



RESEARCH PARK STRATEGIC VISION PLAN

EXISTING PARKING CONDITIONS [DRAFT]

July 2020



1 EXISTING PARKING CONDITIONS

To assess parking supply and demand at the University of Utah's Research Park, parking supply and utilization data was collected by surveyors over three weekdays—February 25-27, 2020—at 8 a.m., 10 a.m., 12 p.m., and 2 p.m. These dates and times were reviewed and confirmed by the University of Utah as representative of a typical day during a non-holiday week of the academic year. These counts were held prior to the confirmation of positive COVID-19 tests in Utah and the declaration of a state of emergency.

SUMMARY OF KEY FINDINGS

- There are over **10,300 parking spaces** in Research Park. More than **98% of spaces are in off-street lots and garages**, while on-street parking is provided on only two streets in Research Park.
- The existing CC&Rs require a minimum of **five spaces per 1,000 square feet (KSF)**, higher than local and national parking generation guidelines. The existing parking supply ratio for the **overall district is approximately 2.4 per KSF**.
- Peak utilization was observed at 10 a.m. on Wednesday, when **utilization across Research Park was approximately 69%**. The peak demand ratio for Research Park is estimated at **1.65 per KSF**.
- Despite parking availability across the whole of Research Park, there are **several hotspots of demand**, and, depending on one's destination, parking can be hard to find. High demand facilities are primarily located in the central areas of Research Park. While there are facilities which have consistently "available" parking, they are restricted to specific users and not accessible to the public or other Research Park tenants.
- **Topography, weather, and street design** also impact parking utilization and behavior, and limit the district parking "shed."
- **Over 93% of spaces are reserved** for a specific user, such as employees or guests/visitors for that specific building.
- For most parking facilities, **parking cost is bundled into leasing or rental agreements and is thus "free"** to employees, residents, and guests/visitors (a few facilities require University "U" or "A" permits).
- The regulatory guidelines for Research Park are **silent on provisions which could allow flexibility or incentives to reduce parking demand**, such as allowances for shared/off-site parking, or requirements for transportation demand management (TDM) plans and trip reduction programs.

PARKING SUPPLY

The Research Park campus has more than 10,300 parking spaces¹. Of the 10,341 inventoried spaces in Research Park, over 98% are in off-street lots and garages (Figure 1). Research Park’s 160 on-street parking spaces are located along Colorow Road and Blackhawk Way.

The size of the off-street facilities varies from small lots with less than 10 spaces to large lots and garages with more than several hundred spaces. The largest facility is the Williams Building garage with 698 spaces (Figure 2).

Based on the current building square footage in the Research Park and the inventoried parking supply, the existing parking supply ratio for the overall district is estimated at 2.4 per KSF.

Figure 1 Parking Supply, by Facility Type

Facility Type	Count	# of Spaces	Share of Spaces	Square Feet of Development²	District Supply Ratio (per KSF)
Off-Street	82	10,157	98.2%		
On-Street	7	160	1.5%		
Loading Dock	6	24	0.2%		
Total	95	10,341	100%	4,306,202	2.4

¹ A limited number of parking facilities were not counted, as they are designated to specific institutions, such as the US Post Office and Fire Station 10, or were being replaced with new building construction at the time of data collection.

² Source: Perkins&Will. Based on 3,809,202 SF of office/lab, 175,000 SF of hotel, and 322,000 SF of residential (322 units at assumed average of 1,000 SF per unit).

Parking Requirements

The Research Park’s existing Covenants, Conditions, and Restrictions (CC&Rs) require “one parking space for every 200 square feet of gross building area,” or five spaces per KSF. This requirement applies to all Research Park buildings and is not differentiated by land use.

The minimum parking requirements were established in the 1970s and are high relative to both industry guidelines published in the Institute of Transportation Engineers (ITE) *Parking Generation Manual, 5th Edition* and the minimum and maximum parking requirements in Chapter 21A.44 of the Salt Lake City Municipal Code (Figure 3)³.

As shown in Figure 7, observed parking demand in Research Park is well below the 5 per KSF ratio. Further application of the current requirement of 5 spaces per KSF would require an excessive amount of parking than actual demand would indicate. This is discussed in greater detail in the shared parking analysis.

In addition, the CC&Rs are silent on provisions which could allow flexibility or incentives to reduce the parking ratio, such as allowances for shared/off-site parking, or requirements for transportation demand management (TDM) plans and trip reduction programs.

Figure 3 Comparison of Parking Requirements

Source	Office (per KSF)	Equivalent Required Parking Supply ⁴	Difference from Existing Parking Supply ⁵	Difference from Existing Peak Demand ⁶
Research Park CC&Rs	5.0	19,046	8,705	11,944
Proposed SLC Minimum Requirement – “General” Context	3.0	11,428	1,087	4,326
ITE Rates for “General Office Building”	2.39	9,104	-1,237	2,002
Proposed SLC Maximum Requirement – “Transit Center” Context	2.0	7,618	-2,723	516

³ www.slc.gov/planning/wp-content/uploads/sites/13/2020/01/Parking-Chapter-Final-Draft.pdf

⁴ Based on existing office square footage in Research Park (3,809,202 SF).

⁵ 10,341 spaces in total (including spaces for hotel, residential, on-street).

⁶ 7,102 occupied spaces observed at peak across all of Research Park.

PARKING MANAGEMENT

Parking management in Research Park occurs at the individual parcel or building level, as property managers manage tenant parking via their leasing agreements. Most parking spaces, over 93%, are reserved for a specific user, such as employees or guests/visitors for that specific building (Figure 4).

For most parking facilities, parking cost is bundled into leasing or rental agreements, thereby making it “free” to employees, residents, and guests/visitors of tenants. The only exception are spaces serving the University Health Professions building which require “U” or “A” permits. These permits are priced at \$280 per year, \$150 per semester, or \$15 per day for University staff, students, and faculty⁷.

Among the facilities and/or spaces marked for guests/visitors, it can be confusing to the motorist if a space is “publicly” available. Some facilities designate spaces for on-site visitors only, while others employ time restrictions (e.g. 1- or 4-hour limits) or post no specific regulatory signage other than “Visitors.” A small share of spaces is also reserved for specific users (ADA, carpoolers, or fleet/construction) or vehicle types (rideshare, car share, or EVs).

Given the current management framework, each facility and/or tenant utilizes its own directional and regulatory signage for parking (Figure 5). Signage types, placement, and information also varies by facility, which further creates confusion about what parking is publicly available and at what times.

Figure 4 Parking Supply, by Regulation

Regulation	# of Spaces	Share of Spaces
Reserved (Employees/Permit/Mix/Other)	7,817	75.6%
Reserved (Guest/Visitor)	1,856	17.9%
ADA	297	2.9%
On-Street + Unmarked	197	1.9%
Fleet/Loading/Construction	100	1.0%
Carpool/Vanpool/Car Share/EV	74	0.7%
Total	10,341	100%

⁷ https://commuterservices.utah.edu/permits/?fwp_permit_type_ddown=8

RESEARCH PARK STRATEGIC VISION PLAN | EXISTING PARKING CONDITIONS (DRAFT)
University of Utah

Figure 5 Examples of Regulatory Signage

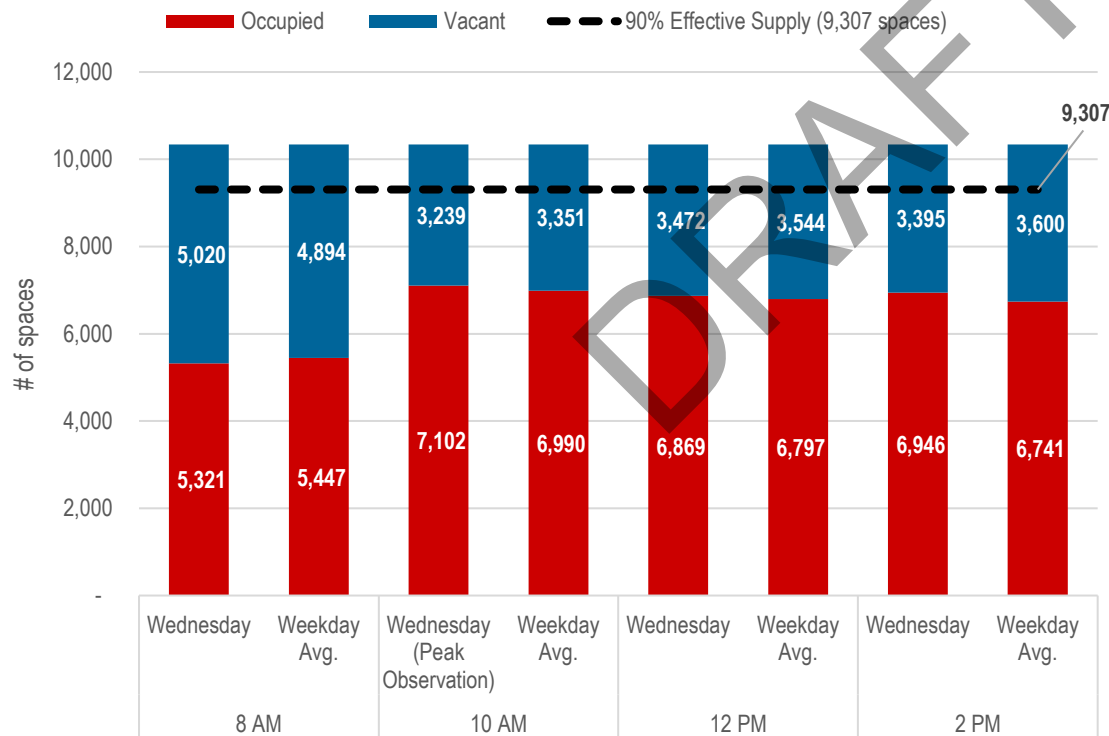


PARKING UTILIZATION

During the February 2020 data collection, the peak observation period occurred at 10 a.m. on Wednesday, as shown in Figure 6. The observed peak utilization at that time across Research Park was approximately 69%. There was minimal fluctuation in utilization across the count days as the weekday average is similar to Wednesday’s data.

Parking utilization is often measured not against *all* parking spaces, but instead relative to “effective” supply. Effective supply for off-street parking is typically 90-95%, providing a 5-10% buffer in the parking system to ensure it can accommodate higher demand on any given day to a special event or unforeseen circumstances. Based on 10,341 spaces, Research Park’s 90% effective supply is 9,307 spaces. At Wednesday at 10 a.m., there is a 2,205-space difference between peak utilization and effective supply.

Figure 6 District Parking Occupancy, by Time of Day



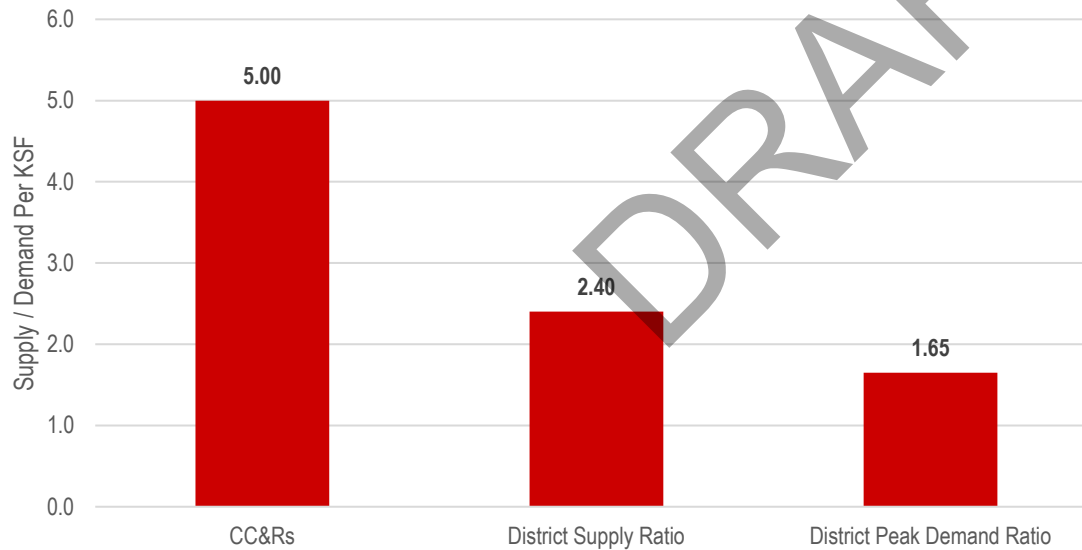
RESEARCH PARK STRATEGIC VISION PLAN | EXISTING PARKING CONDITIONS (DRAFT)
University of Utah

Despite parking availability across the whole of Research Park, there are several hotspots of demand (90%+ utilized facilities), and, depending on one’s ultimate destination, parking can be hard to find. High demand facilities are primarily located in the central areas of Research Park accessible by Chipeta Way and Colorow Road, as seen Figure 8 through Figure 11⁸. Furthermore, while there are facilities which have consistently “available” parking, they are restricted to specific users and not accessible to the public or other Research Park tenants.

Topography, weather, and street design also impact parking utilization and behavior. For example, underutilized parking facilities in the southwest and northwest ends of Research Park are clustered around some of the steepest uphill (Red Butte Garden, Huntsman Foundation) and downhill (Orthopaedic Center, East Village) locations of Research Park. Most streets in the district are auto-oriented, with fast moving vehicles, long crossing distances, and limited pedestrian or bicycle amenities. The streets are not comfortable to walk on, especially in the winter, making the parking “shed” smaller and it difficult to leverage underutilized spaces for the district as a whole.

Figure 7 shows the 1.65 per KSF peak demand ratio for Research Park relative to the CC&Rs and the district parking supply ratio. In general, parking has been supplied at a lower rate than the CC&Rs and peak demand is even lower.

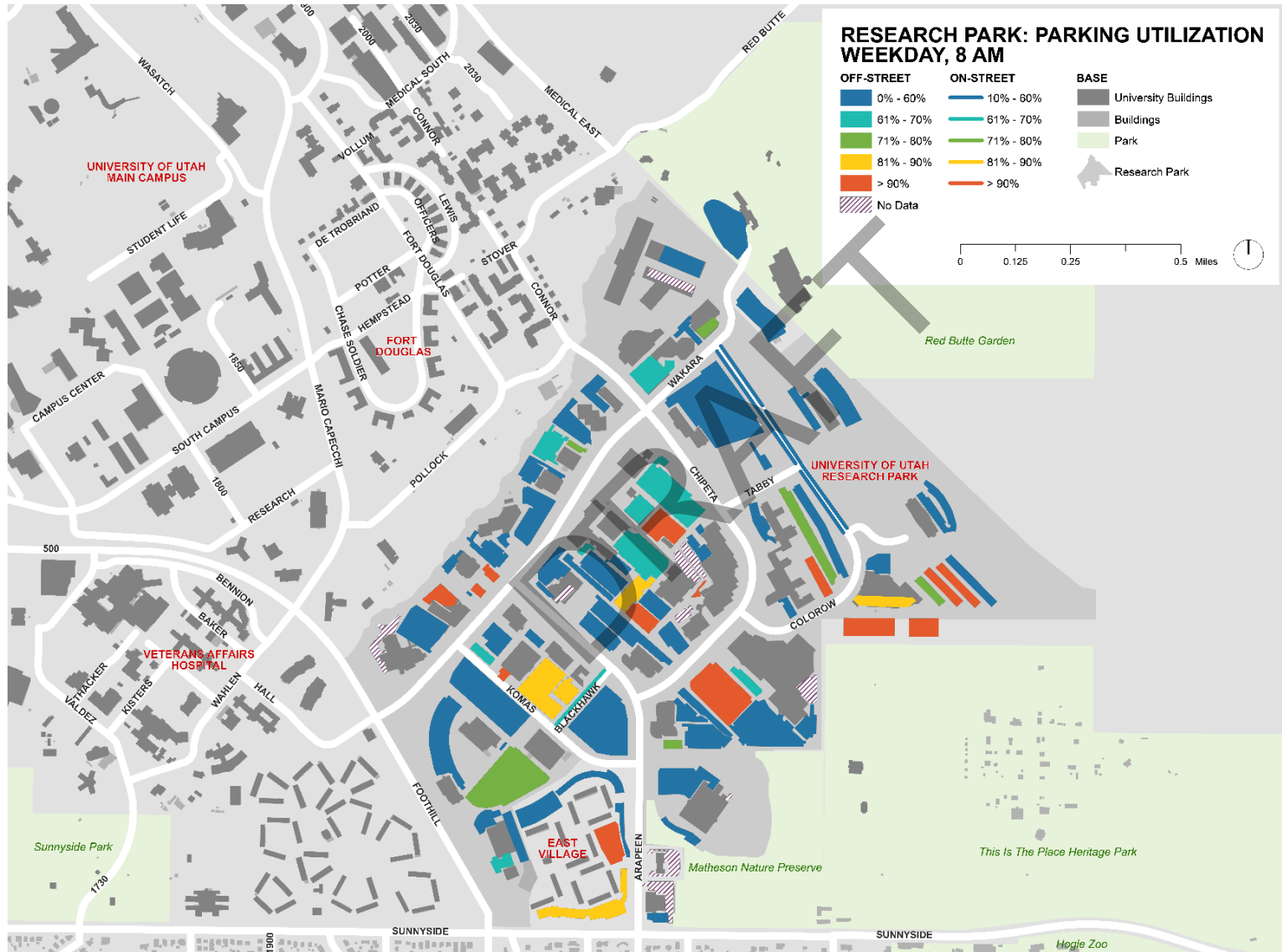
Figure 7 Parking Requirements vs. District Supply and Demand Ratios



⁸ Wednesday, February 26, 2020 is mapped because it has the peak observation period for all three days and it represents the most typical weekday of the three dates observed – utilization levels most closely aligned with the averages per observation time across all three dates.

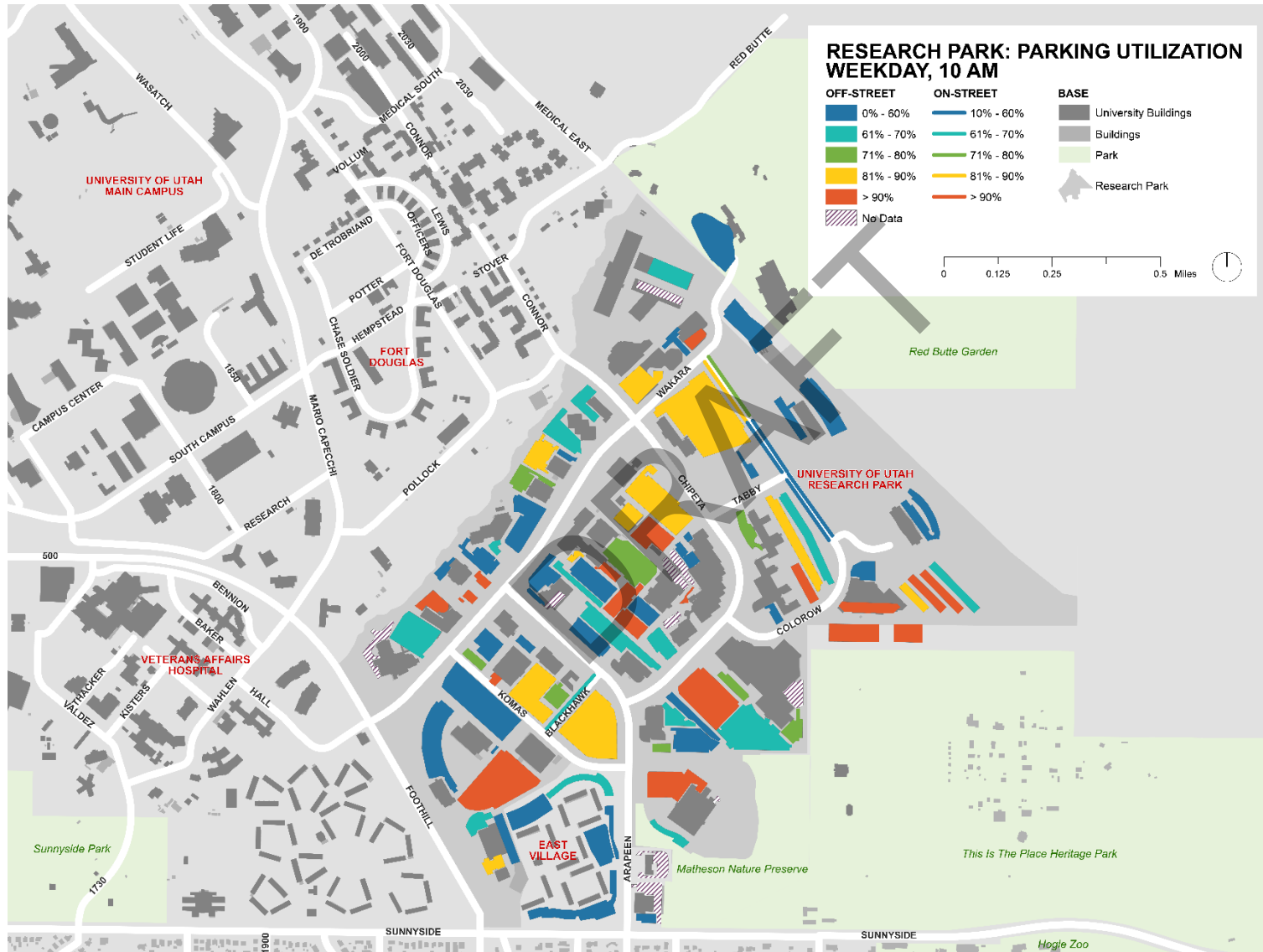
RESEARCH PARK STRATEGIC VISION PLAN | EXISTING PARKING CONDITIONS (DRAFT)
University of Utah

Figure 8 Parking Utilization – Wednesday, 8 a.m.



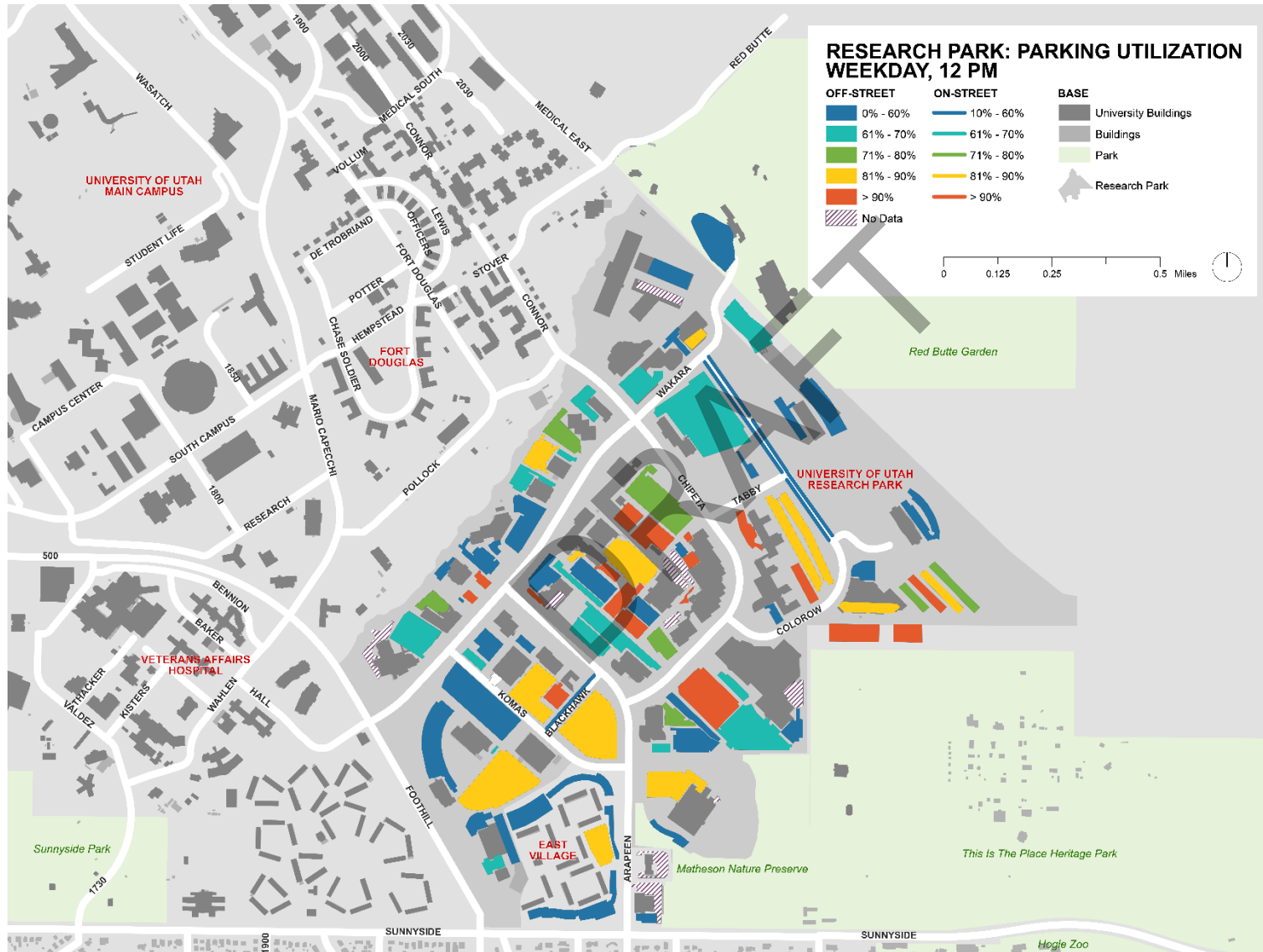
RESEARCH PARK STRATEGIC VISION PLAN | EXISTING PARKING CONDITIONS (DRAFT)
University of Utah

Figure 9 Parking Utilization – Wednesday, 10 a.m.



RESEARCH PARK STRATEGIC VISION PLAN | EXISTING PARKING CONDITIONS (DRAFT)
University of Utah

Figure 10 Parking Utilization – Wednesday, 12 p.m.



RESEARCH PARK STRATEGIC VISION PLAN | EXISTING PARKING CONDITIONS (DRAFT)
University of Utah

Figure 11 Parking Utilization – Wednesday, 2 p.m.

