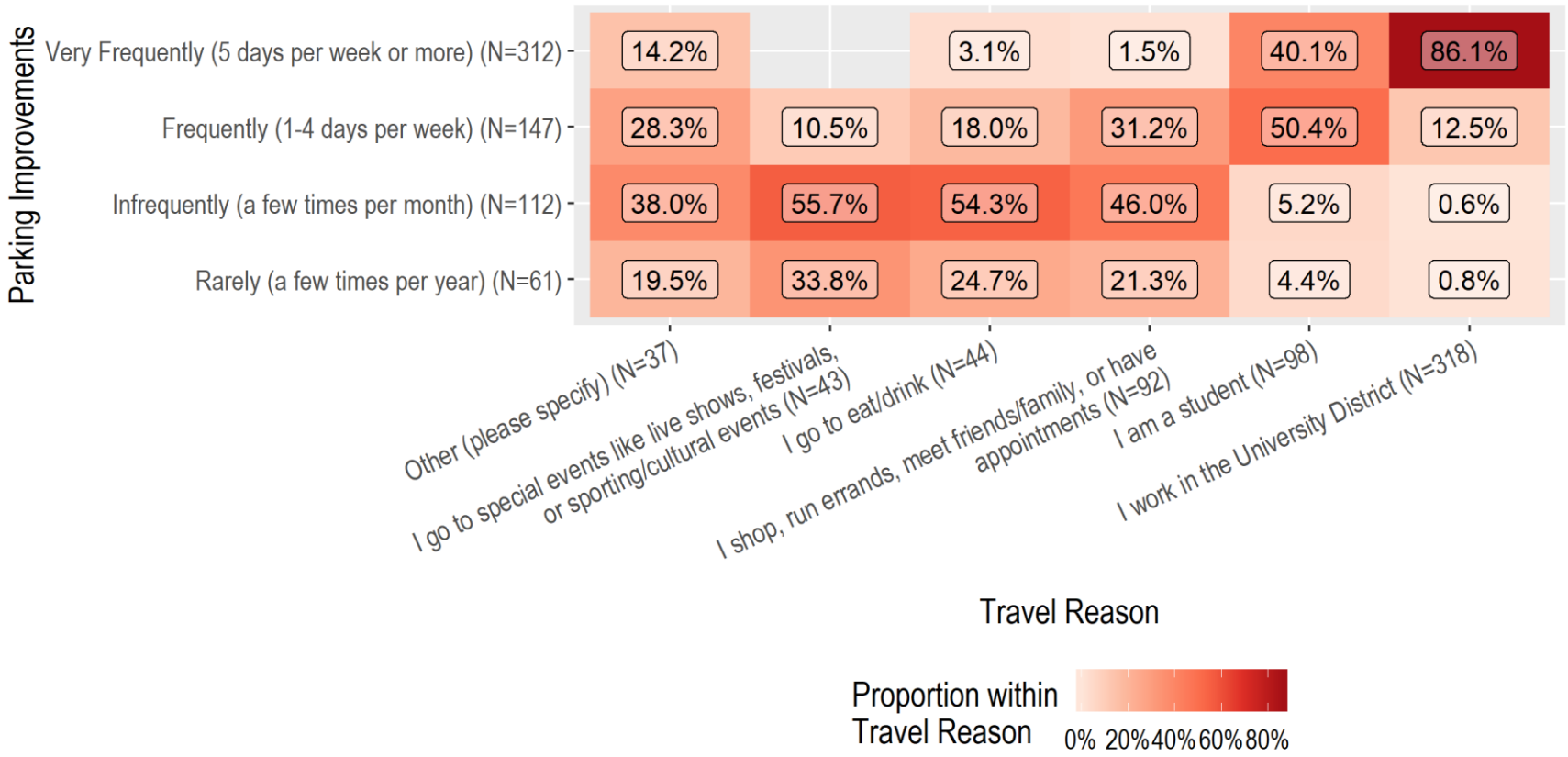
Sections of the matrix with no percentage had zero responses.

Figure 4-3 Respondent User Group vs. Facility Type



Sections of the matrix with no percentage had zero responses.

Figure 4-4 Respondent User Group vs. Visit Frequency



Sections of the matrix with no percentage had zero responses.

STUDENT AND STAFF SUPPLY RATIOS, BY UNIVERSITY

Figure 4-5 presents a summary of available parking spaces, permits, and mode share data by university and user group (student vs. faculty/staff). Permit sales data was only available for two universities – Gonzaga and Whitworth. Only Gonzaga designates parking spaces specifically for students or faculty/staff. Also, the UW's administrative office are in the Spokane Center (multi-purpose space for UW students and faculty) and medical school classroom space is provided on the Gonzaga campus.

Most of the universities in the district provide between 0.3-0.5 off-street spaces per student/staff person (with the exception of the UW Medical School which has very little dedicated parking). This is generally consistent with industry standards, namely the Institute of Transportation Engineers (ITE) Parking Generation, 4th Edition[1].

[1] .22 vehicles per school population ("urban" location) and .33 vehicles per school population ("suburban" location) – ITE Land Use Code 550

Figure 4-5 Estimated Student and Staff Supply Ratios, by University

University	Students			Faculty and Staff			G) Shared Student/Staff/Visitor Spaces	H) Estimated Total Off Street Parking Spaces (H = C+F+G)	I) Total Population of Students and Staff (I = A+D)	J) Spaces per Students + Staff (J = H/I)
	A) Population	B) Permits Sold (2017-2018)	C) Dedicated Spaces	D) Population	E) Permits Sold (2017-2018)	F) Dedicated Spaces				
Community Colleges of Spokane	240	N/A	0	83	N/A	0	162	162	323	0.50
Eastern Washington University	2,213	N/A	0	100	N/A	0	916[A]	1,047	2,313	0.40
Gonzaga University	7,024	1,885[E]	845	1,314	1,193	1,141	924	2,910	8,338	0.35
University of Washington (Medical Program)	137	N/A	0	63	N/A	0	14	14	200	0.07[D]
Washington State University Health Sciences Spokane	1,493	N/A	0	621	N/A	0	837[A]	837	2,114	0.40
Whitworth University	195	200	0	31	35	0	111	111	226	0.49
Total/Average	11,302	2,085	845	2,212	1,228	1,141	2,964	4,950	13,514	0.37

A: Parking is shared between WSU and EWU – the total spaces were divided based on the proportion of estimated campus population (students and staff)

D: Note there is very little parking specifically allocated for UW Medical students and staff – they primarily share parking with the Gonzaga Campus

E: Note that some permits were single term while others were for multiple terms, so there is not a one-to-one relationship between permits and spaces

N/A indicates unavailable data

TOP FIVE TAKEAWAYS

- **Over one-quarter of the parking in the University District is reserved exclusively for university staff**. At most of the universities, there are more available spaces for parking staff (per capita) than for parking students. Depending upon the outcomes of a utilization study, a portion of this parking could be shared with other users at off-peak times to make more efficient use of parking capacity in evenings and on weekends.
- **Over 16% of parking is only available to private customers of businesses**. Much of this parking is on private property, and so coordinating with businesses will be key to maximizing utility of the existing inventory.
- **Free on-street parking in the University District is shared among a number of different users** because most of the other parking is reserved for specific uses. If meters are considered for on-street parking, the resulting increased competition for the few shared off-street spaces must be considered.
- **All University District parkers (staff, students, visitors, and event goers) express that there is a shortage of available parking** in the University District, especially during special events. Occupancy studies for both typical and event conditions must be conducted to determine if this is a user perception, an acute issue in a few locations, or pervasive across the study area.
- **Businesses and employees not associated with a university within the University District** expressed competition for on-street spaces and other public parking spaces has increased in recent years.

Permit and pay-by-plate parking within the University District.

5 ISSUES AND OPPORTUNITIES

The inventory analysis is a key first step in understanding the parking system in the University District. The detailed documentation of parking inventory (number and type of spaces) provides, for the first time, a robust and unified database for the City and district stakeholders. The stakeholder interviews and online survey also provide valuable insight beyond the inventory numbers, highlighting user perceptions and opinions about the state of parking in the district.

More work is needed, however, to develop an action plan for improvement as the district grows and evolves. This chapter synthesizes the key issues and opportunities, as well as considerations for the development and initiation of a Phase 2 parking study for the University District.

KEY ISSUES

- The **University District is growing and evolving,** which has the potential to increase competition for parking. For example, the University District must balance existing resident, university, and long-standing business needs with **emerging commercial corridors,** whose customers have different parking needs. Parking adjacent to the Gonzaga Campus is often volatile due to athletic and other special events, while long-standing businesses in the South University District need to compete with employees and residents for customer and loading space as those areas grow.
- **Management of parking is fragmented,** with the City controlling on-street parking and the various universities and local businesses managing their parking independently of one another. This approach has understandably emerged out of each stakeholder's need to ensure parking access for their users, and that will remain a top priority. However, the lack of a coordinated approach to managing parking throughout the district has the potential to undermine the collective development vision in the long term.
- **Pricing structures are misaligned.** With on-street parking largely free and unregulated and off-street parking heavily regulated and priced, the current approach likely incentivizes many motorists to circle and look for an on-street space. This can become particularly problematic when long-term parkers utilize curb spaces in front of businesses all day, as noted by business owners in the online survey. Additional data collection can confirm the impacts of the pricing structures.
-

- **The user experience can be challenging because information is limited and uncoordinated.** Parking signage, wayfinding, information, and technology systems are not centralized or coordinated in the district. Again, this approach has emerged as each entity manages their parking for their specific user needs, but it exacerbates perceptions, especially for occasional visitors, about the inconvenience of the system.
- Only **one-fifth of parking in the area is available to the general public** at all times, and the vast **majority of these spaces are free and on-street**. The survey indicates user frustration with public access to available private parking, especially for special events and on weekends when the primary users of spaces are not in the district. Additional data collection would confirm utilization levels of facilities at key times.
- Parking is a **dominant land use** in the district, occupying 25% of land in the district. Large surface parking lots impact the overall walkability and connectivity of each campus, as well as the district as a whole. Future development and additions of parking supply should evaluate approaches that minimize surface parking and prioritize multimodal connectivity.
- To date, the University District's parking inventory has also been **fragmented by physical barriers** like the Spokane River and the railway corridor. Recent infrastructure investment will address some of the biggest barriers, but the overall walkability and connectivity within the district must continue to improve to ensure effective use of the parking system and help reduce vehicle trips.
- Today, stakeholders largely view **parking as distinct from a broader approach to mobility, access, and connectivity** to, from, and within the district. Further discussion and exploration of how overall mobility improvements and reductions in parking demand can improve the parking system would benefit long-term outcomes.

With on-street parking largely free and unregulated and off-street parking heavily regulated and priced, the current approach likely incentivizes many motorists to circle and look for an on-street space.

KEY OPPORTUNITIES

- The UDDA and its partners are going to conduct a **Strategic Master Plan (UDSMP) Update and South Sub-area Plan**. This planning process will establish a framework for sustainable economic growth and investment.
- The City of Spokane, with its current on-street management approach and future improvements as part of the Downtown Parking Study, offers a strong template for **improved on-street management** in the district. The district's free and unregulated spaces present a management challenge and there is opportunity to explore a new (or expanded) meter district to better coordinate the on- and off-street supply.
- As the district evolves in the coming years, district partners have the opportunity to explore **new partnerships and shared management approaches.** With additional data collection, it will be possible to identify locations and times when underutilized off-street facilities could be made available to the collective district to accommodate overall parking demand without impacting each facility's primary user.
- Coordinated management could also facilitate a district-wide approach to **signage, wayfinding, parking information, and technology systems,** emphasizing a distinct district "brand" and customer-friendly management approach.
- There is substantial opportunity to address not only parking, but a **district-wide approach to transportation, mobility, and access**. Specific approaches or elements could include:
  - A more comprehensive mobility and demand management study is needed for the University District. It would offer an opportunity for the City, UDDA, and district partners to craft a **cohesive and coordinated mobility vision** that supports not only a new approach to parking, but complements it with comprehensive multimodal strategies.
  - Such a mobility plan would allow the district to further leverage the Central City Line, the new pedestrian bridge, and Sprague Avenue Phase II, catalyzing a transformation in how people travel to, from, and within the district. Paired with new parking management approaches, there is substantial opportunity to **maximize current parking facilities and right-size future parking needs** with continued investment in transit, biking, and walking.
  - **Future parking needs** will likely be a key discussion. Pairing a shared parking analysis of future land use scenarios with utilization data collection will allow the City, UDDA, and stakeholders to accurately examine long-term parking needs in the most cost-effective manner.
  - Stakeholders could also leverage one another to **unify and coordinate district-wide mobility programs** and efforts to reduce parking demand. Formal partnerships in other communities have allowed for transformational investments in transit, biking, walking, and shared mobility services.

PHASE 2 CONSIDERATIONS

- **Utilization and duration study.** It is assumed that Phase 2 will include a study of the utilization of the parking facilities in the University District that were inventoried in Phase 1. This utilization study should include an average weekday, average Saturday, as well as one or more special events where the spillover effects of events on the Gonzaga and/or WSU/EWU campus can be quantified. Depending on the need to specify demand by user group, the utilization study may require a more detailed collection permit and/or vehicle information in key facilities or on-street blocks.

  In addition, a focused duration study on key on-street blocks will enable a better understanding of how prime curb spaces are being used.
- **Additional user surveys.** Due to the project schedule, the first user survey did not receive many responses from students. An additional user survey would aim to collect more feedback from university students and could further identify the specific parking behavior by user group.
- **Public outreach and stakeholder feedback.** Additional discussions with key stakeholders, as well as outreach to the general public and university affiliates, would enable development of community consensus on key issues and needed improvements.
- **Land use analysis.** Drawing upon the land use vision outlined in the University District's forthcoming master plan process, a land-use based parking demand and supply analysis would help in gauging how anticipated changes in land use might affect the University District's parking system.
- **Strategy development.** Following the completion of a full analysis of the qualitative and quantitative information obtained on the University District's parking system, strategies would be developed to meet the needs and opportunities identified herein, as well as resulting from the additional analysis.
- **Best Practices and Peer Review.** Alongside the strategy development, a review of best practices and similar districts would inform the University District's own strategy implementation.
- **Implementation plan.** An implementation plan would prepare a timeline and cost implications for implementing the strategies recommended.
- **Comprehensive mobility/access study.** Either as part of the Phase 2 parking study, or as a separate study entirely, more analysis and outreach needs to be conducted to define a vision for overall transportation and demand management in the University District.

Appendix A Off-street Space Type Glossary

Space Type	Description
ADA	▪ Spaces designated for persons with disabilities
Commercial Loading Zone	▪ Designated commercial loading zones
Passenger Loading Zone	▪ Designated passenger loading zones
Customer/Client Parking	▪ Spaces reserved for the customers of businesses
Hotel Parking	▪ Spaces reserved for hotel customers and employees
Valet	▪ Designated valet spaces
Church Parking	▪ Designated parking spaces for churches
Employee Parking	▪ Spaces designated specifically for employees
Medical Patient/Employee Parking	▪ Spaces designated for medical employees and patients. These were distinguished from other customer and employee spaces because of the high frequency of these types of spaces.
Carpool/Vanpool Parking	▪ Designated carpool spaces
Electric Vehicle	▪ Designated electric vehicle spaces
Motorcycle	▪ Designated motorcycle spaces
Zipcar Parking	▪ Designated Zipcar spaces
Private Lot	▪ Other spaces reserved as private
Car Dealership	▪ Spaces designated for car dealerships
Public Paid	▪ Spaces not designated for specific uses and available to the general public
Other Reserved	▪ Other parking designated as reserved

Space Type	Description
Resident Parking	▪ Spaces designated specifically for residents
Service Vehicle	▪ Spaces designated for service vehicles including police vehicles, fire trucks, etc.
Shared Student/Staff Parking	▪ Spaces designated for both students and staff
University Shared Visitor/Student/Employee Parking	▪ Spaces designated for sharing between visitors, students, and employees
University Visitor Parking	▪ Spaces designated for university visitors
Student Parking	▪ Spaces designated for students
Staff Parking	▪ Spaces designated for staff members