THE UNIVERSITY OF UTAH

TRANSPORTATION AND PARKING INFRASTRUCTURE STUDY

Contract Number: FMA-0002107
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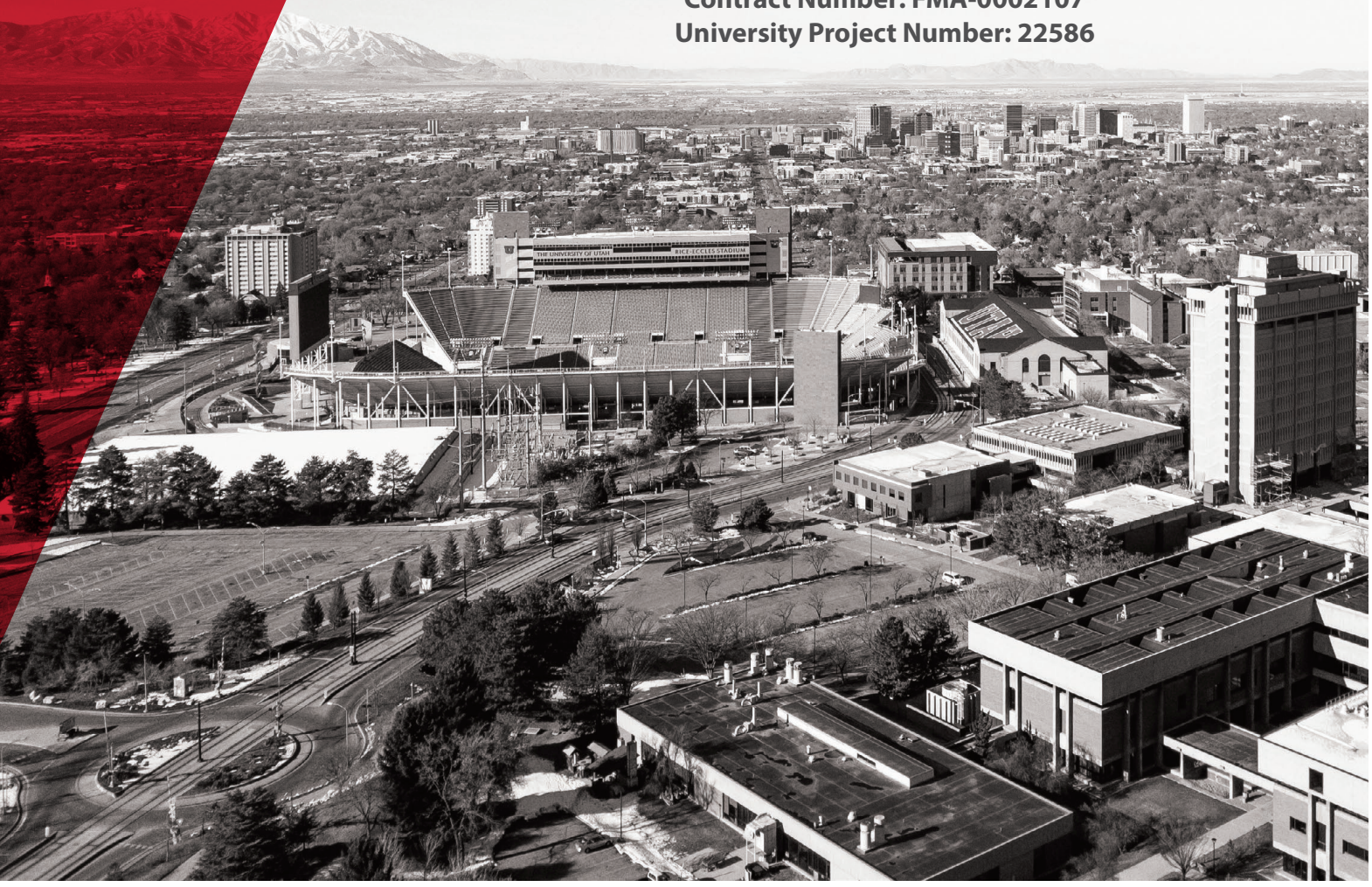

10-Year Strategic Plan

VERSION 1.3
FEBRUARY 13, 2023

TRANSPORTATION AND PARKING INFRASTRUCTURE STUDY

10-Year Strategic Plan

Prepared for:

THE UNIVERSITY OF UTAH

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WOOD SOLUTIONS GROUP | ALTA | ELLIOT WORKGROUP

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LIST OF ACRONYMS

PbP	Pay by phone
SOV	Single Occupancy Vehicle
TDM	Transportation Demand Management
UDOT	Utah Department of Transportation
UTA	Utah Transit Authority

EXECUTIVE SUMMARY

Vision

Create a vibrant campus community as we enhance mobility and connectivity to, from, and within our campus.

Goals

Balanced

Reliable and resilient, recognizing that active transportation, transit, and vehicles are each accomodated.

Efficient

Optimized through data-driven decisions that accommodate future growth.

Sustainable

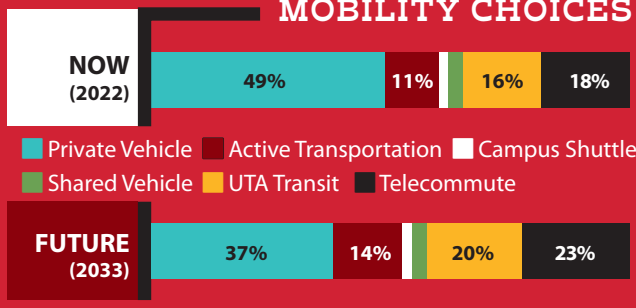
Actively embrace a transition to environmental and financial sustainability, reduce vehicle-miles traveled, and support carbon neutrality by 2040.

Convenient

Fast, clean, and safe; easy to transfer from one mode to another.

Where Are We Now? Where Are We Going?

MOBILITY CHOICES



CARBON NEUTRALITY

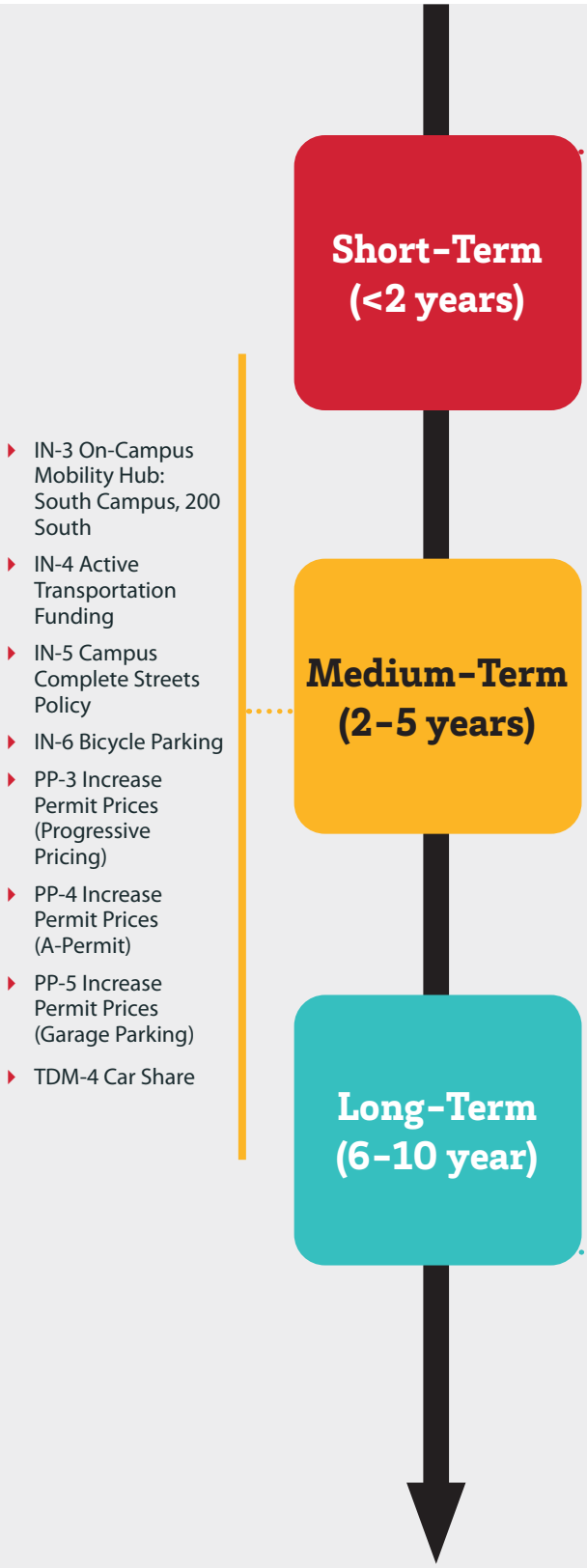
Progress Towards Carbon Neutrality	CO2 Emissions, kg/day*
2022 Existing	263,249
2033 Baseline / No Action	318,868
2033 with Modal Shift Goals	276,774

STATISTICS

	NOW (2022)		FUTURE (2033)	
Campus Population				
Students	34,500		45,000	
Main Campus Employees	13,364		16,597	
Health Sciences Employees	17,456		21,680	
Research Park	14,000		14,700	
Vehicle Parking Stalls / Stalls per Person Ratio				
Main Campus**	12,092	0.25	13,792	0.22
Health Sciences	7,934	0.45	7,934	0.36
Research Park	9,125	0.65	9,125	0.62
Bicycle Parking Spaces	3,694		6,000	
Travel Mode to Campus				
% Single-Occupant Vehicles	49%		37%	
% Active Modes	11%		14%	
% Transit Users	16%		20%	
% Telecommute	18%		23%	

*As compared to 2021 Annual Campus Travel Survey
**Also includes Fort Douglas, West Village, East Village, Red Butte Gardens, Natural History Museum, and Guardsman Lot

STRATEGIES TO ACHIEVE the Goals and Vision



Short-Term (<2 years)

- DDM-1 Integrated Mobility Management Platform
- DDM-2 Evaluation and Performance Monitoring
- DDM-3 Leverage Existing Parking Data to Understand Demand
- DDM-4 Multi-Modal Data Collection
- IN-1 Strategic New Parking Infrastructure
- IN-2 On-Campus Mobility Hub: Health Sciences
- OA-1 Establish TDM Implementation Committee
- OA-2 Centralized Bicycle Parking Operation and Management
- OA-3 Remote Work/ Learning
- PA-1 Reduce Permit Flexibility
- PA-2 Expand Permit Parking Area
- PA-3 Establish Permit Limits (Freshman Parking)
- PA-4 Establish Permit Limits (Student Parking)
- PP-1 Increase Permit Prices (U-Permit)
- PP-2 Demand-Driven Pricing (Visitor Parking)
- TDM-1 UTA Integration
- TDM-2 TDM Messaging, Outreach, and Communications
- TDM-3 Staff Onboarding and Student Orientation

Medium-Term (2-5 years)

- IN-3 On-Campus Mobility Hub: South Campus, 200 South
- IN-4 Active Transportation Funding
- IN-5 Campus Complete Streets Policy
- IN-6 Bicycle Parking
- PP-3 Increase Permit Prices (Progressive Pricing)
- PP-4 Increase Permit Prices (A-Permit)
- PP-5 Increase Permit Prices (Garage Parking)
- TDM-4 Car Share

Long-Term (6-10 year)

- PA-5 Tiered Permits
- PP-6 Demand-Driven Pricing (Location Based)

In years 6-10, strategies implemented in short-term and mid-term should be monitored, evaluated, and modified to achieve desired performance objectives.

Strategy Categories

- **Data Driven Management (DDM)**
- **Infrastructure (IN)**
- **Organizational/Administrative (OA)**
- **Permit Allocation (PA)**
- **Permit Pricing (PP)**
- **Travel Demand Management (TDM)**

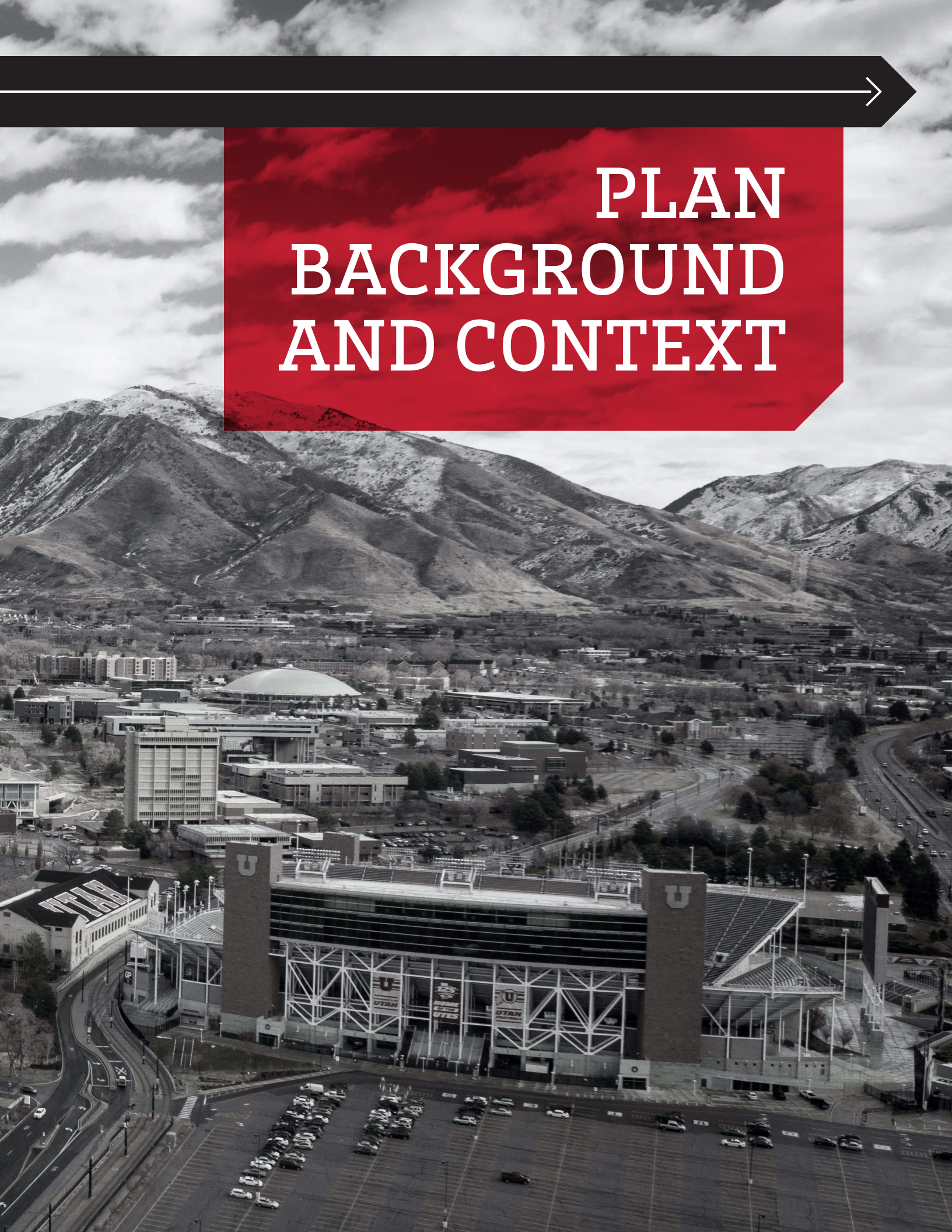
Recommended Investment Scenario

Three improvement scenarios were evaluated: Supply-based Solutions, TDM-Only Investments, and the recommended Hybrid Solutions.

The Hybrid Solutions scenario represents a balanced approach to addressing campus parking demand through a combination of TDM, enhanced active transportation use, parking policies, and new supply.

Recommendations include:

- TDM Investments to reduce the percentage of campus population that travels by single-occupant vehicle to, from, and around campus by 12% (from today's 49%).
- New South Campus Parking Garage (1,000 to 1,500 spaces)
- New parking spaces near Shoreline Ridge (50 spaces)
- New parking spaces adjacent to new south campus residential facility (150 spaces)
- Reallocate spaces at Guardsman lot from Student Commuter to Student Residents (~100 stalls)



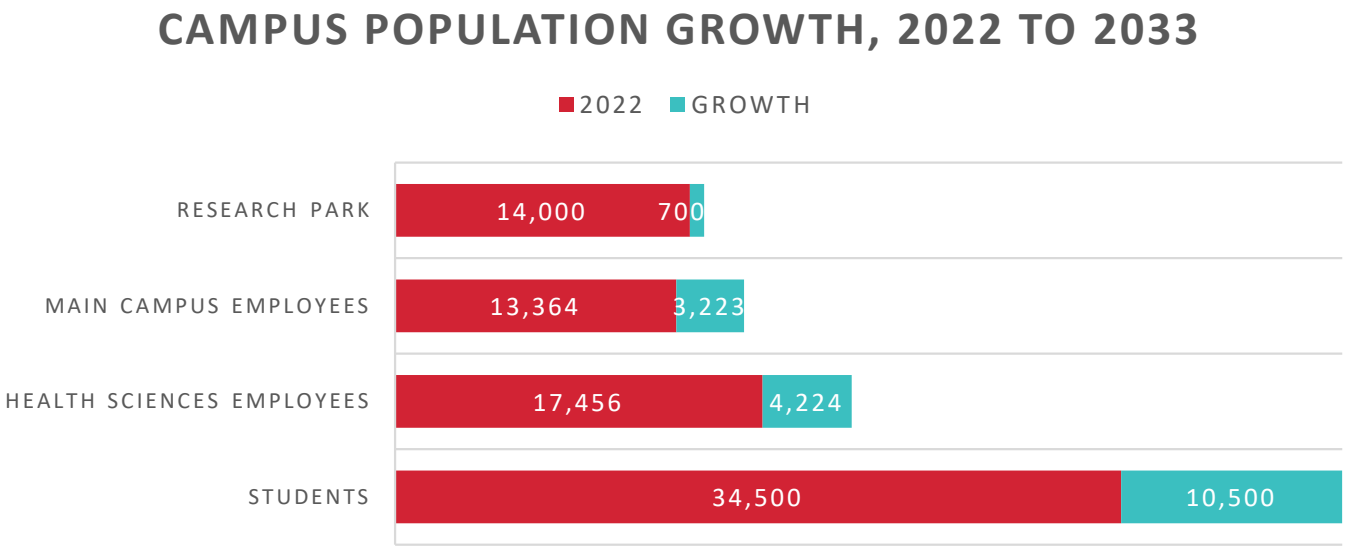
PLAN BACKGROUND AND CONTEXT

PLAN BACKGROUND AND CONTEXT

The University of Utah is preparing to undergo significant changes due to growth in enrollment and staffing; changes to the way students, faculty, and staff access campus; and major building capital changes on campus.

The University of Utah Strategy 2025 increases enrollment to 40,000 by 2025. By 2033, the campus population is anticipated to approach 100,000 people, as illustrated in **Figure 1**.

Figure 1. Campus Population, 2022 to 2033



Note: Employee growth projections derived from University Office of Budget & Institutional Analysis (OBIA) historical data. Student growth projections derived from University of Utah Strategy 2025.

Several new campus buildings will be constructed to accommodate the growth, and many of these will replace existing surface parking lots. The University of Utah recognizes that it cannot construct new parking to keep pace with new development. Utah Transit Authority (UTA) TRAX light rail, UTA fixed route bus, campus shuttle, SPIN scooters, walking, and bicycling are each foundational to providing convenient and efficient options to meet student mobility needs.

PLAN PURPOSE

University of Utah Planning, Design and Construction, in collaboration with Commuter Services and Health Sciences, prepared this University of Utah Transportation and Parking 10-Year Strategic Plan (Strategic Plan) to address needs of the changing campus environment.

The Strategic Plan begins with a review of the University of Utah's parking and transportation infrastructure and services. The plan identifies opportunities to leverage existing resources, changing mobility behaviors, and emerging technologies to provide high-quality and innovative mobility options for the growing number of students, faculty, staff, and visitors to campus.

The University of Utah prepares periodic updates to its Campus Master Plan. The 2008 Master Plan is anticipated to be updated by 2025. The Strategic Plan identifies parking and transportation needs and opportunities in alignment with the current University of Utah capital plan in advance of this campus-wide master planning effort.

The Strategic Plan aligns transportation and parking infrastructure decisions with the Climate Change Action Plan, planned campus development, student recruitment, and campus vitality. The Strategic Plan is:

- A data-driven analysis of multimodal transportation and parking needs.
- A proactive effort to enable Commuter Services to continue serving students, faculty, staff, and visitors by providing mobility options.
- A strategy to align transportation decisions with anticipated University community growth.
- An action plan of recommended improvements and strategies to enhance campus mobility options and promote sustainable decisions.

STRATEGIC PLAN OUTLINE

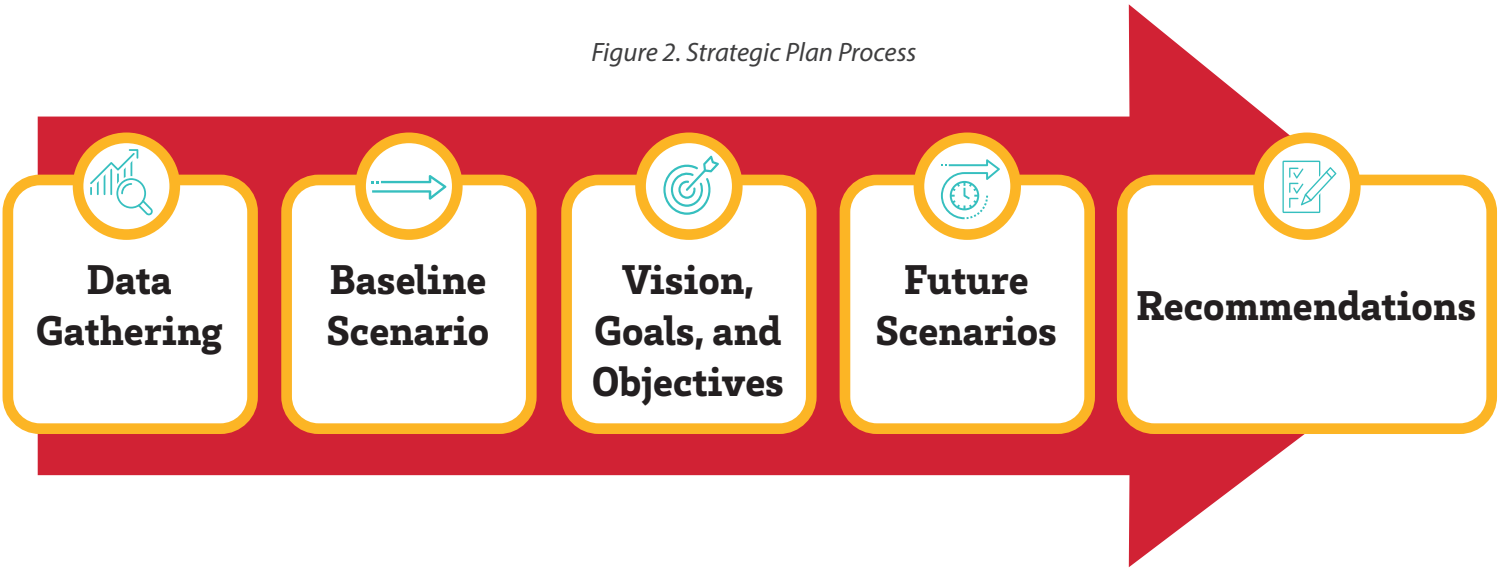
The Strategic Plan is organized into the following sections:

- Plan Background and Context
- Vision, Goals, and Objectives
- Data Gathering
- Defining the Future
- Recommendations

PLAN PROCESS

The Strategic Plan was prepared following the steps as illustrated in **Figure 2**.

Figure 2. Strategic Plan Process



PROJECT MANAGEMENT TEAM

Preparation of the Strategic Plan was directed by the Project Management Team (PMT), a diverse group of individuals with representatives from Planning, Design and Construction; University Health, Auxiliary Services, Commuter Services, and Student Affairs. The PMT met bi-weekly throughout the plan development to discuss study findings, future scenario analysis, and action plan strategies.

TECHNICAL ADVISORY COMMITTEE

Preparation of the Strategic Plan was also informed by a Technical Advisory Committee (TAC), which consisted of the PMT in addition to representatives from Sustainability Office and Research Park. The TAC met at key project milestones to provide input on study findings, future scenario analysis, and action plan strategies.

CAMPUS OVERVIEW

The University of Utah is the oldest university in the state, established in 1850 shortly after settlement of the Salt Lake Valley. The campus, located on the east bench, close to the Wasatch Range, is approximately two miles east of downtown Salt Lake City, Utah. The campus (**Figure 3**) encompasses 1,534 acres including Main Campus, Health Sciences complex, and Research Park.

Most student instruction takes place on the west side of campus, known as main campus. Main campus is home to the Marriot Library, Law School, and the University Student Union. Main campus is also home to large sporting and event venues including Rice-Eccles Stadium, Huntsman Center, Utah Museum of Fine Arts, and performing arts venues including Kingsbury Hall and Pioneer Memorial Theatre. For the purposes of this Strategic Plan, Main Campus also includes the university residence halls and apartments located southeast of Health Sciences in Fort Douglas, as well as West Village and East Village graduate student housing located along Sunnyside Avenue.

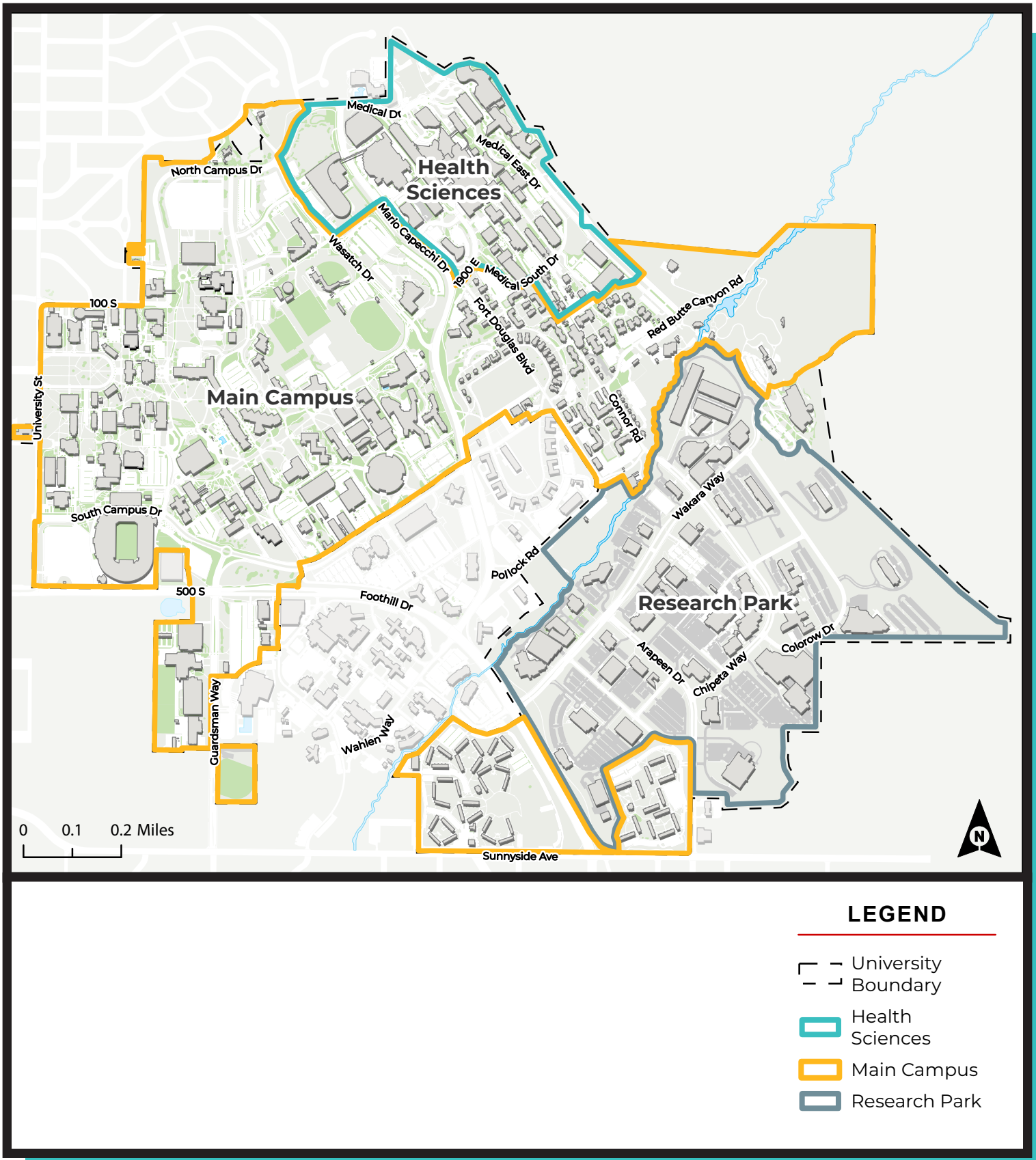
Health Sciences is located at the northeast end of campus. The complex includes the University of Utah Medical Center, School of Medicine, Primary Children's Medical Center, Huntsman Cancer Institute, and Moran Eye Center.

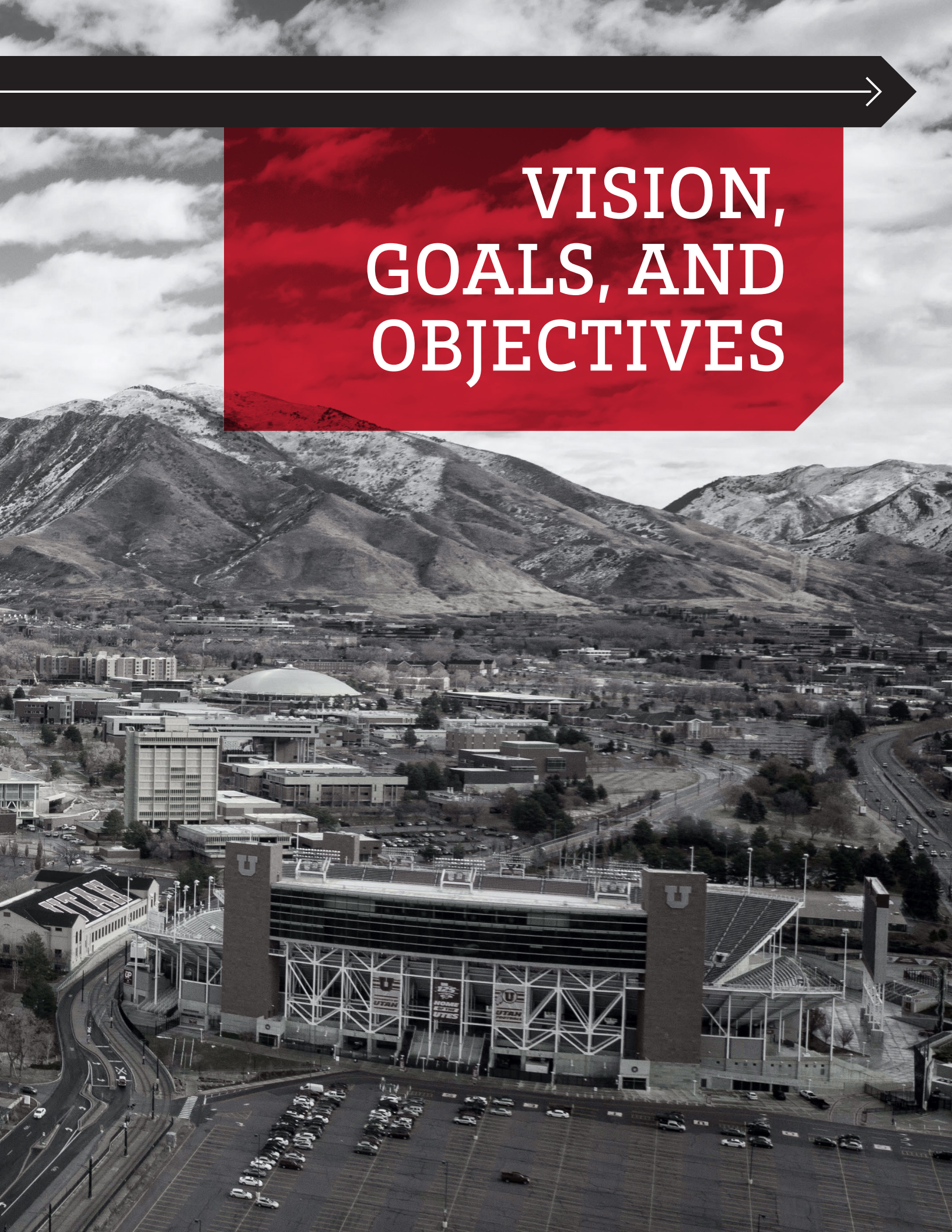
Research Park is located at the southeast end of campus and currently has 48 companies along with 81 university departments with a workforce of more than 14,000.

The University of Utah is accessible by vehicle, transit, bicycling, and walking. Major arterials such as 500 S and Foothill Drive run to the south and west of campus. UTA provides bus and light rail service. Campus shuttle, pedestrian walkways, and SPIN e-scooters and e-bikes provide mobility options within campus.

There are currently 3,694 bicycle and 27,772 vehicle parking spaces on campus for student, staff, employees, and visitors.

Figure 3. Plan Area




VISION,
GOALS, AND
OBJECTIVES

VISION, GOALS, AND OBJECTIVES

The Strategic Plan vision, goals, and objectives were established in collaboration with the PMT and TAC as presented in **Figure 4**.

To achieve the University of Utah carbon neutrality goals by 2040, the campus population will need to reduce reliance on single occupancy vehicles (SOVs) and increase utilization of other modes including carpooling, UTA TRAX light rail and fixed-route bus service, campus shuttle, and micromoblity (SPIN scooters, bike share). The Strategic Plan balances the needs of all modes of transportation. Strategic Plan objectives, illustrated in **Table 1**, will measure progress toward the Strategic Plan goals. The Strategic Plan proposes to increase the percentage of students and faculty commuting to campus by transit, walking, bicycling, or bus by 12% by 2033. While the student and faculty population will grow, the number of parking spaces per person on main campus will decrease. Bicycle parking is proposed to increase by more than 1,600 spaces with an emphasis on secure storage.

Figure 4. Vision and Goals

Vision

Create a vibrant campus community as we enhance mobility and connectivity to, from, and within our campus.

Goals

Balanced

Reliable and resilient, recognizing that active transportation, transit, and vehicles are each accommodated.

Efficient

Optimized through data-driven decisions that accommodate future growth.

Sustainable

Actively embrace a transition to environmental and financial sustainability, reduce vehicle-miles traveled, and support carbon neutrality by 2040.

Convenient

Fast, clean, and safe; easy to transfer from one mode to another.

CARBON NEUTRALITY

Progress Towards Carbon Neutrality	
	CO2 Emissions, kg/day*
2022 Existing	263,249
2033 Baseline / No Action	318,868
2033 with Modal Shift Goals	276,774

See Appendix C for calculations.

Table 1. Transportation and Parking 10-Year Strategic Plan Objectives

MULTIMODAL NETWORKS

Reduce number of trips to, from, and within campus made by single SOV*:

	2022	2033
	SOV Mode Share (%)	SOV Mode Share (%)
Student Commuters	36%	25%
Student Residents	36%	18%
Faculty/Staff	59%	47%
Heath Sciences	86%	77%
Research Park	90%	81%

Increase number of trips to, from, and within campus made by sustainable transposition options:

	2022	2033
	Non-SOV Mode Share (%)	Non-SOV Mode Share (%)
Total Non-SOV Mode Split	51%	63%
Transit	16%	20%
Active Transportation	11%	14%
Telecommute	18%	23%
Other	6%	6%

Increase availability and utilization of secure bicycle parking and storage.

	2022		2033	
	Spaces	Ratio	Spaces	Ratio
Exterior Bicycle Parking	2,502	0.032	3,500	0.036
Interior Bicycle Parking	1,192	0.015	2,500	0.026
Total Bicycle Parking	3,694	0.047	6,000	0.061

VEHICLE PARKING

Optimize parking demands between core and fringe facilities with target occupancies of 75% to 90% occupied.

Maintain a parking space to population ratio of 0.20 to 0.25 on Main Campus.

	2022		2033	
	Spaces	Ratio	Spaces	Ratio
*Main Campus***	12,092	0.25	13,742	0.22
Health Sciences	7,934	0.45	7,934	0.36
Research Park	9,125	0.65	9,125	0.62

- These performance targets will help meet the Strategic Plan's goals of being balanced, efficient, sustainable, and convenient.

**2021 Commuter Survey Report*
***Also includes Fort Douglas, West Village, East Village, Red Butte Gardens, Natural History Museum, and Guardsman Lot*

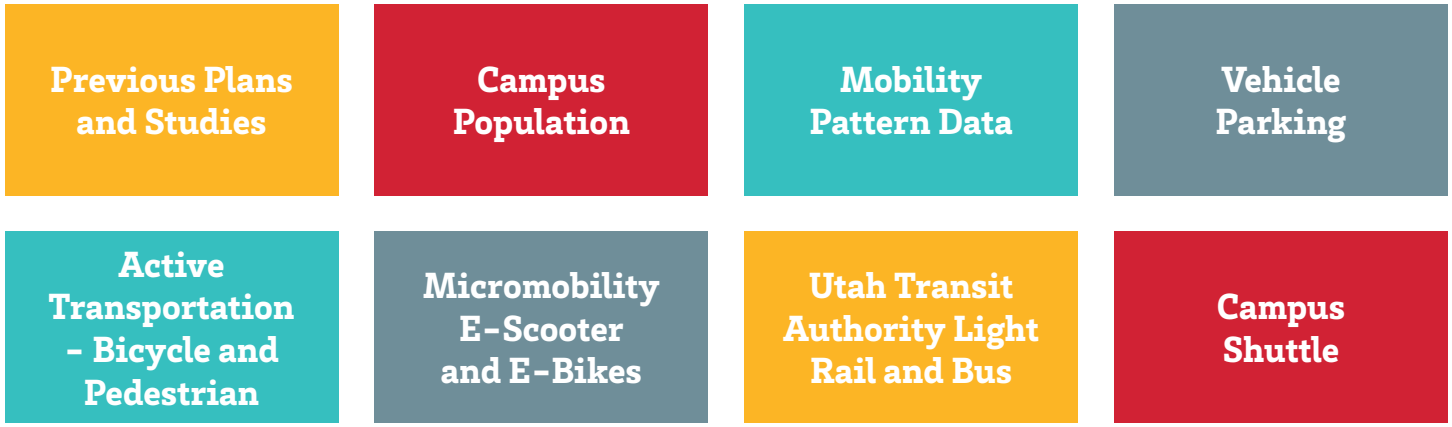
DATA GATHERING

DATA GATHERING

The Strategic Plan began with gathering current conditions data to help understand the campus vehicle parking and multimodal transportation system and define immediate and longer-term needs. The evaluation of existing conditions informed development of strategies and actions to meet the mobility needs of students, faculty, staff, and visitors to the University of Utah campus.

Data and information were reviewed for the categories illustrated in **Figure 5**. Supplemental data for each category is available in **Appendix A**.

Figure 5. Data Collection and Analysis Categories



PREVIOUS PLANS AND STUDIES

Several previous plans and studies include recommendations, as summarized in **Table 2**, related to campus mobility, which set the stage and context for the Strategic Plan.

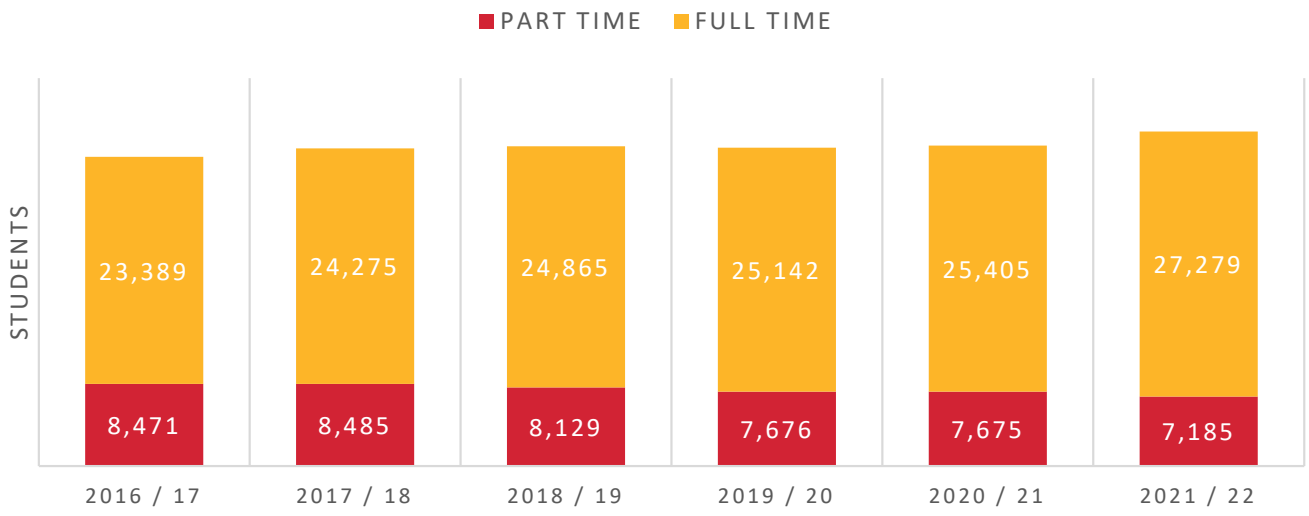
Table 2. Summary of Campus Planning Documents

PREVIOUS PLAN OR STUDY	IMPACT ON STRATEGIC PLAN RECOMMENDATION
CAMPUS MASTER PLAN, 2008 (ADDENDUM, 2010)	Limit new parking structures on Main Campus
CLIMATE ACTION PLAN, 2010	Promote behavior change to influence use of sustainable transportation choices
UNIVERSITY OF UTAH BICYCLE MASTER PLAN, 2011	Improve bicycle infrastructure and connectivity
RESEARCH PARK TRANSPORTATION DEMAND MANAGEMENT PLAN, 2019	Implement Transportation Demand Management (TDM) initiatives: ride share system; guaranteed ride home; transit pass program; bike share; park hub and bike station; wayfinding system; transportation coordination; parking menu; and microtransit/shuttle
MOBILITY HUB STUDY, 2019	Construct Mobility Hubs: 200 South, South Campus Drive, Health Sciences

CAMPUS POPULATION

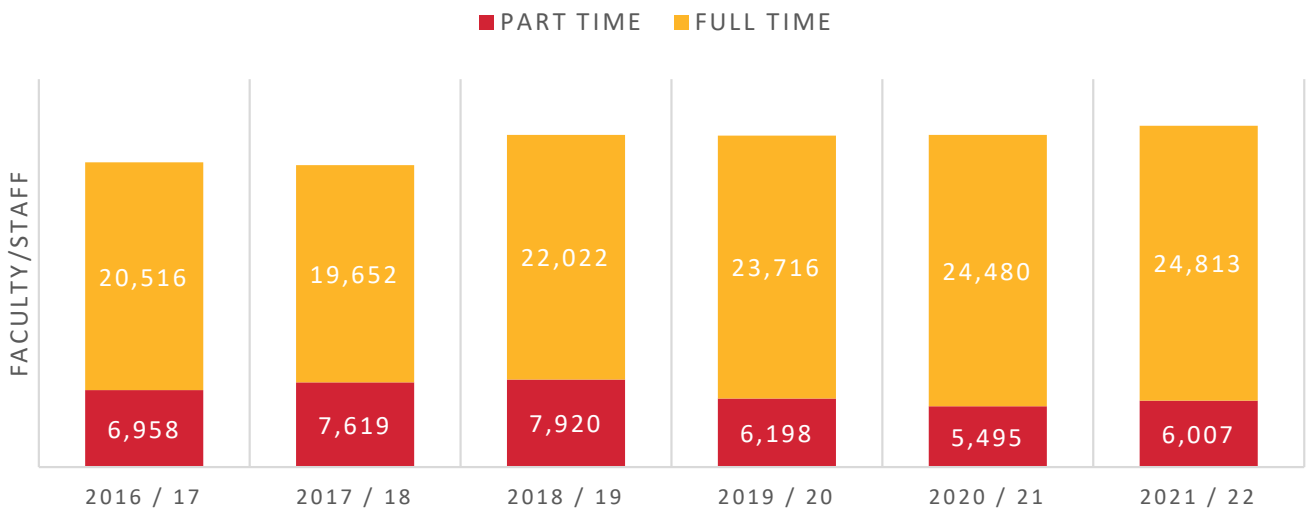
From 2016 to 2022, the student population grew from 31,900 to 34,500, and the faculty population grew from 27,500 to 30,800 in the same years. The University of Utah is planning for more than 45,000 students by 2033.

Figure 6. Student Enrollment (2016/17 – 2021/22)



Source: The University of Utah Common Data Set (Academic years 2016/17 through 2021/22)

Figure 7. University Faculty and Staff (2016/17 – 2021/22)



Source: The University of Utah Fast Facts (Academic years 2016/17 through 2021/22)

MOBILITY PATTERN DATA

The study team reviewed mobility pattern data provided by Replica. Replica gathers and processes multiple and disparate datasets into a holistic picture of mobility. Data components include anonymized cellular location, census demographic, and land use data. Replica data was obtained for this Strategic Plan with information about peak periods of travel, average distance by mode, average travel time by mode, and trip origin (zip code). Key insights from historical data for a typical weekday in March-May 2021 are described in **Table 3**.

KEY TAKEAWAYS

- The average bicycle trip to campus is 3.6 miles, average walk trip to campus is 0.9 miles, and average public transit trip is 8.6 miles.
- 22% of all trips to campus begin less than 2 miles away from campus - from zip codes 84101, 84102, 84105, and 84111.
- 70% of those traveling from these four zip codes do so by SOV.

Table 3. Mobility Pattern Data Insights

TRAVEL PATTERN	EXTERNAL TRIPS FROM TO CAMPUS	INTERNAL TRIPS WITHIN CAMPUS
PEAK PERIODS OF TRAVEL	▸ Inbound: 7 am – 9 am, 14% of all trips ▸ Outbound: 4 pm – 6 pm: 31% of all trips	Highest between 12 pm and 6 pm, peaking at 5 pm
AVERAGE DISTANCE BY MODE	▸ Alone in a vehicle: 14.7 miles ▸ Carpool: 18.6 miles ▸ Public Transit: 8 miles ▸ Bicycle: 3.6 miles ▸ Walking: 0.9 miles	▸ Alone in a vehicle: 1.6 miles ▸ Carpool: 1.8 miles ▸ Public Transit: 2.1 miles ▸ Bicycle: 1.7 miles ▸ Walking: 0.6 miles
AVERAGE TRAVEL TIME BY MODE	▸ Alone in a vehicle: 21 minutes ▸ Carpool: 25 minutes ▸ Public Transit: 43 minutes ▸ Bicycle: 21 minutes ▸ Walking: 16 minutes	▸ Alone in a vehicle: 4 minutes ▸ Carpool: 4 minutes ▸ Public Transit: 21 minutes ▸ Bicycle: 10 minutes ▸ Walking: 10 minutes
TRIPS ORIGIN	▸ 58% of all trips originate from 15 zip codes in Salt Lake County and Davis County. ▸ 22% of all trips originate from zip codes 84101, 84102, 84105, and 84111. Each of these are within 2 miles from edge of campus.	Data not availble since data is provided by zip code

VEHICLE PARKING

Parking facilities across the University of Utah campus are summarized in **Table 4** and illustrated in **Figure 9**.

Figure 8 illustrates the timeline of major additions to campus parking infrastructure.

KEY TAKEAWAYS

- Parking challenges are proximity based rather than supply based. Many different user groups compete for the same spaces in the core of campus.
- Recent shifts in behaviors show that campus users (students and employees) desire flexible parking options including combinations of permits and daily/hourly parking options.
- Recent shifts in U-Permit and Temporary Permit purchases indicate that campus users are combining a number of options because of the relatively low costs.
- Underutilized garage parking spaces provide short-term options to offset immediate proximity challenges while leveraging desire for flexible parking options.

Table 4. Parking Facilities by Campus Area

CAMPUS AREA	NUMBER OF FACILITIES			SPACES		
	SURFACE LOTS	GARAGES	TOTAL	SURFACE LOTS	GARAGES	TOTAL
MAIN CAMPUS*	49	2	51	11,026	1,066	12,092
HEALTH SCIENCES	10	10	20	1,798	4,757	6,555
RESEARCH PARK	32	4	36	7,841	1,284	9,125
TOTAL	**91**	**16**	**107**	**20,665**	**7,107**	**27,772**

**Also includes Fort Douglas, West Village, East Village, Red Butte Gardens, Natural History Museum, and Guardsman Lot.*

Figure 8. Timeline of Major Parking Additions

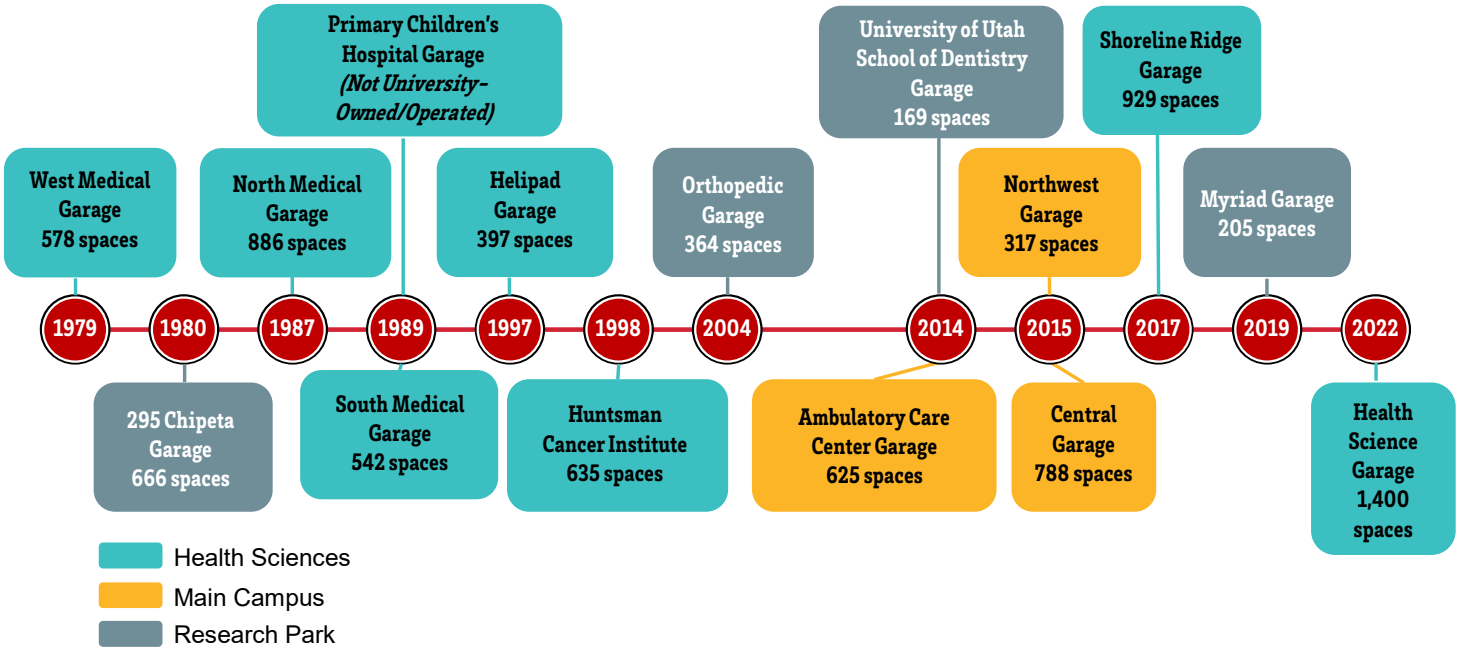


Figure 9. Parking Facility Map

PARKING SPACE TO CAMPUS POPULATION RATIO

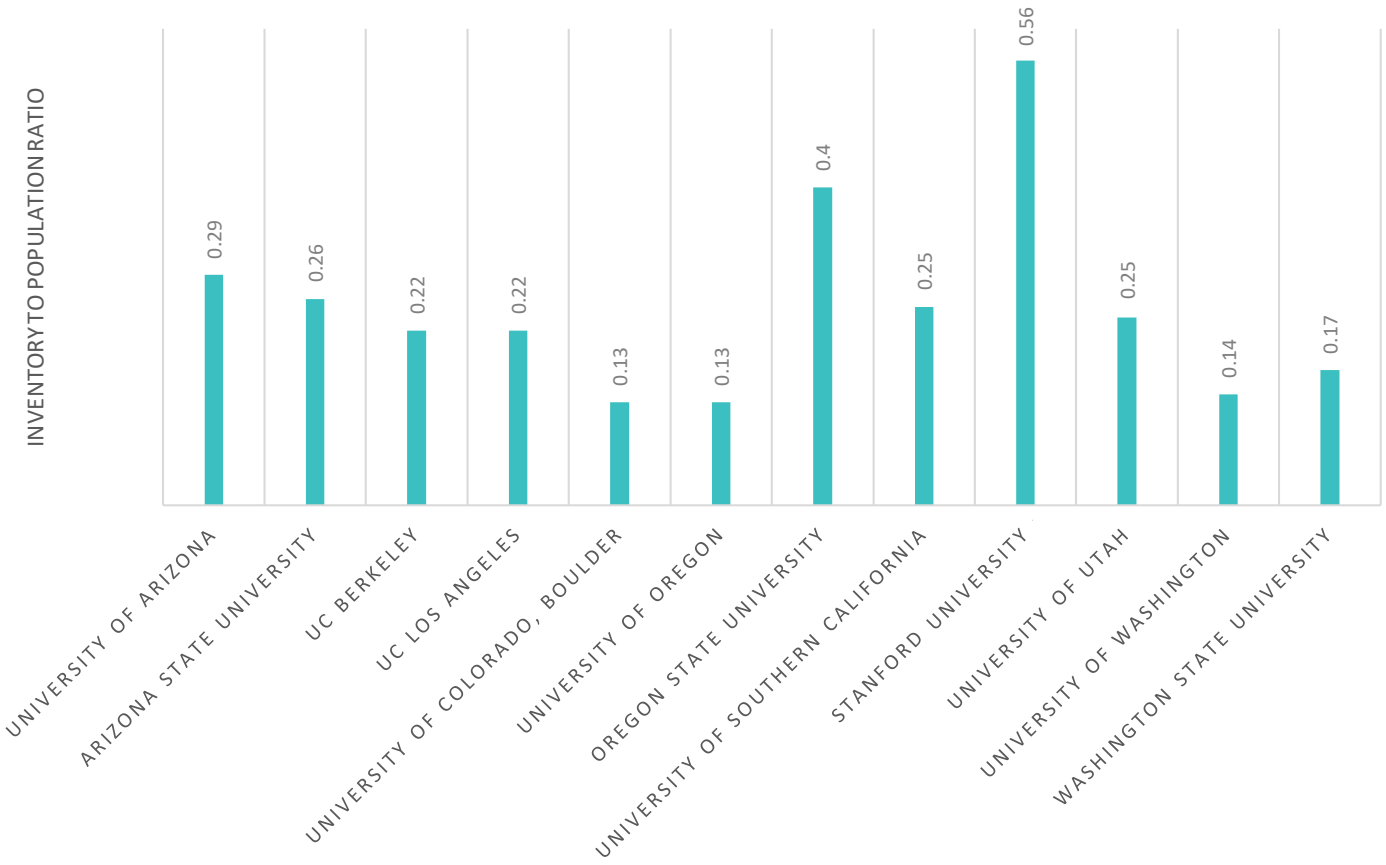
Parking space to population ratio is a metric of effectiveness of a parking and transportation system. Ratios that approach 1.0 space per person reflect auto-oriented campuses. Lower ratios (less than 0.33 spaces per person) reflect effective transportation demand management, and effective utilization of transit and active transportation. Ratios at the University of Utah (**Table 5**) range from 0.25 (Main Campus to 0.65 at Research Park.

Table 5. University of Utah Parking Space to Population Ratio

CAMPUS AREA	2022		
	SPACES	POPULATION	RATIO
MAIN CAMPUS	12,092	47,828	0.25
HEALTH SCIENCES	7,934	17,456	0.45
RESEARCH PARK	9,125	14,000	0.65

Figure 10 shows that the University of Utah parking space to population inventory ratio (Main Campus is in the middle range of those of other PAC-12 schools.

Figure 10. Parking Spaces to Population Ratios Peer Institution Comparison



PERMIT SALES

Figure 11 shows permit sales for the most recent five years excluding temporary permits (A-Temp and U-Temp). Permit sales decreased through the COVID-19 pandemic (2020/21) but have since rebounded.

Figure 12 shows the percentage of permit sales to faculty, staff, and students. The data shows that 66% of all students purchased a permit, and 35% of all faculty purchased a permit. Student permit sales have increased from 43% to 66%, while faculty/staff has ranged from 31% to 37%.

Figure 11. Permit Sales by Type (2017/18-2021/22)

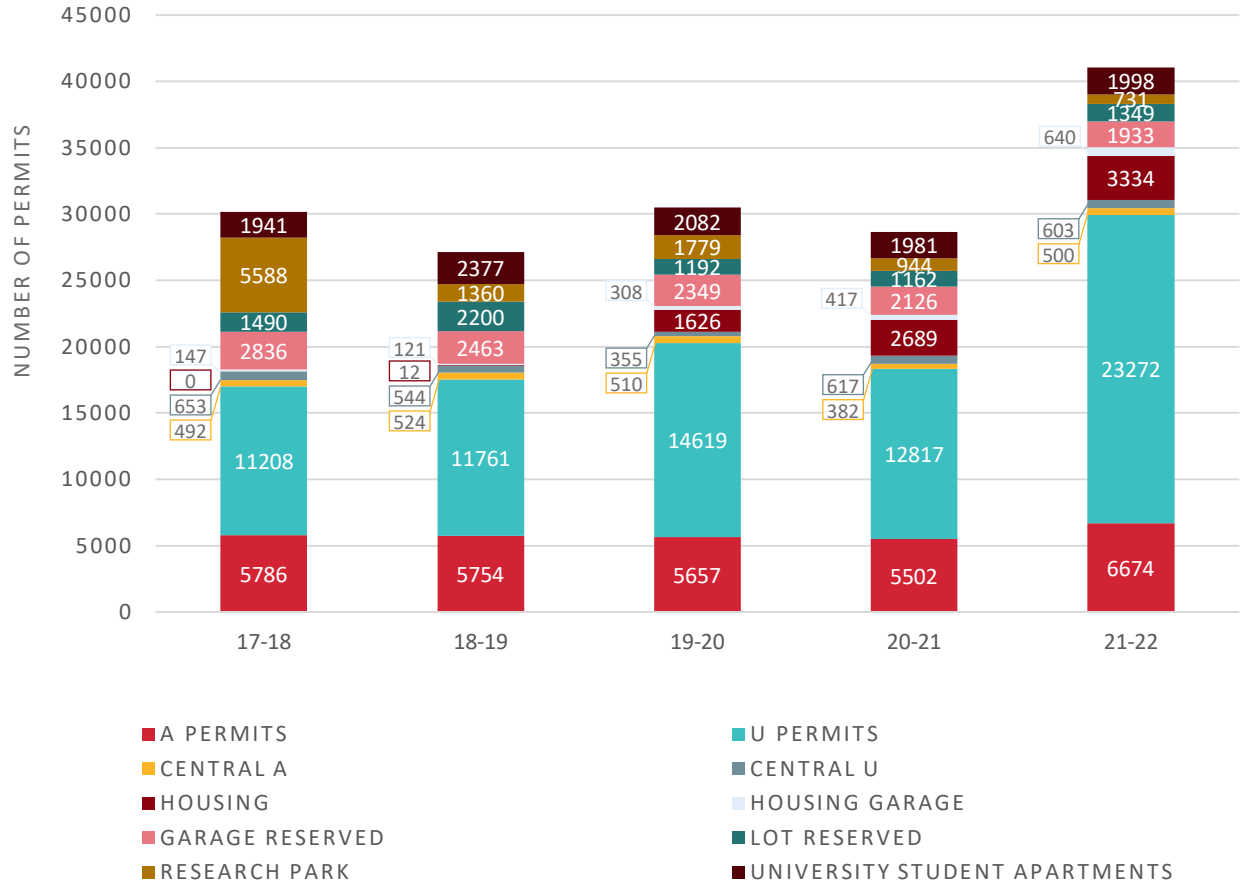
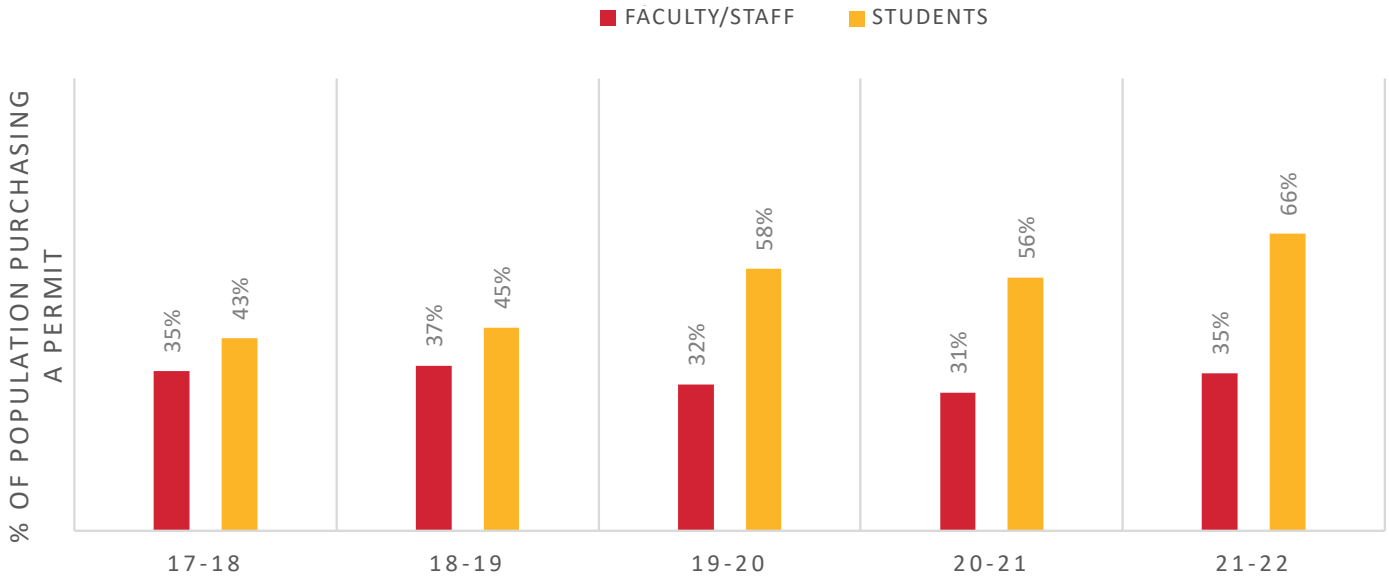


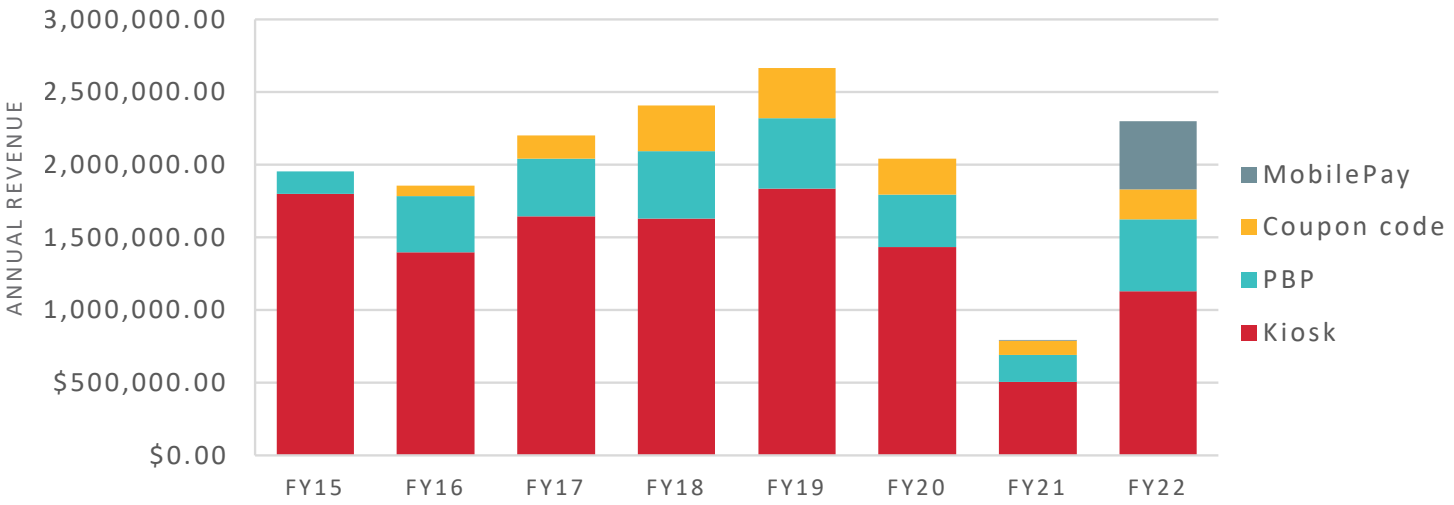
Figure 12. Permit Sales by Group (2017/18-2021/22).



VISITOR PARKING TRENDS

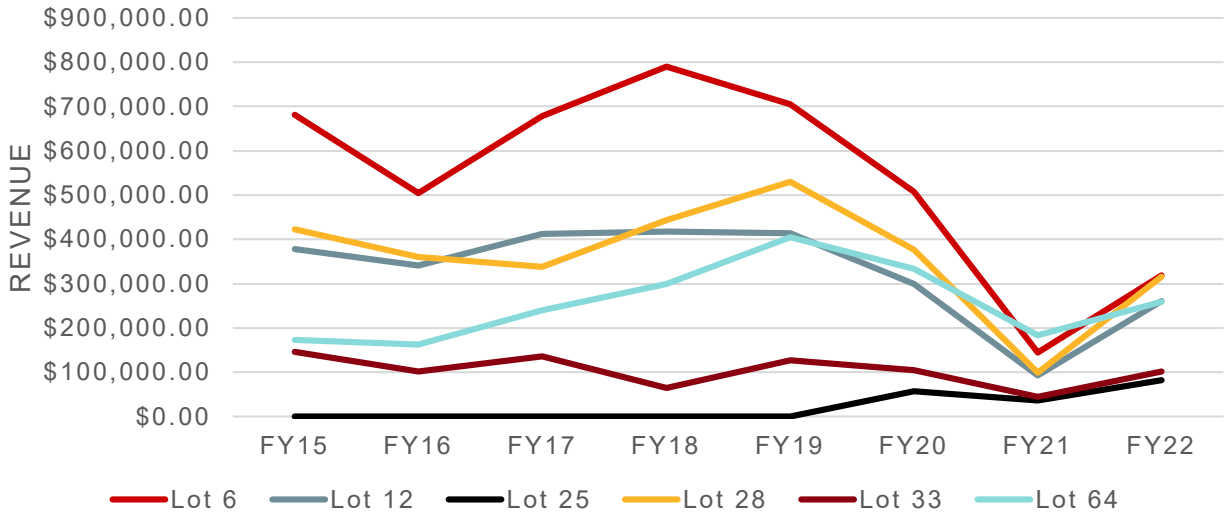
Visitors may pay for parking at kiosk machines, by Pay by Phone (PbP), using a coupon code, or by MobilePay. **Figure 13** illustrates the amount of visitor parking base for different payment methods. Similar to student and employee permits, between 2015 and 2019, there was a steady increase in pay-as-you-go parking, which was also bolstered by students and faculty/staff who already had parking permits. Revenue dropped during the COVID-19 pandemic, but has shown a strong resurgence.

Figure 13. Visitor Parking Revenue



Visitor parking by location is summarized in **Figure 14**. Revenue for all visitor lots decreased, with a significant drop for Lot 6 (Marriot Library/Campus Bookstore) during the COVID-19 pandemic. All lots are showing signs of recovering ,with Lot 25 (Student Life Center), Lot 64 (South Garage), and Lot 33 (Student Union) being near pre-pandemic levels.

Figure 14. Visitor Revenue by Location



As activity has returned to normal levels on campus post COVID-19, the number of parking permit holders using the kiosk (**Table 6**) and PbP systems (**Table 7**) has increased, as campus users look to gain more flexible parking. Most of this increase has been by student permit holders.

Table 6. Kiosk Transactions by Employees and Students with a Parking Permit

	ACADEMIC YEAR		
TRANSACTION TYPE	**19/20**	**20/21**	**21/22**
TRANSACTIONS BY EMPLOYEES WITH A PERMIT	33,674	11,763	33,159
% OF TOTAL TRANSACTION	10%	10%	9%
TRANSACTIONS BY STUDENTS WITH A PERMIT	50,769	18,130	110,237
% OF TOTAL TRANSACTION	15%	15%	31%
% OF TOTAL TRANSACTION	25%	25%	41%

Table 7. Pay by Phone Transactions by Employees and Students with a Parking Permit

	ACADEMIC YEAR		
TRANSACTION TYPE	**19/20**	**20/21**	**21/22**
TRANSACTIONS BY EMPLOYEES WITH A PERMIT	12,472	5,393	12,145
% OF TOTAL TRANSACTION	12%	10%	10%
TRANSACTIONS BY STUDENTS WITH A PERMIT	17,852	8,294	34,349
% OF TOTAL TRANSACTION	17%	16%	27%
% OF TOTAL TRANSACTION	29%	26%	37%

PARKING UTILIZATION

The University of Utah monitors parking utilization for Main Campus and select Health Science parking facilities by conducting empty stall counts. Three to six weeks of data are collected in the Fall and Spring semesters and two weeks of data in the Summer semesters. Data collection is limited to a single timeframe during the day and does not provide information on parking turnover or how utilization varies throughout the day. Parking utilization was also obtained from the Health Sciences Patient Parking Study and Research Park Vision Study. **Figure 15** shows the existing parking space occupancy. Occupancy by user type is available in **Appendix A**.

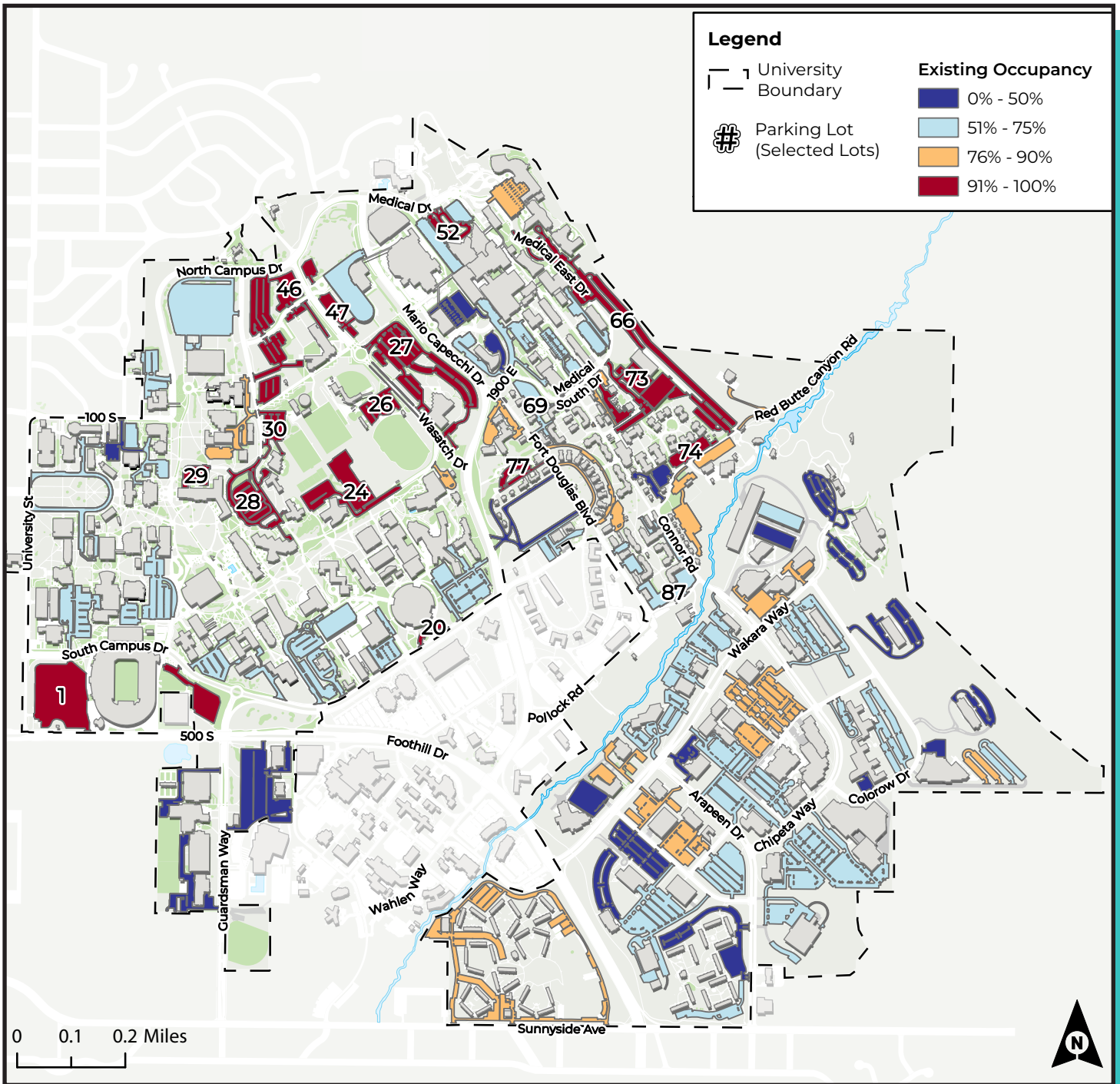
The data shows that parking for students and faculty/staff is the most constrained. Within the Visitor parking areas and Research Park, occupancies are close to 50% and parking is readily available. Lots that are consistently at or near maximum occupancy are listed at right.

PARKING LOTS CONSISTENTLY AT OR NEAR MAXIMUM OCCUPANCY

- Lot 1 - West Stadium
- Lot 20 - Huntsman South
- Lot 24 - HPER Sports
- Lot 26 - Soccer
- Lot 27 - Broadcast Center
- Lot 28 - Union East
- Lot 29 - Union North
- Lot 30 - Alumni
- Lot 46 - USTAR
- Lot 47 - East Wasatch
- Lot 52 - Hospital Loop
- Lot 66 - Hospital East
- Lot 69 - Chapel Glenn
- Lot 73 - Medical Towers
- Lot 74 - Shoreline
- Lot 77 - Officers Club

Many of the lots that are consistently at or near maximum occupancy are at these levels due to their convenient locations. Several lots on Main Campus and Health Sciences are underutilized due to their location and not being accessible to other areas on campus. For example, Lot 39 (Merrill Engineering) and Lot 1 (West Stadium) are roughly the same size and located at the perimeter of campus. However, Lot 1 is consistently at or near maximum occupancy, while Lot 39 is not. Lot 1 is appealing due to its connection to the transit network via the TRAX station, four bus stops, and the bicycle network, which makes the rest of the campus more accessible. Within Research Park, many parking lots are underutilized where most are between 50% and 75% occupied. This is likely due to the use of suburban parking standards to design office parking needs, resulting in an over-supply of parking within this area of campus.

Figure 15. Existing Conditions Parking Occupancy



ACTIVE TRANSPORTATION

BICYCLE FACILITIES

Figure 16 shows designated bicycle routes on campus. Bicycle facilities are largely concentrated on Main Campus with limited facilities in Research Park. Existing bicycle repair facilities are also shown in **Figure 16**.

Bicycle parking throughout campus includes standard bike racks, covered bike racks, secure bike lockers, and secure bike rooms and cages. Not all bicycle parking spaces are available to all students, faculty, and staff; some locations require a rental fee.

A bi-annual bicycle utilization study counts every bicycle parking space and records the observed occupancy. **Table 8** and **Figure 17** highlights the latest data from September 2022. The majority of bicycle parking spaces are located at uncovered, outdoor bike racks with a total of 2,502 parking spaces of the total 3,694 bicycle parking spaces provided by the University of Utah. This level of parking represents a bike parking to campus population ratio of 0.047:

$$\frac{(3{,}694 \text{ bicycle parking spaces})}{(79{,}320 \text{ campus population})} = 0.047 \text{ bicycle spaces per population}$$

The data shows that external bike parking has higher occupancy rates compared to interior bike parking. The Health Science area has higher occupancy percentages compared to Main Campus and Research Park areas.

KEY TAKEAWAYS

- Bicycle racks are typically associated with individual buildings, with observed occupancy between 20% to as high as 73%.
- Secure bicycle lockers are the preferred storage type; existing facilities have long wait lists. More secure storage is needed.
- 2021 Commuter Survey Report shows that 11% of respondents used active transportation to get to campus, with undergraduate students at 17% bicycle mode share. Most of these trips are likely from on-campus housing, as Replica mobility data shows just 1% of external trips arriving by bicycle.
- Sidewalk gaps along major roadways, including North Campus Drive, Foothill Drive, Chipeta Way, and Wakara Way, are barriers between areas of campus and can impact pedestrian connectivity across campus.

Table 8. Bicycle Parking Spaces by Type, September 2022

	MAIN CAMPUS			HEALTH SCIENCES			RESEARCH PARK		
BIKE PARKING FACILITY TYPE	TOTAL PARKING SPACES	OCCUPIED SPACES (5-YEAR AVERAGE)	OBSERVED OCCUPANCY RATE (5-YEAR AVGERAGE)	TOTAL PARKING SPACES	OCCUPIED SPACES (5-YEAR AVERAGE)	OBSERVED OCCUPANCY RATE (5-YEAR AVGERAGE)	TOTAL PARKING SPACES	OCCUPIED SPACES (5-YEAR AVERAGE)	OBSERVED OCCUPANCY RATE (5-YEAR AVGERAGE)
Exterior Bike Parking									
Bike Rack	1,908	678	36%	144	105	73%	131	11	8%
Covered Bike Rack	189	49	26%	97	45	46%	33	4	12%
Exterior Subtotal	2,097	727	35%	241	150	62%	164	15	9%
Interior Bike Parking									
Secure Bike Room	929	599	64%	0	0	0%	0	0	0%
Secure Bike Cage	93	3	3%	60	34	57%	59	7	12%
Secure Bike Locker	4	0	0%	47	0	0%	0	0	0%
Interior Subtotal	1,026	602	59%	107	34	32%	59	7	12%
Total	3,123	1,329	43%	348	184	53%	223	22	10%

NOTES: Main Campus includes Fort Douglas, West Village, East Village, Red Butte Gardens, Natural History Museum, and Guardsman Lot.
Campus staff unable to assess utilization in bike lockers due to access restrictions

Figure 16. Existing Bicycle Facilities

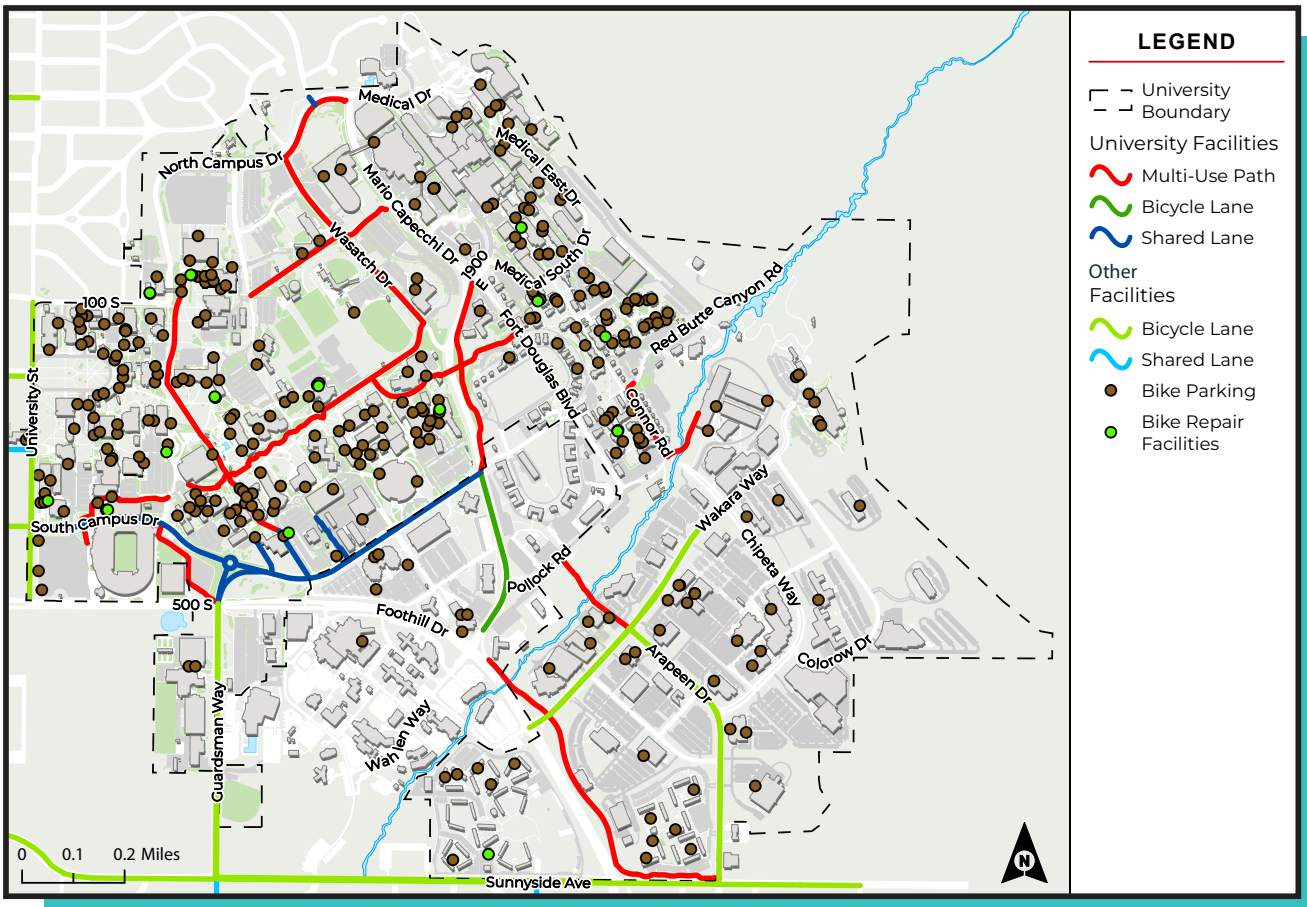
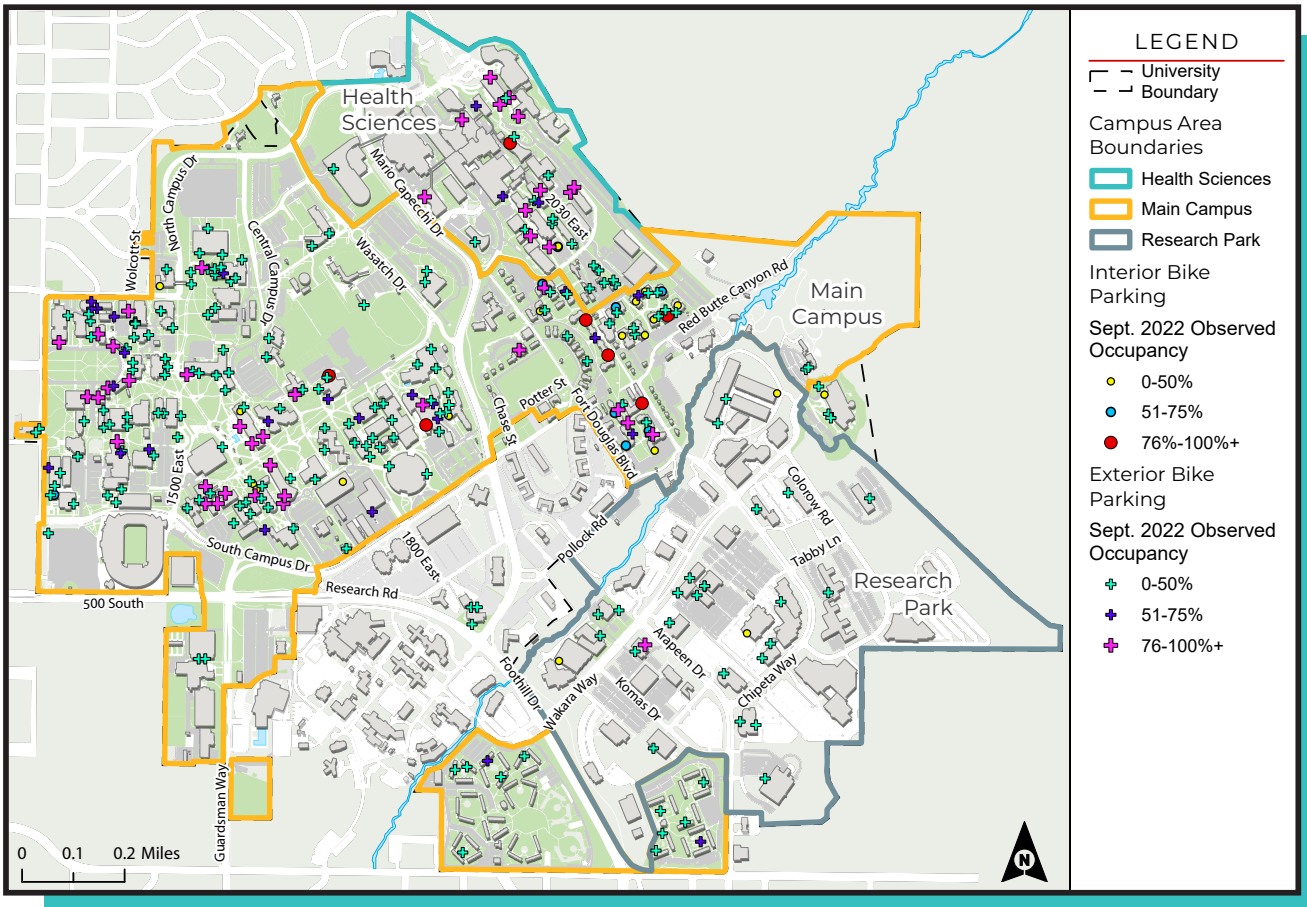


Figure 17. Bike Parking Occupancy Rates



PEDESTRIAN FACILITIES

The pedestrian network on the University of Utah campus is generally well connected as shown in **Figure 18**, with robust networks on Main Campus, Health Sciences, and Fort Douglas, though significant elevation changes can limit the distance that some individuals can reasonably be expected to walk. Research Park is the least connected with pedestrian facilities. Sidewalk gaps along high-volume roadways including North Campus Drive, Foothill Drive, Chipeta Way, and Wakara Way impact pedestrian connectivity across campus. Additionally, major roadways through and around campus require pedestrians to them or take circuitous routes to avoid potential conflicts with vehicles. The campus provides multiple grade-separated crossings for pedestrians and bicyclists including the George Eccles Legacy Bridge and at the Rio Tinto Kennecott Building.

PEDESTRIAN IMPROVEMENT RECOMMENDATIONS FROM PREVIOUS PLANS

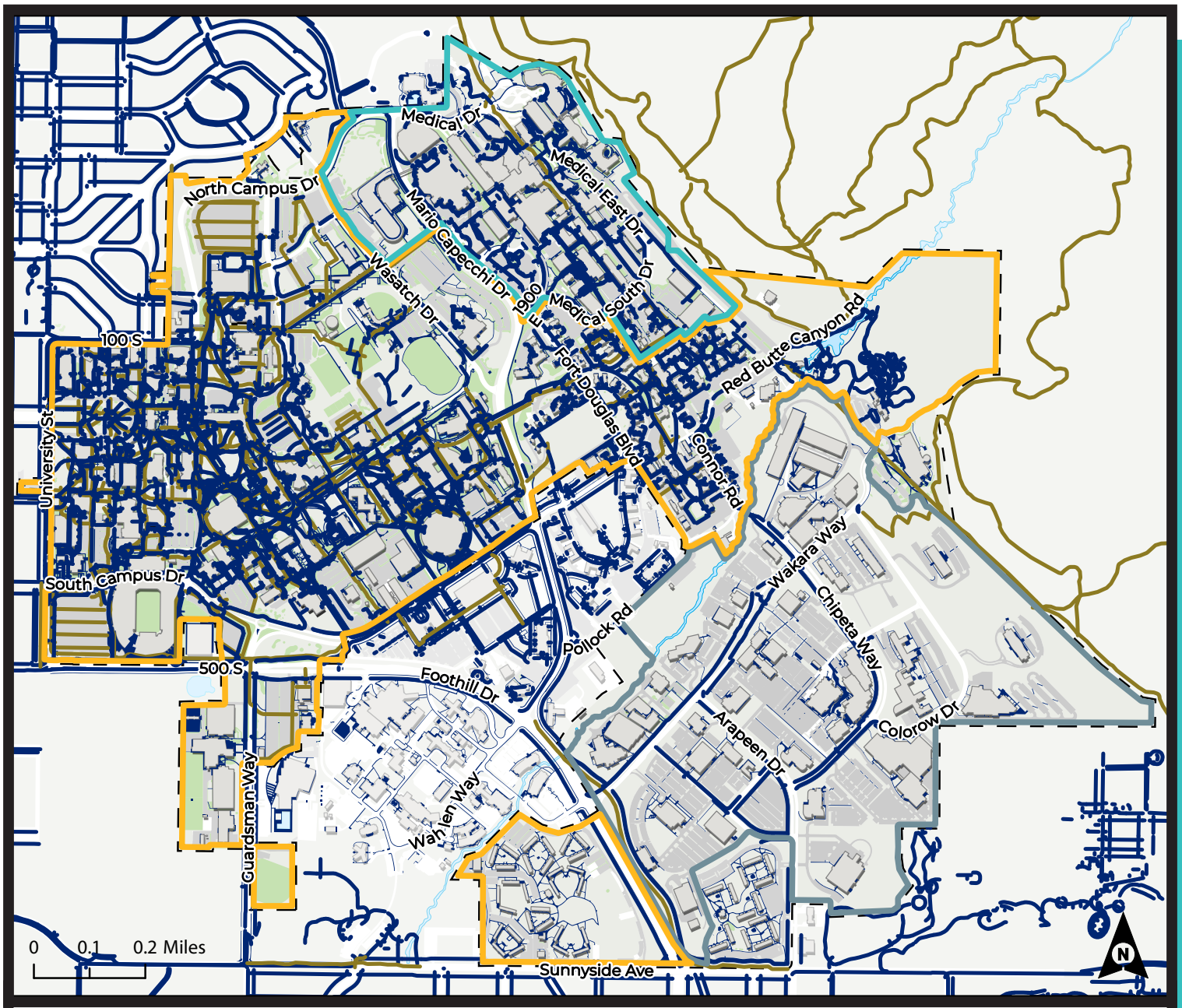
SOUTH CAMPUS WALK

This project was identified in the 2008 Master Plan to transform the South Campus area into a mixed-use gateway including a safe pedestrian connection to the core campus area. South Campus Walk, as proposed by the 2008 Campus Master Plan, envisions a pedestrian pathway linking South Campus TRAX to the core campus. South Campus Walk should feature high-quality paving materials, lighting, seating, and shade trees which support a comfortable pedestrian environment day and night and during all seasons. This project concept was carried forward into the Mobility Hub study and will be incorporated into the South Campus Mobility Hub project.

UNDERGROUND TUNNEL AT FOOTHILL DRIVE CONNECTING RESEARCH PARK CAMPUS TO MAIN CAMPUS

This project is included as a long-term option in the 2017 Foothill Drive Implementation Strategy. This concept would construct a two-lane reversible underground tunnel connecting turn lanes on Mario Capecchi Drive and Wakara Way with Foothill Drive south of Sunnyside Avenue. This concept is carried forward into the Campus Mobility Hub Study. This tunnel concept would route turning traffic between Foothill and Research Park/the University underground, freeing space for the surface of Foothill Drive in this segment to prioritize pedestrians and cyclists. This concept may be incorporated into redevelopment plans for the Research Park Campus in partnership with Salt Lake City and Utah Department of Transportation (UDOT).

Figure 18. Existing Pedestrian Facilities



LEGEND

- University Boundary
- **Campus Area**
  - Health Sciences
- Main Campus
- Research Park
- Sidewalks
- Trails and Pathways

SPIN (SHARED E-SCOOTERS AND E-BIKES)

In April 2022, the University of Utah partnered with SPIN, a provider of a shared e-scooter and e-bikes, to bring their shared micromobility system to campus. The full system rollout kicked off in August 2022. SPIN e-scooters and bikes are located at locations throughout campus in designated parking areas. As shown in **Figure 19**, total daily rides starting on the University of Utah campus grew significantly once classes began in August 2022. The total number of on-campus trip starts regularly peaks on Saturdays, with the highest single-day trip starts occurring on August 27, 2022, with a total of 777 trip starts.

This mode has the potential to be increasingly utilized as faculty, staff, and visitors become accustomed to its widespread availability throughout campus.

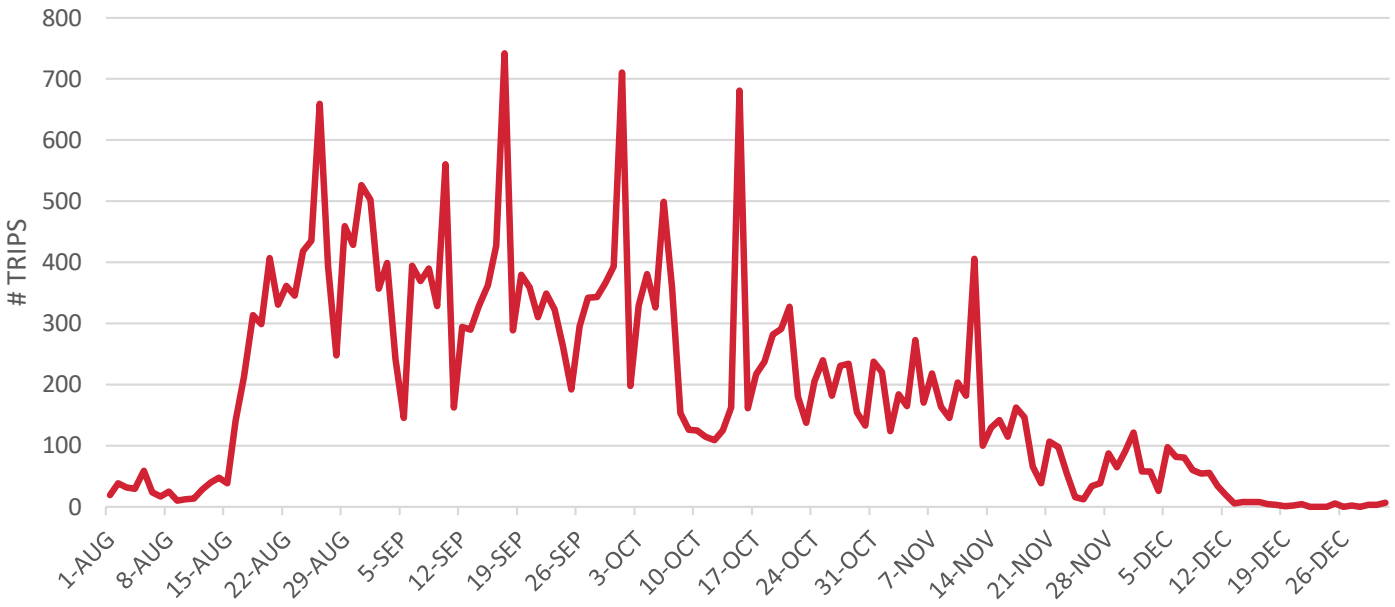
KEY TAKEAWAYS

- As micromobility expands on the University of Utah campus, it has the potential to serve as "last-mile" transportation from peripheral lots to the campus core.
- Currently, micromobility is most heavily utilized outside of peak periods of demand suggesting it's use is primarily recreational.
- Enhanced low-stress pathway and bikeway connections between campus areas may facilitate more first/last mile trips between areas of campus.

Observations on SPIN device usage based on a SPIN Ridership report from April 25, 2022, to July 11, 2022 indicate:

- There are more SPIN e-scooters (93.5%) deployed on campus than SPIN e-bicycles (6.5%).
- The average SPIN trip using an e-scooter is slightly over one mile.
- Most SPIN trips (56%) are taken during the evening (after 4:00 PM).
- Saturday was the day of the week with the most trips (35%).

Figure 19. Total Daily SPIN Trip Starts (August - December 2022)



UTAH TRANSIT AUTHORITY LIGHT RAIL AND BUS

The University of Utah partners with UTA to provide students, staff, and faculty access to UTA services through the UCard, which is valid on UTA bus, express bus, TRAX, FrontRunner, Streetcar, and UTA On Demand.

TRANSIT NETWORK

The campus is directly served by UTA with over 60 campus bus stops and four TRAX light rail stations (University Medical Center, Fort Douglas, University South Campus, and Stadium). The location of these stops and the transit routes are shown in **Figure 20**.

RIDERSHIP

October 2022 UTA ridership data shows that 63% of all transit trips to the University of Utah were made by light rail, as summarized in **Table 9**. **Figure 21** shows the relative Stadium Station has the highest combined bus/rail boardings (25%), followed by University Medical Center (21%).

KEY TAKEAWAYS

- TRAX Light Rail serves 63% of transit users. Stadium Station has highest boardings/alightings, accommodating 25% of all transit trips to campus.
- Planned Mobility Hubs at Health Sciences, South Campus Drive, and 200 S will enhance transit connectivity. Additional coordination with UTA is required regarding future service to the University of Utah as the mobility hubs are constructed.
- Salt Lake City Transit Plan recommends a new high-capacity transit line (referred to by UTA and Salt Lake City as the Orange Line) to provide a direct link between Salt Lake City International Airport, downtown Salt Lake City, and the University of Utah.

Table 9. Ridership Summary (October 2022)

STOP LOCATION[1]	MODE	# STOPS	AVERAGE DAILY BOARDING	AVERAGE DAILY ALIGHTING	TOTAL	% TOTAL
STADIUM STATION	Bus	4	139	147	286	2%
	Rail	2	2,682	1,004	3,686	23%
	Total	6	2,821	1,151	3,972	25%
UNIVERSITY MEDICAL CENTER STATION	Bus	2	293	250	543	3%
	Rail	2	1,846	962	2,808	18%
	Total	4	2,139	1,212	3,351	21%
UNIVERSITY SOUTH CAMPUS STATION	Bus	2	113	87	200	1%
	Rail	2	1,134	820	1,954	12%
	Total	4	1,247	907	2,154	13%
FORT DOUGLAS STATION	Rail	2	1,052	633	1,685	11%
KENNECOTT BUILDING	Bus	2	492	677	1,169	7%
UNION BUILDING	Bus	3	477	361	838	5%
UNIVERSITY HOSPITAL	Bus	1	231	292	523	3%
PRESIDENT'S CIRCLE	Bus	4	224	247	471	3%
SOCIAL WORK BUILDING	Bus	2	195	188	383	2%
FOOTHILL DRIVE	Bus	3	158	161	319	2%
MARIO CAPECCHI	Bus	4	64	252	316	2%
MISC. MAIN CAMPUS[2]	Bus	12	196	293	489	3%
MISC. RESEARCH PARK[3]	Bus	21	177	193	370	2%
TOTAL	Bus	60	2759	3148	5,907	37%
	Rail	8	6714	3419	10,133	63%
	TOTAL	**68**	**9,473**	**6,567**	**16,040**	**100%**

https://data-rideuta.opendata.arcgis.com/datasets/rideuta::uta-stops-and-most-recent-ridership/about. Accessed November 28, 2022.

Notes:
1 Stop locations represent group of individual stops that share stop name and located near each other. For example, Stadium Station consists of the two TRAX stops (i.e., towards Daybreak or towards University Medical Center) and four Stadium Station bus stops.
2 Combined total of 12 stops within Main Campus with less than 2% of total ridership per stop location.
3 Combined total of 21 stops within Research Park with less than 2% of total ridership per stop location.

Figure 20. Existing Transit Network

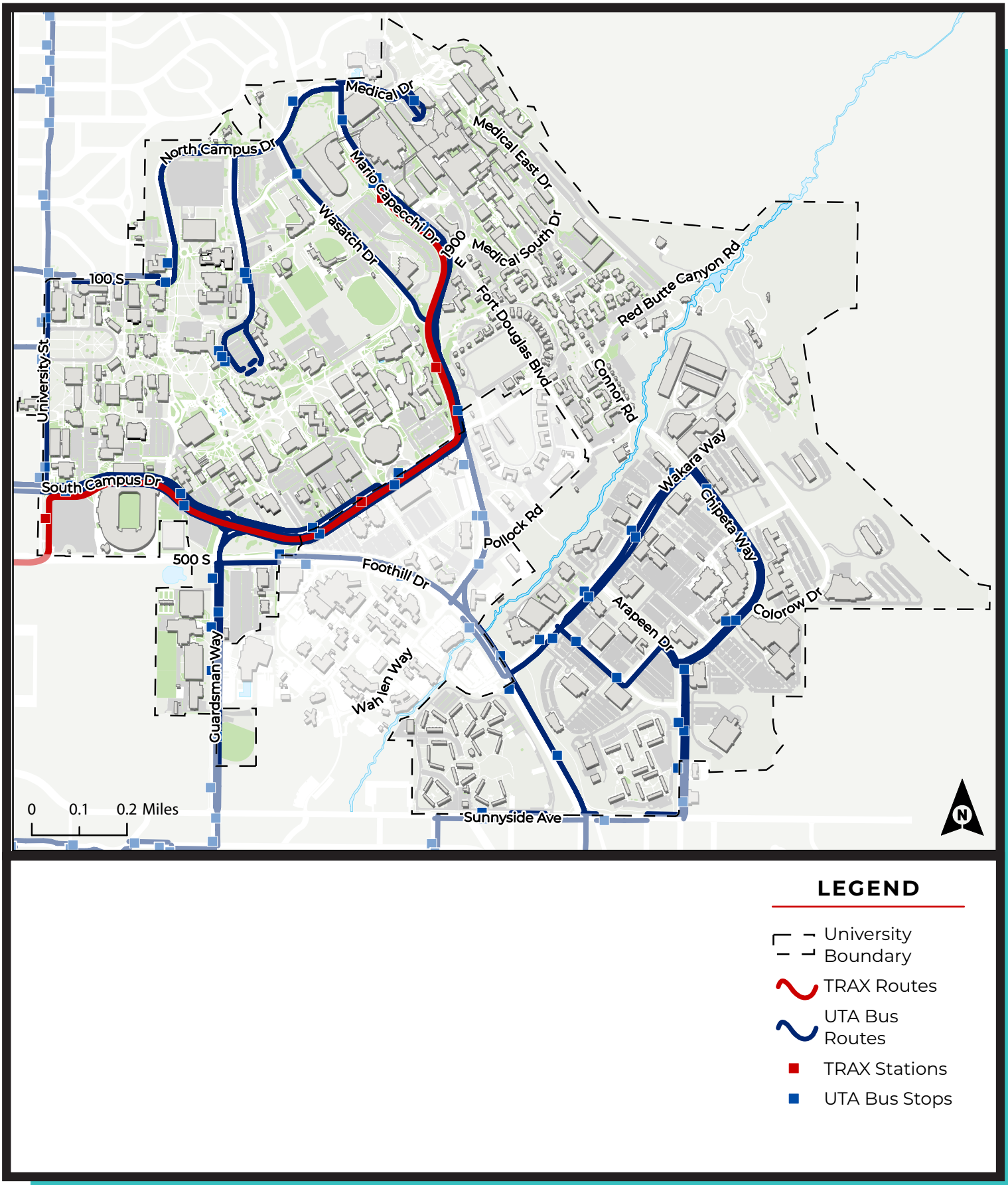
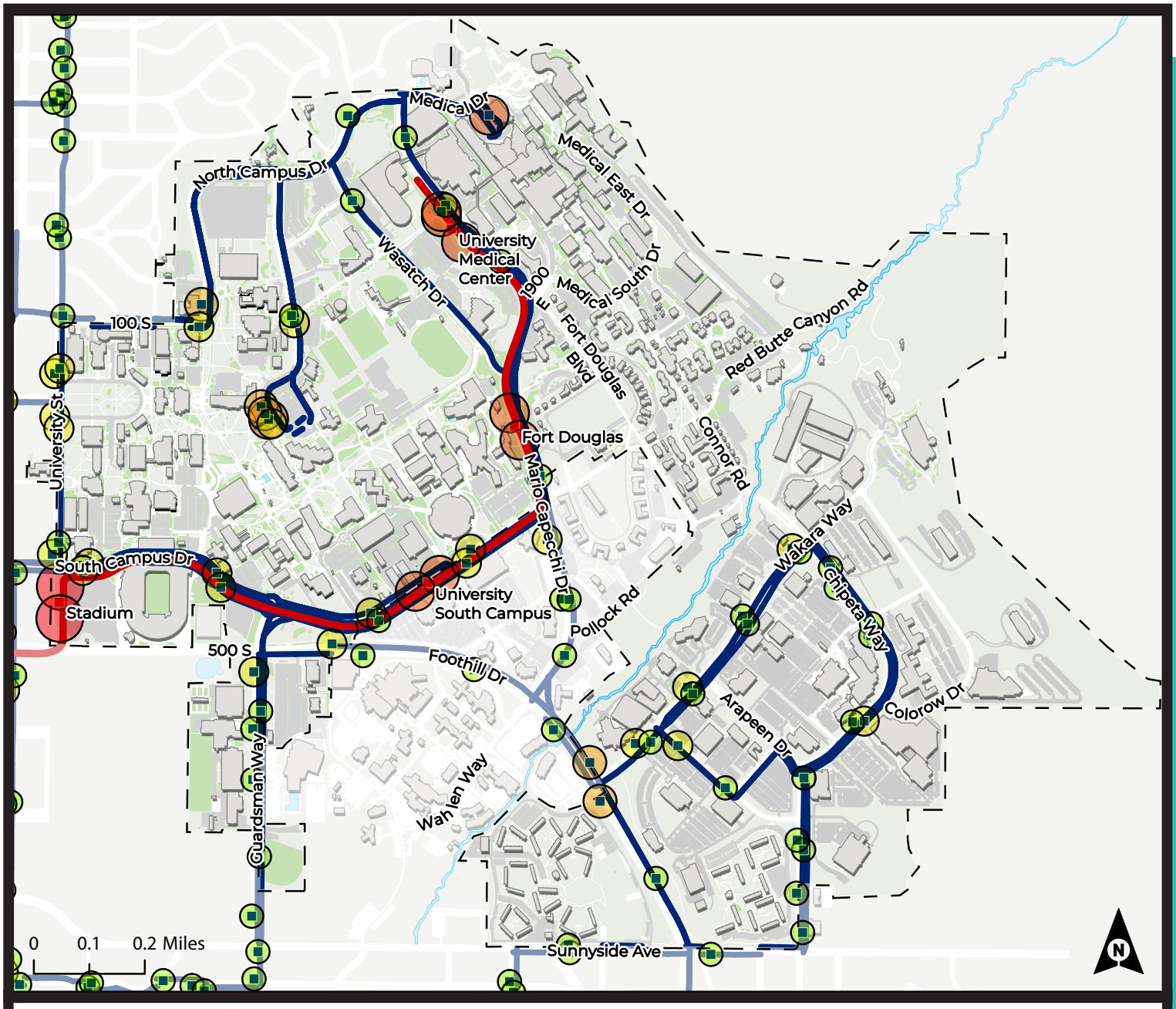


Figure 21. Existing UTA Ridership



LEGEND

- University Boundary
- TRAX Routes
- UTA Bus Routes
- TRAX Stations
- UTA Bus Stops

Average Boarding

Passengers Per Day

- 0 - 10
- 11 - 50
- 51 - 100
- 101 - 1000
- >1000

CAMPUS SHUTTLE

The University of Utah operates a campus shuttle that services Main Campus and Health Sciences, as shown in **Figure 23**.

Riders are able to track the campus shuttle live through the TransLoc app, UofUbus.com website, and the MobileU app. The UofUbus.com website also provides shuttle routing and scheduling information.

Main Campus routes operate Mondays through Fridays. Due to reduced ridership due to COVID-19, only three of the seven Main Campus fixed routes (Blue Detour, Orange, and Circulator) are currently in operation. The five Hospital Routes provide regular service Mondays through Fridays, and limited service on the weekends. The hospital routes include an on-demand shuttle for which riders may request a ride to and from the University Hospital, Research Park, and Medical Center TRAX station. The University of Utah also provides shuttle services during special events such as football games and graduation.

KEY TAKEAWAYS

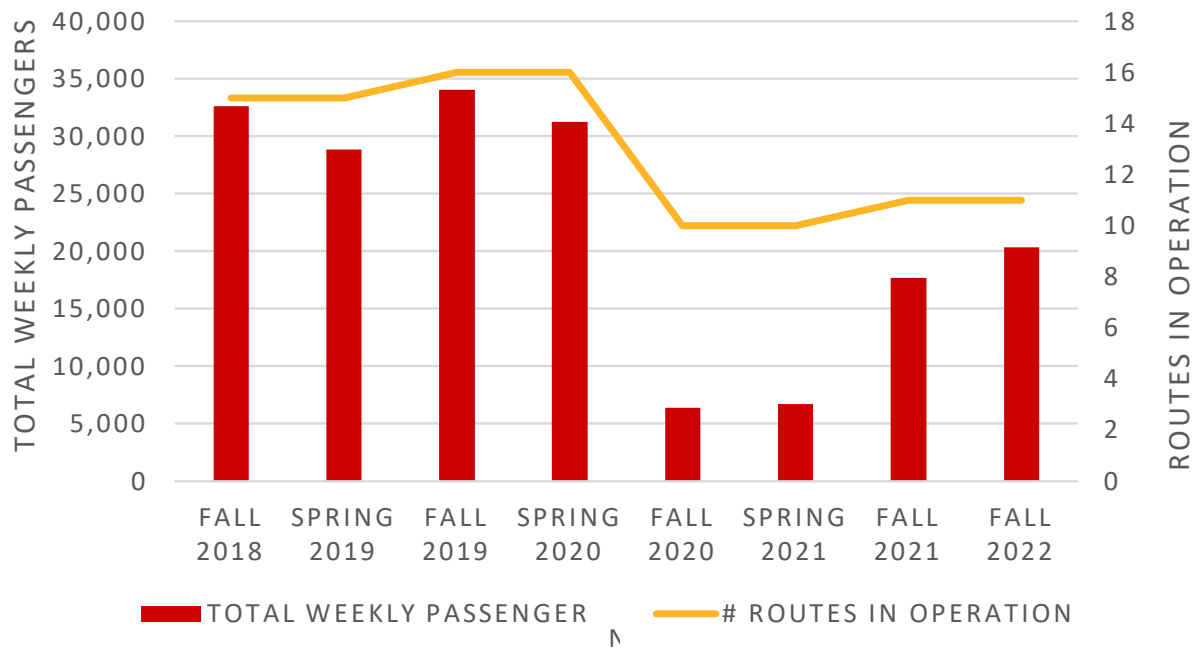
- During COVID-19, shuttle ridership dropped to 20% of pre-pandemic levels and increased to 60% of pre-pandemic levels in Fall 2022.
- A robust campus shuttle network is critical to reducing reliance on SOVs, and for improving convenience and accessibility of peripheral parking areas.

CAMPUS SHUTTLE RIDERSHIP

Historical weekly shuttle ridership data and daily ridership by shuttle stop was reviewed. The University is in process of purchasing automatic passenger counters (APC) to improve data collection.

Figure 22 illustrates historical weekly ridership for the Fall and Spring semesters for the last few academic years. Prior to the COVID-19 pandemic, there were approximately 29,000 – 34,000 weekly shuttle passengers and 15-16 routes in operation. During the academic year affected by COVID (2020/21 academic year), shuttle ridership dropped to approximately 20% of pre-COVID ridership with10 routes in operation. Recently, ridership has risen to 60% of pre-pandemic levels with 11 routes in operation.

Figure 22. Historical Campus Shuttle Ridership



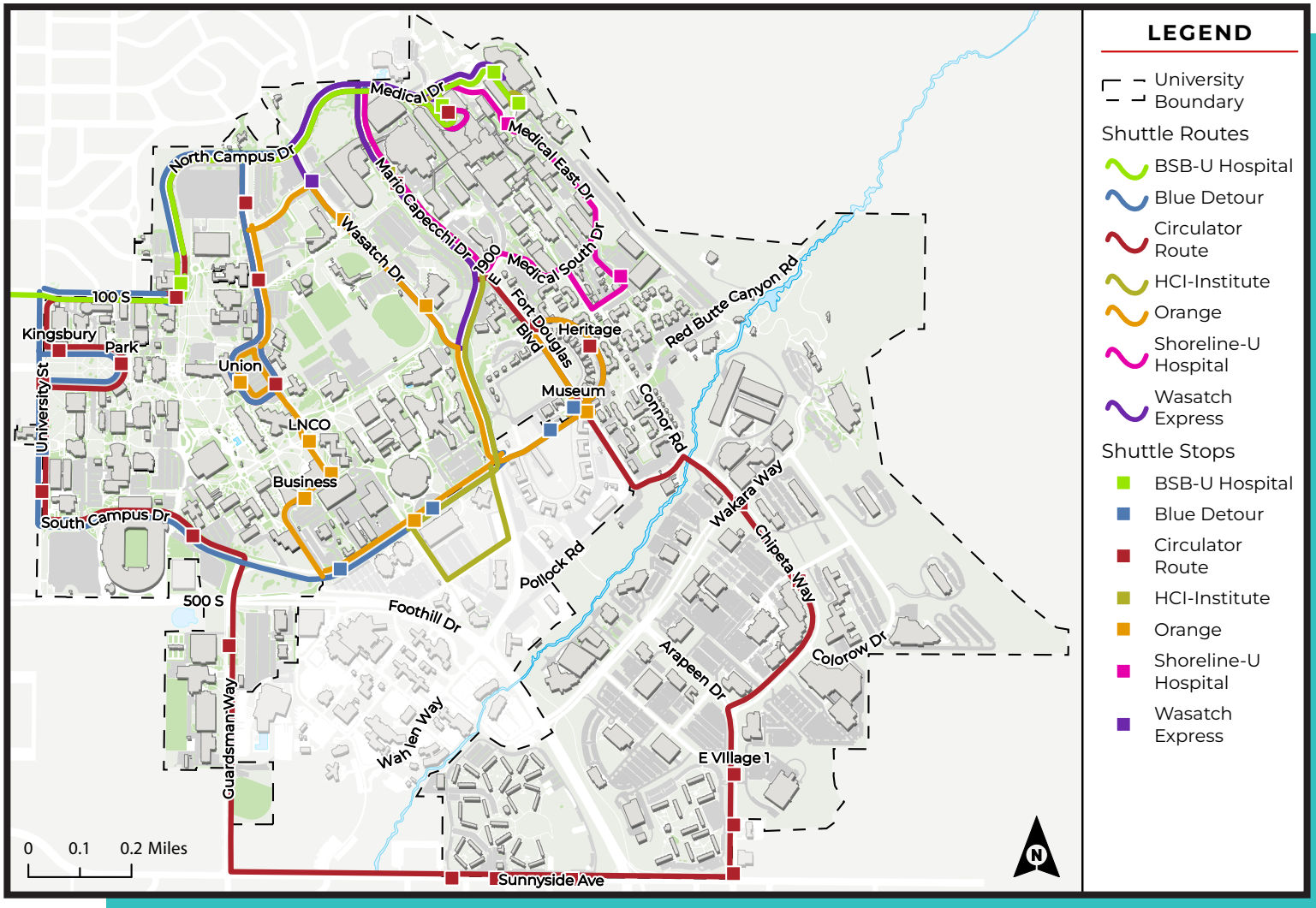
Note: Data for Spring 2022 was not available.

Table 10 lists the most utilized stops, identified from a review of Fall 2022 ridership data. Each of the top-five shuttle stops is served by at least two shuttle routes except for Business Loop shuttle stop, which is only serviced by the Orange Route. These high-utilization stops are shown in **Figure 23**.

Table 10. Top Five Bus Stops (Main Campus Routes, August - October 2022)

ROUTE	AVERAGE DAILY RIDERSHIP	HIGHEST UTILIZED STOPS BY ROUTE				
		1	2	3	4	6
BLUE DETOUR	545	Heritage (28%)	Park (20%)	Union (11%)	Kingsbury (7%)	Institute (5%)
ORANGE	1,335	Heritage (38%)	Union (36%)	Business Loop (10%)	Museum (4%)	LNCO (3%)
CIRCULATOR	542	Union (20%)	Heritage (17%)	Park (14%)	Social Work (6%)	E Village 1 (6%)
OVERALL	2,422	Heritage (31%)	Union (27%)	Park (8%)	Business Loop (5%)	Kingsbury (2%)

Figure 23. Campus Shuttle Routes (Fixed Routes)

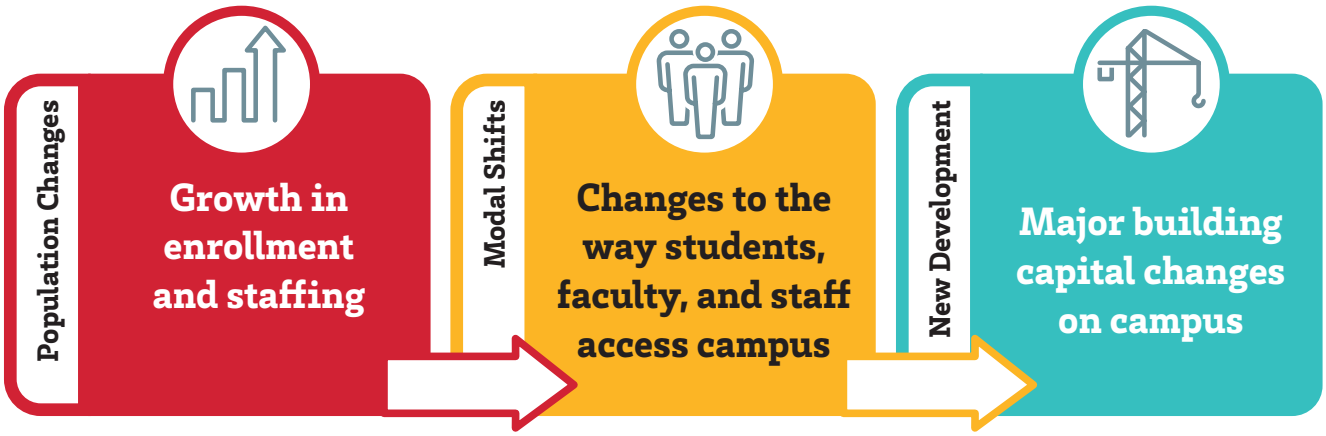


DEFINING THE FUTURE

DEFINING THE FUTURE

The previous chapter defined current conditions on campus based on data collected 2019-2021 and known as of Fall 2022. That information is valuable to identify issues that impact campus today. To define a full set of solutions for today and the coming years, the analysis considers how conditions will change on campus over the next 10 years. These changes will come as a result of population changes, modal growth, and new development, as illustrated in **Figure 24**.

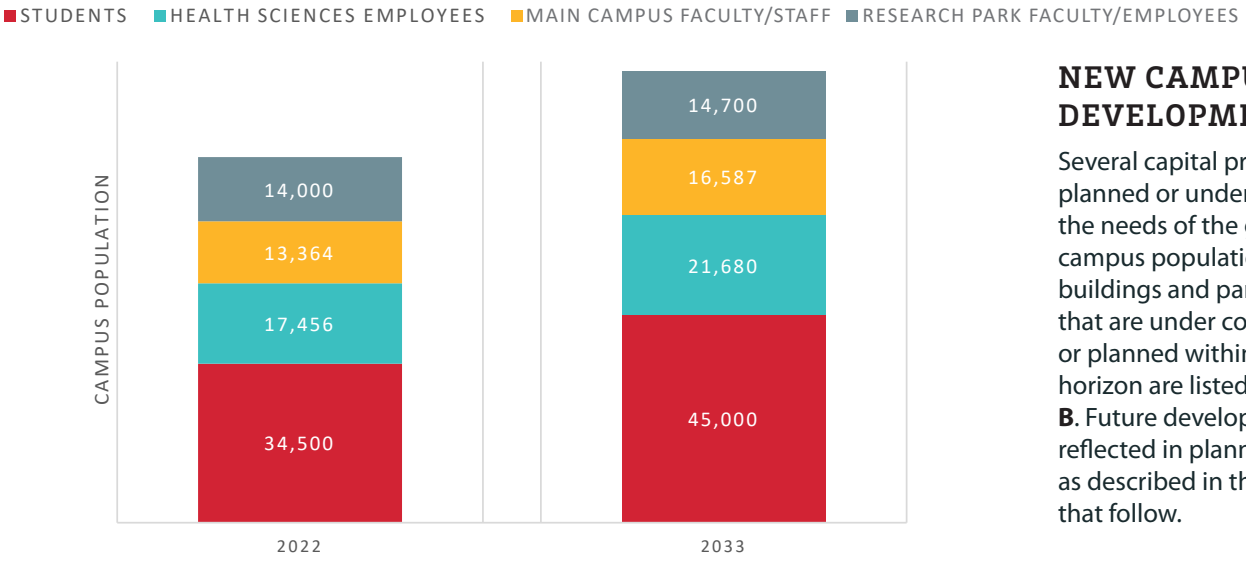
Figure 24. Factors Influencing Future Conditions



FUTURE GROWTH

The University of Utah is planning for increased programming and student enrollment. The University of Utah Strategy 2025 sets a goal to increase student enrollment to 40,000 by 2025. By 2033, the projected campus population will add more than 19,000 faculty, staff, and students as the total campus population approaches 100,000 people, as illustrated in **Figure 25.** Projections for Students, Health Sciences Employees, and Main Campus Faculty/Staff assume an approximate 2% annual growth rate. Projections for Research Park Faculty/Employees assume an overall 5 % Increase.

Figure 25. Campus Population Growth



NEW CAMPUS DEVELOPMENT

Several capital projects are planned or underway to meet the needs of the growing campus population. New buildings and parking facilities that are under construction or planned within the 10-year horizon are listed in **Appendix B**. Future development is reflected in planning scenarios as described in the sections that follow.

IMPACTS TO STREET NETWORK

The projected growth could add up to 8,600 vehicles per day to campus and adjacent streets, or an approximately 20% increase from 2022. During AM and PM peak commuting periods, the growth could add 1,680-1,850 vehicles to major arterials (North Campus Drive, South Campus Drive, Foothill Drive, etc.) that already experience congestion. Foothill Drive currently carries approximately 52,000 vehicles per day. An additional 5,000 vehicles per day, resulting from campus growth, would exceed the capacity of this 6-lane roadway, underscoring the importance of decreasing reliance on SOVs.

PARK + MODELING TOOLS

To evaluate future-year conditions, a vehicle parking demand model, Park+, was prepared for the University of Utah campus to forecast the anticipated performance and vehicle parking infrastructure needs of the growing campus. Model inputs include the following:

- Land use
- Vehicle parking facilities
- Existing occupancy (observed and assumed)
- Restrictions
- User groups
- Campus mode share
- Maximum relationship distances (walk tolerance)

These inputs are used to allocate projected vehicle parking demand to adjacent vehicle facilities based on proximity and the availability of spaces in each vehicle parking facility. The model considers conditions unique to the university, changes to the system through user inputs, and can provide the following outputs:

- Vehicle parking ratio by user group
- Vehicle parking occupancies by defined user groups
- Unmet demand by user group

Unmet demand is generated when a vehicle user is unable to locate a vehicle parking space that is proximate to their desired destination. The overall vehicle parking ratio, occupancy, and unmet demand can be used to understand where the system is strained and areas where solutions may need to be concentrated to address anticipated challenges.

PLANNING SCENARIOS

Four planning scenarios were prepared and evaluated in the Park+ model. Each scenario, as outlined in **Table 11**, adds understanding to the issues the University of Utah will face as the campus grows and invests in the transportation system. The scenarios were tested using the University of Utah Park+ parking demand model. The following sections provide a high-level description of each scenario. Detailed descriptions and output for each scenario are included in **Appendix B**.

Table 11. Park+ Model Planning Scenarios

SCENARIO	DESCRIPTION
SCENARIO 0 *Baseline Growth*	▸ Reflects development projects in the pipeline as well as population growth anticipated on the campus ▸ Identifies the strain the future system may face in a business-as-usual scenario
DISCOVER SCENARIO 1 *Supply-Based Solutions*	▸ Explores supply-based solutions to resolve unmet demand for the various user groups identified in the model
DISCOVER SCENARIO 2 *TDM Solutions*	▸ Explores how much mode shift would be needed for each user group to resolve unmet demand challenges
SCENARIO 3 *Recommended Hybrid Approach*	▸ Quantifies the impacts of recommended strategies which are a combination of parking policies, recommended additional supply, and TDM investments on the University's parking system

DEFINING THE PROBLEM: BASELINE GROWTH

Baseline Growth (Scenario 0) reflects the growth in the campus population as well as the planned building program. The scenario, illustrated in **Figure 26**, is designed to define parking conditions if no new, unprogrammed parking facilities are constructed, or no new policies or programs are implemented to discourage SOV travel to, from, and around campus.

ASSUMPTIONS

- Approximately 600,000 square feet of new academic space in four new buildings
- Approximately 5,000 new student residential beds on Main Campus
- Approximately 950 new student housing units in the West Village
- Three new buildings in the Health Sciences area
- The new 1,400-space Health Sciences Garage that is currently under construction

PERFORMANCE

Table 12. Baseline Growth Scenario, Park+ Results

USER GROUP	EXISTING CONDITIONS		SCENARIO 0 – BASELINE GROWTH		
	VEHICLE PARKING SPACES	VEHICLE PARKING OCCUPANCY	VEHICLE PARKING SPACES	VEHICLE PARKING OCCUPANCY	UNMET VEHICLE PARKING DEMAND
STUDENT	5,942	77%	4,935	90%	799
FACULTY/STAFF	2,731	64%	2,193	88%	19
STUDENT RESIDENT	2,229	77%	2,275	88%	1,526
VISITOR	1,368	57%	1,295	61%	0
HEALTH SCIENCES	6,614	67%	7,809	59%	0
RESEARCH PARK	8,947	63%	8,947	66%	0

PROBLEM STATEMENT

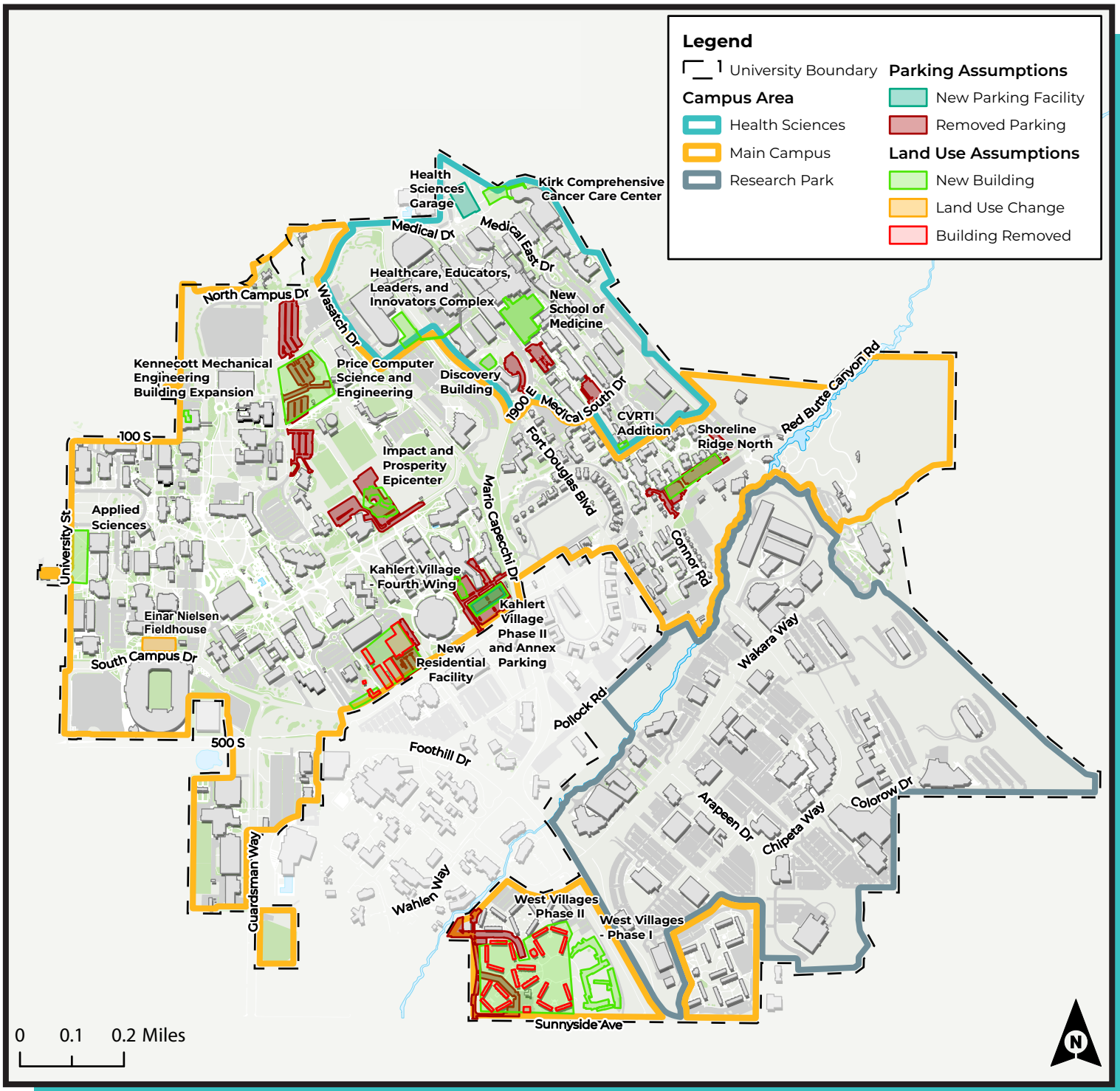
Proximity and Spatial Mismatch

- The existing parking supply is not concentrated in desirable locations for commuter students and faculty/staff.

Supply Challenge

- New vehicle parking supply cannot keep up with the rapid pace of construction and growth of the commuter student and student resident population.

Figure 26. Baseline Growth Scenario



DISCOVERY: SUPPLY-BASED SOLUTIONS

Supply-Based Solutions (Scenario 1), illustrated in **Figure 27**, was prepared to explore how much new parking supply would be needed to meet future demand, assuming that travel choices are consistent with existing conditions and no further utilization of transit or active transportation modes is encouraged.

ASSUMPTIONS

- New buildings and development as identified in Scenario 0
- 1,500 new parking spaces at the South Campus Garage for students and faculty/staff
- 1,200 new parking spaces to support a new south campus residential facility
- 625 new parking spaces for students in Main Campus
- 410 new parking spaces in Fort Douglas for student residents parking

PERFORMANCE

Table 13. Supply-Based Solutions, Park+ Results

USER GROUP	SCENARIO 0 - BASELINE GROWTH			SCENARIO 1 - SUPPLY		
	VEHICLE PARKING SPACES	VEHICLE PARKING OCCUPANCY	UNMET VEHICLE PARKING DEMAND	NET NEW SUPPLY	VEHICLE PARKING SPACES	VEHICLE PARKING OCCUPANCY
STUDENT	4,935	90%	799	+1,935	6,870	76%
FACULTY/STAFF	2,193	88%	19	+190	2,383	85%
STUDENT RESIDENT	2,275	88%	1,526	+1,610	3,885	91%
VISITOR	1,295	61%	0	-	1,295	61%
HEALTH SCIENCES	7,809	59%	0	-	7,809	59%
RESEARCH PARK	8,947	66%	0	-	8,947	66%

ALIGNMENT WITH GOALS

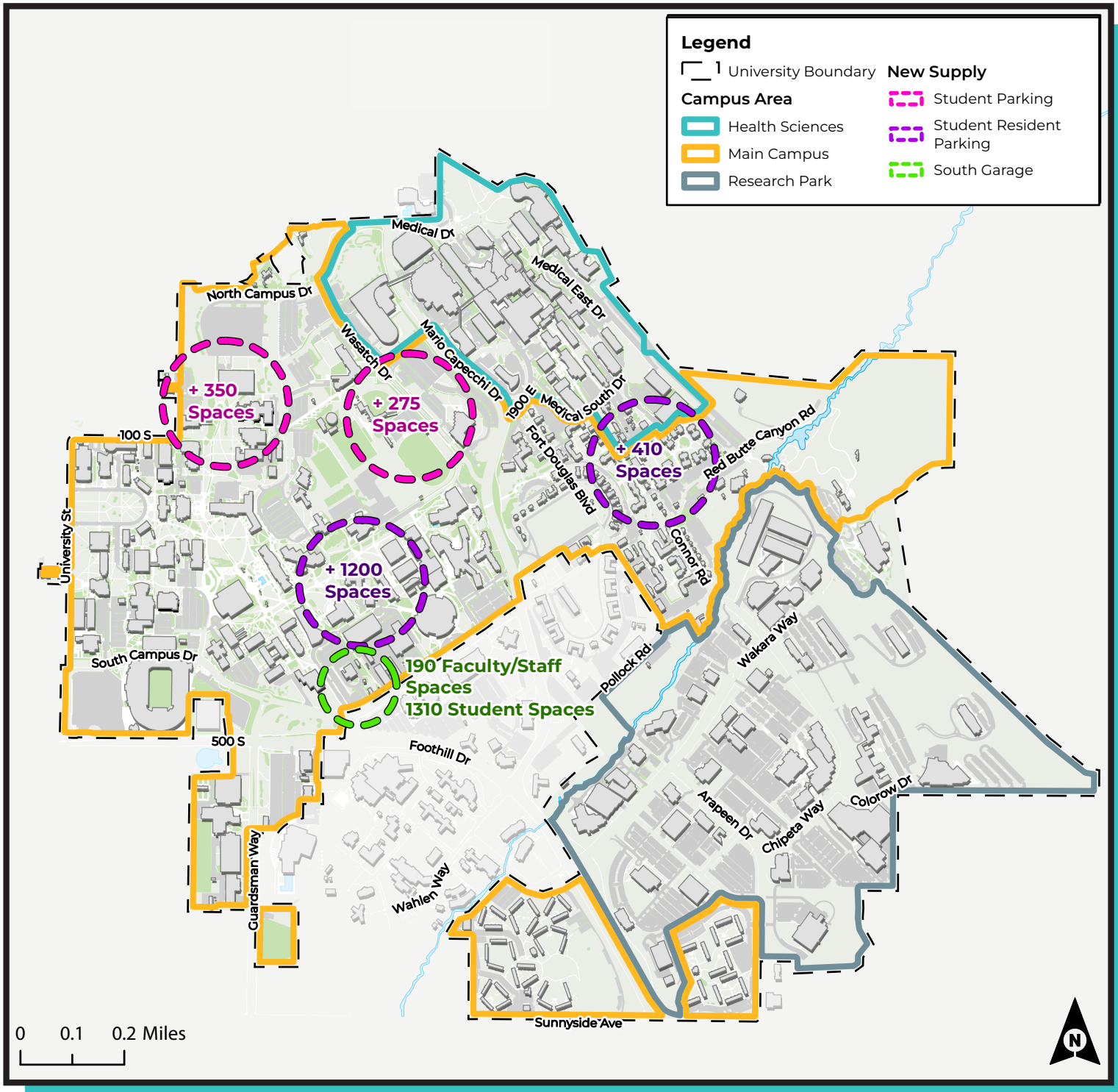
Scenario 1 is **not balanced** as it caters exclusively to SOVs.

Scenario 1 is **efficient** as it was determined through a data-driven approach and is right-sized to growth projections.

Scenario 1 is **not financially sustainable** as it would require a significant amount of investment in infrastructure.

Scenario 1 is **convenient** as it would make it easier for users to find vehicle parking on campus.

Figure 27. Supply-Based Solutions Scenario



DISCOVERY: TRANSPORTATION DEMAND MANAGEMENT SOLUTIONS

Transportation Demand Management Solutions (Scenario 2) was prepared as an exploratory scenario to estimate the required reduction in SOV use through transportation demand management (TDM) strategies or a modal shift to active transportation or transit. This scenario assumes that no additional vehicle parking facilities are constructed beyond those identified in Baseline Growth (Scenario 0). The scenario also assumes that the "walk-tolerance", defined as the distance that students, faculty, and staff are willing to walk, ride a bicycle, use campus shuttle, or a scooter to reach their destination increases.

ASSUMPTIONS

Table 14. TDM Scenario, Park+ Assumptions

USER GROUP	WALK TOLERANCE ADJUSTMENT (FT)	TOTAL WALK TOLERANCE ASSUMPTION (FT)	SOV REDUCTION FROM CURRENT	2033 TOTAL SOV MODE[1] SHARE ASSUMPTION
STUDENT	+2,000	5,000	-7%	29%
FACULTY/STAFF	-	3,000	-6%	53%
STUDENT RESIDENT	+2,500	5,000	-26%	10%

1. As compared to 2021 Annual Commuter Survey Report

PERFORMANCE

Table 15. TDM Scenario, Park+ Results

	SCENARIO 0 - BASELINE GROWTH			SCENARIO 2 - TDM
USER GROUP	VEHICLE PARKING SPACES	VEHICLE PARKING OCCUPANCY	UNMET VEHICLE PARKING DEMAND	VEHICLE PARKING OCCUPANCY
STUDENT	4,935	90%	799	84%
FACULTY/STAFF	2,193	88%	19	80%
STUDENT RESIDENT	2,275	88%	1,526	60%
VISITOR	1,295	61%	0	61%
HEALTH SCIENCES	7,809	59%	0	59%
RESEARCH PARK	8,947	66%	0	66%

ALIGNMENT WITH GOALS

Scenario 2 is **not balanced** as it prioritizes non-vehicular travel modes over all others.

Scenario 2 is environmentally **sustainable** because it addresses a reduction in SOVs and investment in cleaner modes of travel.

Scenario 2 is **efficient** as it reduces need for expensive new vehicle parking facilities, however, the required level of mode non-vehicle model share **may not be effectively** achieved.

Scenario 2 is **convenient** for both those traveling by vehicle and those who choose to travel by other modes to and within the campus.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RECOMMENDATION: HYBRID SOLUTIONS

Hybrid Solutions (Scenario 3) represents a balanced approach to addressing campus parking demand. This hybrid scenario, illustrated in **Figure 28,** portrays the outcome of the strategies outlined in the Strategic Plan and quantifies the assumptions of the strategies as model inputs.

A hybrid approach assumes a combination of TDM including enhanced transit and active transportation use, parking policies, and new supply.

The Hybrid Solutions Scenario confirms a need for new vehicle parking supply, including a new parking garage in south campus, the garage is assumed to consist of up to 1,500 parking spaces. Sensitivity testing of Scenario 3 indicates that the garage could be optimally sized at 1,000 spaces and limited to student parking only. A reduced-size garage would not provide for staff/faculty parking.

HYBRID SOLUTIONS IMPROVEMENTS

- A new south campus parking garage, providing between 1,000 and 1,500 spaces
- 150 new vehicle parking spaces constructed in conjunction with a new south campus residential facility
- 50 new vehicle spaces in Fort Douglas for student residents
- Reallocation of 100 spaces in the Guardsman lot to student residents parking

ASSUMPTIONS

Table 16. Hybrid Solutions Scenario, Park+ Assumptions

USER GROUP	NEW SUPPLY	TDM INVESTMENT OUTCOMES			
		WALK TOLERANCE ADJUSTMENT (FT)	WALK TOLERANCE ASSUMPTION (FT)	SOV REDUCTION	2033 TOTAL SOV MODE SHARE ASSUMPTION[1]
STUDENT	+1,210*	+1,000	4,000	-11%	25%
FACULTY/STAFF	+190	+500	3,500	-12%	47%
STUDENT RESIDENT	+300	+1,500	4,000	-18%	18%
VISITOR	-	-	3,000	-	-
HEALTH SCIENCES	-	-	1,000	-9%	77%
RESEARCH PARK	-	+500	1,250	-9%	81%

*Net new student supply, reflective of a reallocation of 100 spaces in the Guardsman to student residents.

1. As compared to 2021 Annual Commuter Survey Report

PERFORMANCE

Table 17. Hybrid Solutions Scenario, Park+ Results

USER GROUP	SCENARIO 0 - BASELINE GROWTH			SCENARIO 3 - HYBRID	
	VEHICLE PARKING SPACES	VEHICLE PARKING OCCUPANCY	UNMET VEHICLE PARKING DEMAND	VEHICLE PARKING SPACES	VEHICLE PARKING OCCUPANCY
STUDENT	4,935	90%	799	6,145	59.3%
FACULTY/STAFF	2,193	88%	19	2,383	68.2%
STUDENT RESIDENT	2,275	88%	1,526	2,575	67.1%
VISITOR	1,295	61%	0	1,295	60.8%
HEALTH SCIENCES	7,809	59%	0	7,809	53.3%
RESEARCH PARK	8,947	66%	0	8,947	59.3%

ALIGNMENT WITH GOALS

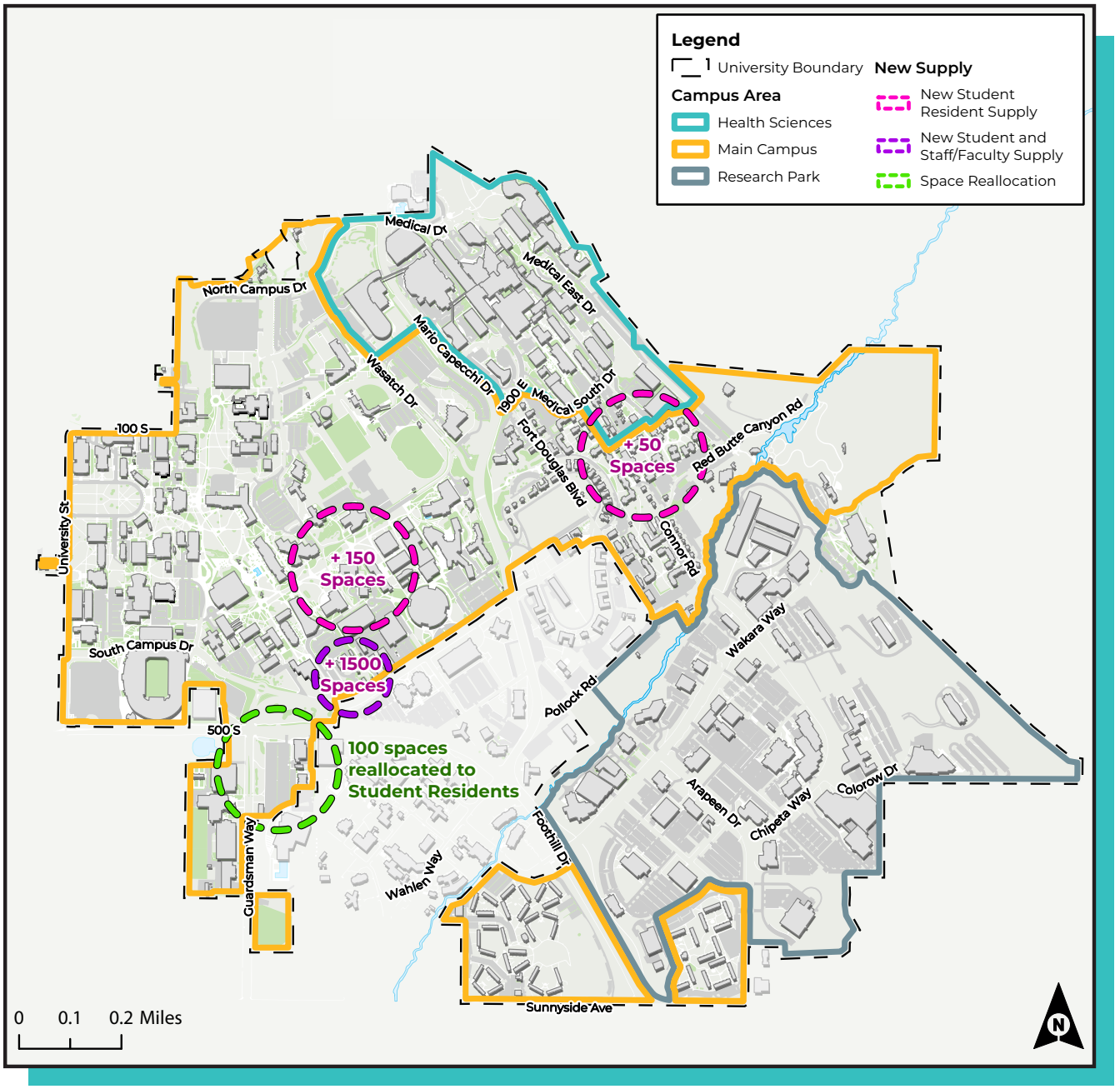
Scenario 3 is **balanced** as it provides a combination of new supply and TDM investment solutions to achieve a balanced system.

Scenario 3 is **efficient** as it considers both vehicle parking and TDM policies that create a more demand-responsive and data-driven transportation system. Required mode shifts are feasibly achieved.

Scenario 3 is environmentally **sustainable** as it supports carbon neutrality goals through investment in TDM Strategies and is financially **sustainable** by assuming a modest amount of new supply and the reallocation of spaces.

Scenario 3 is **convenient** because it provides a variety of accessible multi-modal options.

Figure 28. Hybrid (Balanced Approach) Solutions Scenario



RECOMMENDATIONS

RECOMMENDATIONS

Strategic Plan recommendations summarize the results of the previous analysis into an implementable action plan, optimizing the infrastructure and investment strategy, and identifying how and when the University of Utah needs to begin to make changes to affect the future of campus.

The recommended strategies to achieve the stated Transportation and Parking Vision, Goals, and Objectives include:

- **STRATEGY GROUP** or primary strategy area
- **DESCRIPTION** including the purpose and relevant implementation information
- **INTENDED USER GROUP** of the campus population towards whom the strategy is directed
- **INTENDED BENEFITS** of what the University of Utah community should expect from the strategy rollout
- **ANTICIPATED COSTS** of the potential capital cost of the investment, as applicable
- **PROJECTED IMPACT** or anticipated effectiveness of the strategy
- **PRIORITY** of the strategy in relation to other plan recommendations
- **TIMEFRAME** within which the strategy should be implemented
- **RELATED STRATEGIES** which influence with or require coordination with this strategy

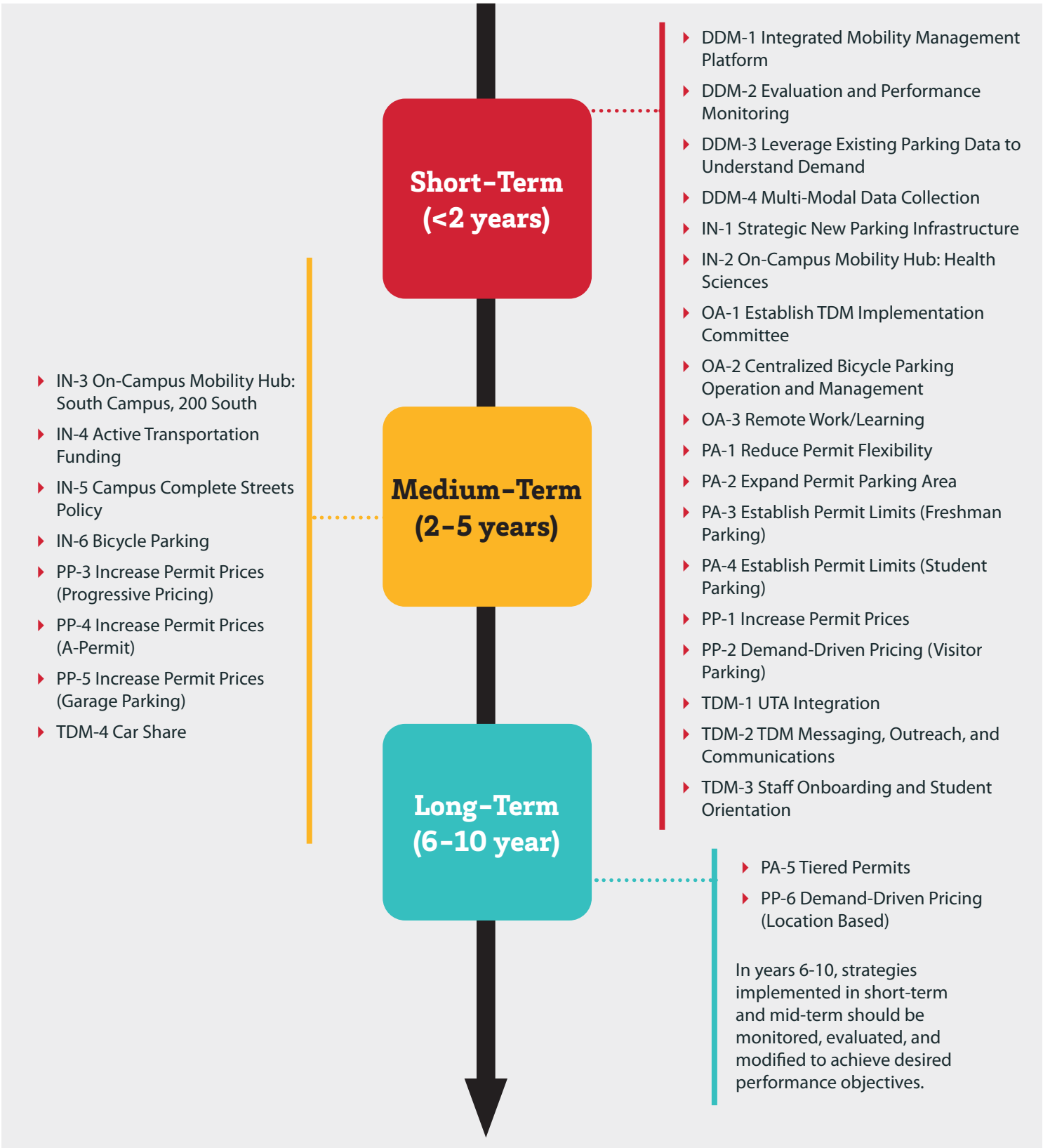
A timeline of recommendations in the short-term (<2 years), medium-term (2-5 years), and long-term (6-10 years) is illustrated in **Figure 29.** The phasing of the strategies is intended to provide time for critical communication of new changes and ample evaluation time to measure performance and adapt strategies.

Strategies are organized into the following categories:

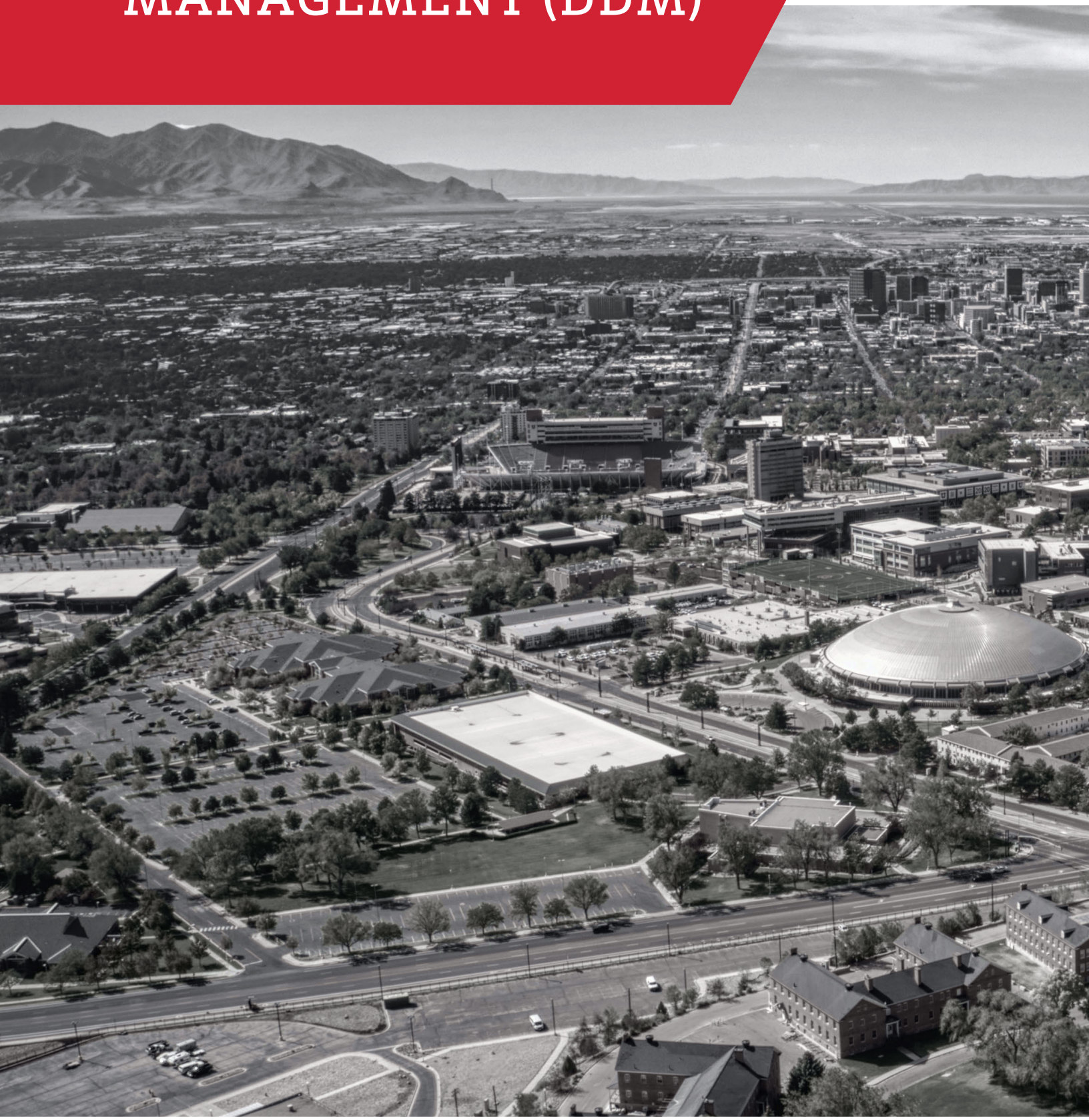
- Data-Driven Management (DDM)
- Infrastructure (IN)
- Organizational/Administrative (OA)
- Permit Allocation (PA)
- Permit Pricing (PP)
- Travel Demand Management (TDM)

For each recommendation, a strategy sheet was prepared, and they are provided in the following pages. There are 18 short-term strategies, eight medium-term strategies, and two long-term strategies. Strategy sheets are intended to serve as a roadmap to their implementation.

Figure 29. Recommendations Timeline



DATA-DRIVEN MANAGEMENT (DDM)



DDM-1 INTEGRATED MOBILITY MANAGEMENT PLATFORM

DATA-DRIVEN MANAGEMENT

INTENDED USER GROUPS

Students
Staff/Faculty
Visitors
Health Sciences
Research Park

ANTICIPATED COSTS

(2022 $s)

Costs range from $2-$4 per month per user. As an example, 40,000 users would cost between $960,000 and $1.9M per year.

PROJECTED IMPACT

High

PRIORITY

High

TIMEFRAME

Short (<2 yr)

DESCRIPTION

Procure and implement an integrated mobility management platform for the University of Utah. Platform will consist of an app and a website to provide mobility and commute information in one place.

INTENDED BENEFITS

- Facilitate flexible daily mode choice decision making
- Integrate with other mode options (UTA, SPIN, Carshare, etc.)
- Make non-driving options easy to access
- Directly incentivize shifts from non-single occupancy vehicle to other modes of transportation (transit, bicycle, walking, scooter)
- Continuously track transportation decisions from users and ridership/usage of major services and investments
- Identify real-time impacts of TDM strategies
- Provide targeted messaging to users based on proximity to campus, primary mode, and other characteristics
- Facilitate parking management (e.g., communicate when a lot is full)
- Make it easier to change parking pricing (e.g., for major events)

RELATED STRATEGY

- DDM-2 Evaluation and Performance Monitoring
- DDM-3 Leverage Existing Parking Data to Understand Demand
- DDM-4 Multi-Modal Data Collection
- OA-1 Establish TDM Implementation Committee
- PA-1 Reduce Permit Flexibility
- PA-3 Establish Permit Limits (Freshman Parking)
- PP-2 Demand-Driven Pricing (Visitor Parking)
- PP-3 Increase Permit Prices (Progressive Pricing)
- PA-4 Establish Permit Limits (Student Parking)
- TDM-2 TDM Messaging, Outreach, and Communication
- TDM-4 Car Share

ACTION ITEM	RESPONSIBLE GROUP
Select integrated mobility management platform	TDM Implementation Committee
Identify staff/group to manage and maintain platform	TDM Implementation Committee

TARGET METRICS

- Campus mode share (all user groups)
- Total UTA boardings and alightings within campus
- Parking metrics (parking permit usage; total daily parking; permits by type)
- Response rates/conversion for targeted communication efforts

ADDITIONAL INFORMATION

The system should support both the faculty/staff commute perspective (e.g., administering employee benefits and integrating with payroll) and student travel needs (e.g., access to long-term bike parking for on-campus residents). The Integrated Mobility Management Platform will include:

- Cost-sharing for carpool and carpool matching options
- Incentives/tracking for non-SOV modes
- UTA pass usage (if integrated)
- Campus shuttle ridership tracking
- Integration with existing parking management systems
- Vehicle parking payment and usage monitoring
- Ability to implement dynamic parking pricing
- Parking enforcement support
- Bike room/cage usage monitoring
- Offer and track usage of Guaranteed Ride Home program
- Targeted communications capabilities
- Ongoing high-quality data collection
- Ability to assess Return on Investment (ROI) and mode shift response to communications, incentives, and pricing changes
- Clear and useful administrator (back-end) and user (front-end) interfaces and features
- Optional integration of real-time data and other mobility apps/tools (e.g., Strava)

U of U should clearly designate roles and responsibilities for managing the platform, providing customer support to users, working with the vendor on new features, using all platform features to support TDM goals, and using the data and integrated dashboards to monitor progress and assess performance of new strategies.

PEER EXAMPLES

- Move VU Commute Hub
- OHSU Luum Transition

DDM-2 EVALUATION AND PERFORMANCE MONITORING

DATA-DRIVEN MANAGEMENT

INTENDED USER GROUPS

Students
Staff/Faculty
Visitors
Health Sciences
Research Park

ANTICIPATED COSTS

Additional responsibility to TDM Manager position, or new staff position within Commuter Service

PROJECTED IMPACT

Medium

PRIORITY

High

TIMEFRAME

Short (< 2 yr)

DESCRIPTION

Evaluate progress towards mode shift targets for each user group, report regularly, and adjust strategy as needed. Develop and track internal performance goals (parking occupancy, permit sales, user group behaviors) on an ongoing basis.

INTENDED BENEFITS

- Deeper and more meaningful analytics for campus planning, including a better understanding of commute patterns, behavior shifts, and outcomes of implemented strategies
- Consistency with university goals

RELATED STRATEGY

- DDM-1 Integrated Mobility Management Platform
- DDM-3 Leverage Existing Parking Data to Understand Demand
- DDM-4 Multi-modal Data Collection

ACTION ITEM	RESPONSIBLE GROUP
Identify specific, achievable, and measurable goals to track implementation successes and inform adjustments to TDM and parking strategies	TDM Implementation Committee Commuter Services
Partner with campus research groups (UTC) to improve analysis of performance, using data streams available to Commuter Services and other departments to better understand the impacts of parking and TDM decisions	TDM Implementation Committee Commuter Services
Track and report on progress towards goals annually	TDM Implementation Committee Commuter Services
Develop annual TDM Implementation Report	TDM Implementation Committee

TARGET METRICS

- Campus mode share (all user groups)
- Parking occupancy
- Climate Action Plan Goals, as applicable

PEER EXAMPLES

- Move VU Goals
- OHSU Transportation Demand Management Goals (refer to pages 10, 33-37, and 47-49)

DDM-3 LEVERAGE EXISTING PARKING DATA TO UNDERSTAND DEMAND

DATA-DRIVEN MANAGEMENT

INTENDED USER GROUPS

Students
Staff/Faculty
Visitors
Health Sciences
Research Park

ANTICIPATED COSTS

New staff position within Commuter Services

New equipment may cost up to $100,000 or more.

PROJECTED IMPACT

Low

PRIORITY

High

TIMEFRAME

Short (< 2 yr)

DESCRIPTION

Use License Plate Recognition, back-end management, Parking Access Revenue Control Systems (PARCS), and other existing data streams to enhance understanding of parking behaviors on campus and to support other strategies.

INTENDED BENEFITS

- Enhance user behavior data to inform performance-based decision making

RELATED STRATEGY

- DDM-1 Integrated Mobility Management Platform
- DDM-2 Evaluation and Performance Monitoring
- DDM-4 Multi-modal Data Collection

ACTION ITEM	RESPONSIBLE GROUP
Prepare data improvement plan to review existing data streams and opportunities for enhancement. New equipment may be required.	Commuter Services TDM Implementation Committee

TARGET METRICS

- Parking occupancy
- Permit sales
- Parking citations

DDM-4 MULTI-MODAL DATA COLLECTION

DATA-DRIVEN MANAGEMENT

INTENDED USER GROUPS

Students
Faculty/Staff
Health Sciences
Research Park
Visitors

ANTICIPATED COSTS

New staff position within Commuter Services

PROJECTED IMPACT

Medium

PRIORITY

Medium

TIMEFRAME

Short (<2 yr)

DESCRIPTION

Enhance campus-wide multi-modal data collection to support mode shift goals. Enhanced data may include travel mode by user group (student, etc.) and active transportation usage on key routes and facilities.

INTENDED BENEFITS

- Improved understanding of transportation trends on campus
- Support performance measure tracking of other strategies
- Ensure that the TDM program is data-driven

RELATED STRATEGY

- DDM-2 Evaluation and Performance Monitoring
- DDM-3 Leverage existing parking data streams to better understand demands
- IN-6 Bicycle Parking
- OA-2 Centralized Bicycle Parking Operation & Management

ACTION ITEM	RESPONSIBLE GROUP
Conduct travel survey annually	Commuter Services
Conduct regular bicycle parking monitoring to identify hourly, daily, weekly, and monthly demand trends across representative installations	Commuter Services
Utilize passive data collection equipment (e.g., pneumatic tubes, infrared bike counters, AI video algorithms) and other tools to regularly perform user counts for all modes	Commuter Services
Leverage the Integrated Mobility Management Platform (DDM 1) to collect data on Campus mode share (all user groups), Vehicle Miles Traveled (VMT) by mode, and mode shift trends	Commuter Services
Collaborate with University departments to conduct focused analysis	TDM Implementation Committee

TARGET METRICS

- Completed annual travel survey data and report
- Bicycle parking count data and report

PEER EXAMPLES

- UC Davis Campus Travel Survey
- UW 2019 Bike Count Report
- Colorado State University bike counter (source: Bikes Count on Campus: Using Data To Support Bicycle Friendly Universities)
- American University Annual Transportation Performance Monitoring Plan Report


THE UNIVERSITY OF UTAH
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INFRASTRUCTURE (IN)

IN-1 STRATEGIC NEW PARKING INFRASTRUCTURE

INFRASTRUCTURE

INTENDED USER GROUPS

Students
Staff/Faculty
Visitors

ANTICIPATED COSTS

(2022 $s)

$95M (South Campus Garage);
$7k-$9k/stall for surface parking

PROJECTED IMPACT

Medium

PRIORITY

High

TIMEFRAME

Planning: Short (<2 yr)
Design & Construction: Medium (2-5 yr)

DESCRIPTION

Plan, design, and construct new parking facilities, consistent with Hybrid Solutions (Scenario 3), which includes a new south campus parking garage, new parking near Shoreline Ridge, parking spaces in conjunction with the new south campus residential facility, and reallocating existing underutilized parking spaces at the Guardsman lot from Student Commuter to Student Residents. The Hybrid Solutions scenario represents a balanced approach to addressing campus parking demand through a combination of TDM, enhanced active transportation use, parking policies, and new supply.

Hybrid Solutions scenario parking infrastructure recommendations assume the the percentage of campus population that travels by single occupancy vehicle to, from, and around campus is reduced by 12% (from today's 49% based on the 2021 Annual Campus Travel Survey).

Sensitivity testing of Scenario 3 indicates that if mode choice goals are achieved, the new South Campus garage could be optimally sized at 1,000 spaces and limited to student parking only.

INTENDED BENEFITS

- Provide parking supply in areas of unmet (latent) demand

RELATED STRATEGY

- PA-2 Expand Permit Parking Area

ACTION ITEM	RESPONSIBLE GROUP
New South Campus Parking Garage (1,000 to 1,500 spaces)	Campus Planning, Design & Construction
New parking spaces near Shoreline Ridge (50 spaces)	Campus Planning, Design & Construction
New parking spaces adjacent to new south campus residential facility (150 spaces)	Campus Planning, Design & Construction, Student Life
Reallocate spaces at Guardsman lot from Student Commuters to Student Residents (~100 spaces)	Commuter Services

TARGET METRICS

- Parking Occupancy

IN-2 ON-CAMPUS MOBILITY HUB: HEALTH SCIENCE

INFRASTRUCTURE

INTENDED USER GROUPS

Students
Faculty/Staff
Health Sciences
Research Park
Visitors

ANTICIPATED COSTS

(2022 $s)

~ $1M, costs to be determined

PROJECTED IMPACT

High

PRIORITY

High

TIMEFRAME

Planning: Short (>2 yr)
Design & Construction: Medium (2-5 yr)

DESCRIPTION

Plan and construct a mobility hub that consolidates transportation services at Health Sciences location. The Health Sciences location is located just west of the UTA Health Sciences TRAX Station. This site will primarily include surface parking with landscaping, bathroom facilities, and minimal other improvements.

INTENDED BENEFITS

- Complimentary services such as end of trip facilities, bike parking, and trip planning
- Seamless experience for multimodal trips to, from, and within campus
- Enhanced functionality and safety of public transit space
- Increased transit ridership among all user groups

RELATED STRATEGY

- IN-3 On-Campus Mobility Hub: South Campus, 200 South
- IN-4 Active Transportation Funding
- IN-5 Campus Complete Streets Policy
- IN-6 Bicycle Parking
- TDM-1 UTA Integration

ACTION ITEM	RESPONSIBLE GROUP
Identify operational needs in conjunction with UTA	Campus Planning, Design & Construction
Pursue funding through collaboration with Wasatch Front Regional Council, UTA and Salt Lake City	Campus Planning, Design & Construction

TARGET METRICS

- Campus mode share (all user groups)
- UTA boardings & alightings within Campus
- Micro-mobility Trips Originating or Terminating within 250 feet of a Mobility Hub
- Climate Action Plan Goals, as applicable

IN-3 ON-CAMPUS MOBILITY HUB: SOUTH CAMPUS, 200 SOUTH

INFRASTRUCTURE

INTENDED USER GROUPS

Students
Staff/Faculty
Visitors

ANTICIPATED COSTS

(2022 $s)

South Campus: $22.5M|
200 South: ~$1M, costs to be determined

PROJECTED IMPACT

Medium

PRIORITY

High

TIMEFRAME

Planning: Medium (2-5 yr)
Design & Construction: Long (6-10 yr)

DESCRIPTION

Plan and construct a mobility hub that consolidates transportation services at South Campus and 200 South location.

South Campus: University of Utah Mobility Hub Study states that the 200 South Mobility Hub will primarily include surface parking with landscaping, bathroom facilities, and minimal other improvements. The study states that site may contain a variety of landscape and hardscape improvements, as well a potential of 14,000 square feet of commercial space and roughly 135 residential units in a stacked-flat design with above-grade parking.

200 South: University of Utah Mobility Hub Study states that the site will include some intersection changes and minimal landscape and hardscape improvements for the bulb-outs, curb extensions, and bus and shuttle stop areas. The 200 South Mobility Hub should be planned and implemented with Salt Lake City's 200 South transportation improvements.

INTENDED BENEFITS

- Complementary services such as end-of-trip facilities, bike parking, trip planning, etc.
- Seamless experience for multimodal trips to, from, and within campus
- Enhanced functionality and safety of public transit space
- Increased transit ridership among all user groups

RELATED STRATEGY

- IN-2 On-Campus Mobility Hub Development: Health Science
- IN-4 Active Transportation Funding
- IN-5 Campus Complete Streets Policy
- IN-6 Bicycle Parking
- TDM-1 UTA Integration

ACTION ITEM	RESPONSIBLE GROUP
Identify operational needs in conjunction with UTA	Campus Planning, Design & Construction
Pursue funding through collaboration with Wasatch Front Regional Council, UTA, and Salt Lake City	Campus Planning, Design & Construction

TARGET METRICS

- Campus mode share (all user groups)
- UTA boardings and alightings within campus
- Micromobility trips originating or terminating within 250 feet of a mobility hub
- Climate Action Plan Goals, as applicable

IN-4 ACTIVE TRANSPORTATION FUNDING

INFRASTRUCTURE

INTENDED USER GROUPS

Students
Faculty/Staff
Health Sciences
Research Park
Visitors

ANTICIPATED COSTS

Costs to be determined

PROJECTED IMPACT

Medium

PRIORITY

High

TIMEFRAME

Medium (2-5 yr)

DESCRIPTION

Establish dedicated funding stream for active transportation projects, bicycle parking, and bicycle repair. Opportunities include:

- Dedicate a percentage of vehicle parking revenue to bicycle parking
- Incorporate bicycle parking into design of new buildings

INTENDED BENEFITS

- Investment in active transportation facilities reduces need for new parking facilities

RELATED STRATEGY

- OA-1 Establish TDM Implementation Committee
- DDM-1 Integrated Mobility Management Platform
- TDM-2 TDM Messaging, Outreach, and Communication

ACTION ITEM	RESPONSIBLE GROUP
Develop policies to establish active transportation funding sources	TDM Implementation Committee
Create policy to incorporate new bicycle infrastructure into future development	Campus Planning, Design & Construction

TARGET METRICS

- Annual funding for active transportation projects

IN-5 CAMPUS COMPLETE STREETS POLICY

INFRASTRUCTURE

INTENDED USER GROUPS

Students
Faculty/Staff
Health Sciences
Research Park
Visitors

ANTICIPATED COSTS

Programmatic

PROJECTED IMPACT

Low-High

PRIORITY

Medium

TIMEFRAME

Medium (2-5 yr)

DESCRIPTION

Develop a University policy that prioritizes walking, biking, and connections to transit during design of campus buildings and internal roadway connections:

- Internal University policy to support roadway designs through campus which prioritize non-motorized users and adhere to national active transportation facility design guidance (FHWA Bikeway Facility Design Guide, NACTO Urban Bikeway Design Guide)
- Prioritize construction of low-stress multimodal connections to reduce active transportation trip distances from peripheral parking lots, connecting to transit, and within campus

INTENDED BENEFITS

- Improved connectivity for active transportation users across campus
- Increased active transportation trips to, from, and within campus
- Reduced active transportation trip distances between campus districts (Research Park, Main Campus, Health Sciences, etc.)

RELATED STRATEGY

- IN-2 On-Campus Mobility Hub: Health Sciences
- IN-3 On-Campus Mobility Hub: South Campus, 200 South
- IN-4 Active Transportation Funding
- OA-2 Centralize Bicycle Parking Operation and Management

ACTION ITEM	RESPONSIBLE GROUP
Partner with UTA and Salt Lake City to pursue grant funding for high-quality, low-stress active transportation projects from 2011 Master Plan	TDM Implementation Committee
Develop Campus Complete Streets policy	TDM Implementation Committee, Campus Planning, Design, & Construction
Identify potential adjustments to 2011 Bicycle Master Plan project recommendations	TDM Implementation Committee
Reprioritize projects in the 2011 Bicycle Master Plan which create low-stress connections (Red Butte Creek Trail, Mario Cappechi Path, Chipeta Protected Bike Lane, etc.)	TDM Implementation Committee

TARGET METRICS

- N/A

IN-6 BICYCLE PARKING

INFRASTRUCTURE

INTENDED USER GROUPS

Students
Faculty/Staff
Health Sciences
Research Park
Visitors

ANTICIPATED COSTS

Project-specific

PROJECTED IMPACT

Medium

PRIORITY

Medium

TIMEFRAME

Medium (2-5 yr)

DESCRIPTION

Create a standard high-quality bicycle parking offering across campus:

- Replace bicycle parking that does not meet Association of Pedestrian and Bicycle Professionals (APBP) guidelines
- Enhance real and perceived safety at short and long-term bicycle parking installations (e.g., lighting, security cameras, and visible siting)
- Upgrade wayfinding/informational signage to help locate existing bicycle parking (indoor and outdoor)
- Incorporate bicycle parking locations and types into integrated mobility management platform
- Provide access to charging infrastructure (power outlets) at long-term indoor bicycle parking installations
- Add bicycle repair stations to indoor and outdoor bicycle parking hubs which are more than ¼ mile away from existing bicycle repair stations (Research Park, University of Utah Health, Eccles Outpatient, etc.)
- Internal University policy to incorporate end-of-trip facilities (showers/changing rooms) and bicycle storage opportunities into designs of new buildings in convenient locations

INTENDED BENEFITS

- Enhanced comfort and predictability for bicyclists parking within campus
- Increased bicycle mode-share across campus

RELATED STRATEGY

- IN-4 Active Transportation Funding
- IN-5 Campus Complete Streets Policy
- OA-2 Centralize Bicycle Parking Operations and Management
- DDM-1 Integrated Mobility Management Platform
- DDM-4 Multi-Modal Data Collection

ACTION ITEM	RESPONSIBLE GROUP
Construct ~350 covered bike racks and ~1,300 secure bicycle storage for a total of ~1,600 new bicycle parking spaces on campus; facilities should be located in central campus as well as peripheral parking lots to promote last-mile connections	Commuter Services, Facilities, Sustainability

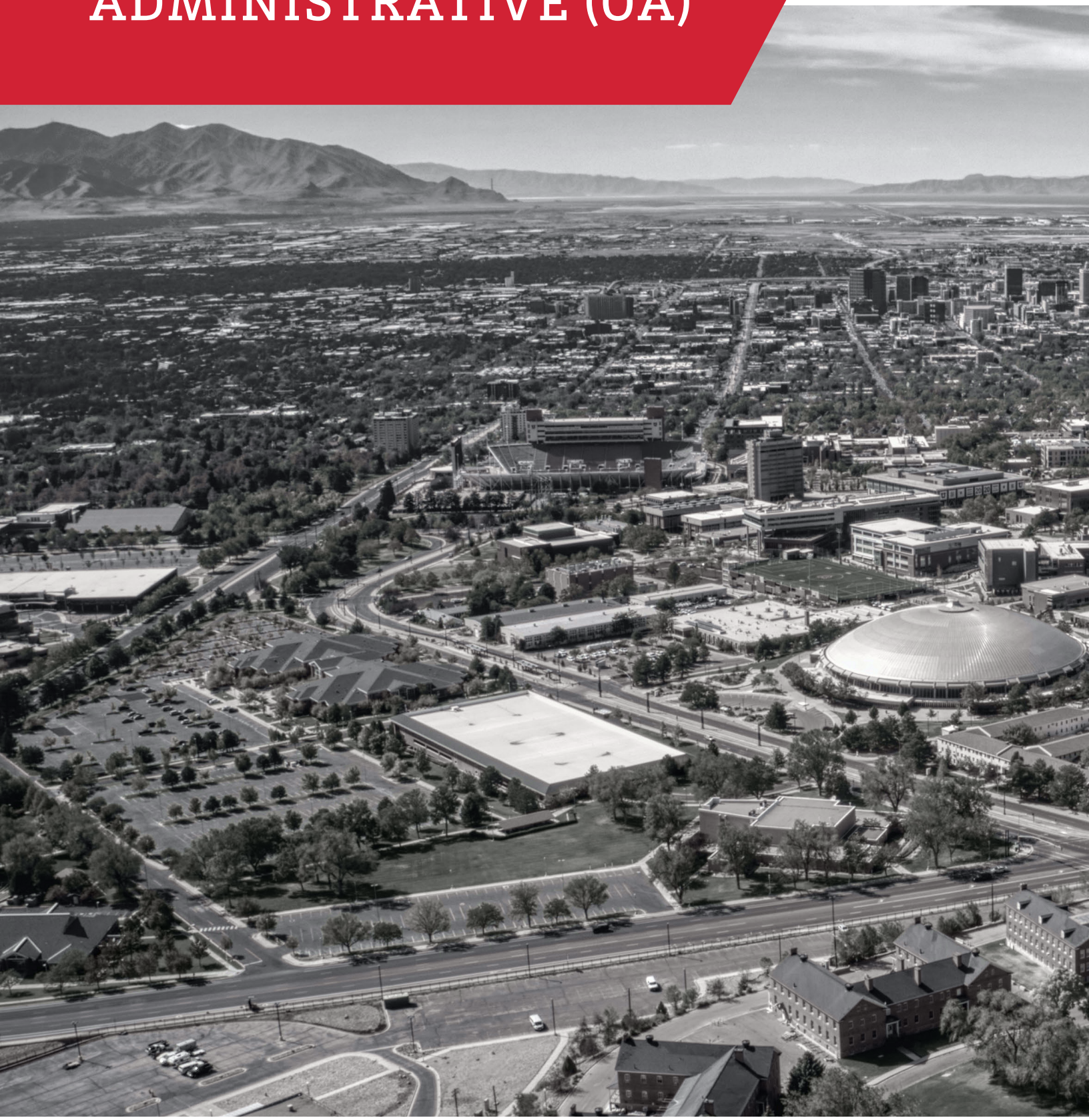
TARGET METRICS

- Campus Mode Share (Annual Campus Travel Survey)
- Bicycle Parking Utilization Rates (Multi-Modal Data Collection)
- Long-term bicycle parking spaces to student population ratio
- Short-term bicycle parking spaces to student population ratio
- % of APBP-compliant bike parking spaces
- SOV trips to campus

PEER EXAMPLES

- UC Davis Bicycle Parking webpage
- OHSU Go By Bike Valet Bike Parking
- UC Boulder Secure Bike Shelter Access

ORGANIZATIONAL/ ADMINISTRATIVE (OA)



OA-1 ESTABLISH TDM IMPLEMENTATION COMMITTEE

ORGANIZATIONAL/ ADMINISTRATIVE

INTENDED USER GROUPS

Students
Faculty/Staff
Health Sciences
Research Park
Visitors

ANTICIPATED COSTS

N/A

PROJECTED IMPACT

High

PRIORITY

High

TIMEFRAME

Establish: Short (<2 yr)
Implementation: Ongoing

DESCRIPTION

Establish inter-departmental committee to champion implementation of TDM and parking strategies.

INTENDED BENEFITS

- Facilitate TDM implementation and tracking
- Cross-departmental collaboration
- Pooled resources to support implementation of TDM strategies

RELATED STRATEGY

- DDM-2 Evaluation and Performance Monitoring
- OA-2 Centralize Bicycle Parking Operations and Management
- TDM-2 TDM Messaging, Outreach, and Communication

ACTION ITEM	RESPONSIBLE GROUP
Establish TDM Implementation Committee	Lead: - Commuter Services Supporting: - Campus Planning, Design & Construction - Sustainability - Student Life - Public Information Contacts

TARGET METRICS

- Campus Mode Share (Annual Campus Travel Survey)

OA-2 CENTRALIZED BICYCLE PARKING OPERATIONS AND MANAGEMENT

ORGANIZATIONAL/ ADMINISTRATIVE

INTENDED USER GROUPS

Students
Faculty/Staff
Health Sciences
Research Park
Visitors

ANTICIPATED COSTS

Staff dedicated to bicycle parking operation and management

PROJECTED IMPACT

Medium

PRIORITY

Medium

TIMEFRAME

Short (<2 yr)

DESCRIPTION

Provide consistency, predictability, and efficiency for bicycle parking across campus by unifying operations, management, and funding.

- Centralize oversight and operations of bike cages and secure bike rooms across campus under one office/department
- Establish dedicated funding stream for bicycle parking and bicycle repair enhancements (i.e., dedicate a percent of vehicle parking revenue to expand bicycle parking)
- Incorporate bicycle parking into budget proposals and designs of new buildings
- Review past exceptions granted regarding bicycle parking policy during building design; identify and close enforcement/policy gaps which contributed to exceptions being made
- Monitor bike parking capacity, demands, trends, and needs, and meet these through policy, stand-alone capital investments, and integration through planned development
- Use Integrated Mobility Management Platform to monitor bike room/cage use, and communicate effectively about bike parking
- Consider valet bike parking at high-demand locations
- Centralize bicycle permit process and bicycle parking enforcement for all short and long term parking areas.

INTENDED BENEFITS

- Enhanced comfort, convenience, security, and predictability for bicyclists parking within campus, all of which support mode shift to bicycling
- Budgetary efficiencies through consolidation of services
- Improved bicycle parking coverage in coordination with new campus construction

RELATED STRATEGY

- DDM-1 Integrated Mobility Management Platform
- DDM-2 Evaluate and Performance Monitoring
- DDM-4 Multi-Modal Data Collection
- IN-4 Active Transportation Funding
- IN-5 Campus Complete Streets Policy
- IN-6 Bicycle Parking
- OA-1 Establish TDM Implementation Committee

ACTION ITEM	RESPONSIBLE GROUP
Collaborate on management strategy for bicycle parking and identify funding to support TDM implementation	Commuter Services, Facilities, Sustainability

TARGET METRICS

- Campus Mode Share (Annual Campus Travel Survey)
- Bicycle Parking Utilization Rates (Multi-Modal Data Collection)
- Long-term bicycle parking spaces to student population ratio
- Short-term bicycle parking spaces to student population ratio

OA-3 REMOTE WORK / LEARNING

ORGANIZATIONAL/ ADMINISTRATIVE

INTENDED USER GROUPS

Students
Faculty/Staff
Health Sciences
Research Park

ANTICIPATED COSTS

Programmatic, may require additional IT infrastructure, to be determined

PROJECTED IMPACT

Medium

PRIORITY

Medium

TIMEFRAME

Short (<2 yr)

DESCRIPTION

Support telework and remote learning through policy, scheduling, training, and communication to reduce trips to campus.

- Encourage telework/telelearning on bad-air days
- Develop University Employee Policy on flexible work arrangements to optimize remote work opportunities
- Expand hybrid class scheduling which includes both in-person and virtual instructions to reduce trips to campus
- Leverage Integrated Mobility Management Platform to promote remote work/learning to commuter students and faculty

INTENDED BENEFITS

- Reduce total trips to campus

RELATED STRATEGY

- DDM-1 Integrated Mobility Management Platform
- PA-1 Reduce Permit Flexibility
- PA-3 Establish Permit Limits (Freshmen Parking)
- PA-4 Establish Permit Limits (Student Parking)
- OA-1 Establish TDM Implementation Committee
- TDM-2 TDM Messaging, Outreach, and Communication
- TDM-3 Staff Onboarding and Student Orientation

ACTION ITEM	RESPONSIBLE GROUP
Develop supportive University policy	Administration
Adjust class scheduling/format options for professors	Administration
Increased promotion of flexible work arrangements	TDM Implementation Committee
Develop University Employee Policy on flexible work	Human Resources, Administration

TARGET METRICS

- Campus Mode-Share (% telework/telecommuting)
- Ratio of traditional vs. hybrid class format offerings
- Additional SMART Goals/Climate Action Plan Goals, as applicable


J. WILLARD MARRIOTT LIBRARY

PERMIT ALLOCATION (PA)

PERMIT ALLOCATION (PA)

PA-1 REDUCE PERMIT FLEXIBILITY

PERMIT ALLOCATION

INTENDED USER GROUPS
Student Residents

ANTICIPATED COSTS
Staff time, education/outreach

PROJECTED IMPACT
Medium

PRIORITY
Medium

TIMEFRAME
Short (< 2 yr)

DESCRIPTION
Limit residential students to Housing (HU) lots only (no flexing to U-permit spaces).

INTENDED BENEFITS
- Reduce competition for U-Permit spaces, freeing up 500-1,000 +/- spaces during peak conditions in these lots; potential unintended effects include increased competition for visitor permit spaces where H students begin to drive in for those locations

RELATED STRATEGY
- PA-3 Establish Permit Limits (Freshmen Parking)
- PA-4 Establish Permit Limits (Student Parking)
- TDM-3 Staff Onboarding and Student Orientation
- TDM-4 Car Share

ACTION ITEM	RESPONSIBLE GROUP
Adjust student resident permit	Commuter Services

TARGET METRICS
- U-Permit and H-Permit occupancy levels – determine where space allocation shifts may be considered

PA-2 EXPAND PERMIT PARKING AREAS

PERMIT ALLOCATION

INTENDED USER GROUPS

Staff/Faculty
Visitors

ANTICIPATED COSTS

Staff time, signage, education

PROJECTED IMPACT

Medium

PRIORITY

Medium

TIMEFRAME

Short (<2 yr)

DESCRIPTION

Increase permit/visitor spaces in garages with lower utilization:

- Add daily parking before increasing permit sales (daily parking is easier to withdraw if there are unintended consequences)
- Projected parking occupancy data shows parking spaces located adjacent to Main Campus that can be re-allocated:
  - Lot 45: Ambulatory Care Garage
    - Utilization: 64%
    - Spaces: 610
  - Lot 50: North Medical Garage
    - Utilization: 70%
    - Spaces: 806
  - Lot 51: Helipad Garage
    - Utilization: 74%
    - Spaces: 380
  - Lot 81: Shoreline Ridge Garage
    - Utilization: 61%
    - Spaces: 910

INTENDED BENEFITS

- Provide more spaces for permits (A-Permits) and Visitor/Daily parking; unintended impacts may include increased competition for garage spaces, and reduced availability and convenience for target audience (hospital staff and patients/visitors)

RELATED STRATEGY

- IN-1 Strategic New Parking Infrastructure
- DDM-4 Multi-Modal Data Collection
- PP-2 Demand-Driven Pricing (Visitor Parking)
- PP-5 Increase Permit Prices (Garage Permit)

ACTION ITEM	RESPONSIBLE GROUP
Improve data monitoring to understand availability of spaces to re-allocate and communicate to the campus population	Commuter Services
Adjust allocation of spaces in garage	Commuter Services
Monitor parking garage occupancy levels, with target goals of 75-85% occupied on average	Commuter Services, TDM Implementation Committee

TARGET METRICS

- Parking garage occupancy levels – using thresholds to determine when to cut off oversell

PA-3 ESTABLISH PERMIT LIMITS (FRESHMAN PARKING)

PERMIT ALLOCATION

INTENDED USER GROUP

Students

ANTICIPATED COSTS

Programmatic

PROJECTED IMPACT

High

PRIORITY

Medium

TIMEFRAME

Medium (2-5 yr)

DESCRIPTION

Restrict freshmen to park in fringe or outer parking areas only

INTENDED BENEFITS

- Reduce competition for campus core U-Permit spaces and reduce core parking demand
- Long-term shift to non-automotive modes on campus
- An unintended effect is a potential increase to visitor parking by freshmen students

RELATED STRATEGY

- PA-1 Reduce Permit Flexibility
- PA-4 Establish Permit Limits (Student Parking)
- TDM-1 UTA Integration
- TDM-2 TDM Messaging, Outreach, and Communication
- TDM-4 Car Share

ACTION ITEM	RESPONSIBLE GROUP
Adjust parking policy	Commuter Services
Educate incoming students to support shifts to non-automotive modes	Commuter Services, Student Life
Improve micro-mobility options on campus	Commuter Services
Improve active transportation or transit connections to campus for commuting freshmen	Commuter Services
Monitor U-permit & visitor parking occupancy and sales	Commuter Services, TDM Implementation Committee

TARGET METRICS

- U-Permit occupancy and sales –determine where space allocation shifts need to be considered
- Visitor parking occupancy –determining where space allocation shifts need to be considered

PA-4 ESTABLISH PERMIT LIMITS (STUDENT PARKING)

PERMIT ALLOCATION

INTENDED USER GROUP

Students

ANTICIPATED COSTS

Programmatic

PROJECTED IMPACT

High

PRIORITY

Medium

TIMEFRAME

Medium (2-5 yr)

DESCRIPTION

Limit the number of on-campus student parking spaces, through the use of seniority and/or a lottery

INTENDED BENEFITS

- Reduce competition for campus core U-Permit spaces and reduce core parking demand
- Long-term shift to non-automotive modes on campus
- An unintended effect is increases to visitor parking levels by non-permitted students

RELATED STRATEGY

- PA-3 Establish Permit Limits (Freshman Parking)
- PP-5 Increase Permit Prices (Garage Permit)
- TDM-4 Car Share
- TDM-1 UTA Integration
- TDM-2 TDM Messaging, Outreach, and Communication

ACTION ITEM	RESPONSIBLE GROUP
Adjust parking policy	Commuter Services
Educate incoming students to support shifts to non-automotive modes	Sustainable Office, Commuter Services, Student Life
Improve micromobility options on campus	Commuter Services
Improve active transportation or transit connections to campus for commuting freshmen	Commuter Services
Monitor U-permit and visitor parking occupancy and sales	Commuter Services, TDM Implementation Committee

TARGET METRICS

- U-Permit occupancy and sales – observing and determining where space allocation shifts need to be considered
- Visitor parking occupancy – observing and determining where space allocation shifts need to be considered

PA-5 TIERED PERMITS

PERMIT ALLOCATION

INTENDED USER GROUPS

Students
Staff/Faculty

ANTICIPATED COSTS

Varies by project considering size and complexity of sites

PROJECTED IMPACT

Medium

PRIORITY

Low

TIMEFRAME

Long (6-10 yr)

DESCRIPTION

Implement park-and-ride permits at perimeter or off-campus

INTENDED BENEFITS

- Create equitable parking options with adequate connections to transit and modal options; this may create a perception of inequity for lower-paid staff

RELATED STRATEGY

- PA-2 Expand Permit Parking Areas
- PA-3 Establish Permit Limits (Freshmen Parking)
- TDM-1 UTA Integration

ACTION ITEM	RESPONSIBLE GROUP
Implement consistent and reliable shuttling from park-and-ride facilities into campus core	Commuter Services
Identify and establish off-campus parking locations	Commuter Services, TDM Implementation Committee
Implement park-and-ride permits	Commuter Services, TDM Implementation Committee

TARGET METRICS

- System occupancy levels (core vs. fringe)

PERMIT PRICING (PP)

PERMIT PRICING (PP)

PP-1 INCREASE PERMIT PRICES

PERMIT PRICING

INTENDED USER GROUP

Students

ANTICIPATED COSTS

Programmatic

PROJECTED IMPACT

Low

PRIORITY

Medium

TIMEFRAME

Short (<2 yr)

DESCRIPTION

Adjust permit prices to market rate ($500-600 annually)

INTENDED BENEFITS

- Promote sustainable behavior toward U-permit purchases (initially, it's likely there won't be a noticeable change as students continue to purchase permits until prices are increased sufficiently to correspond to changing mode choice); this may have an unintended effect of some Faculty/Staff/Employees migrating back to A-Permits, increasing competition for A-Permits

RELATED STRATEGY

- DDM-1 Integrated Mobility Management Platform
- PA-3 Establish Permit Limits (Freshmen Parking)
- PA-4 Establish Permit Limits (Student Parking)
- PP-3 Increase Permit Prices (Progressive Pricing)
- PP-4 Increase Permit Prices (A-Permit)

ACTION ITEM	RESPONSIBLE GROUP
Adjust U-Permit prices	Commuter Services
Monitor U-Permit, A-Permit, and visitor parking occupancy levels to see if there are shifts	Commuter Services, TDM Implementation Committee
Improve connectivity to campus for price-averse students that choose not to purchase a higher priced permit	TDM Implementation Committee

TARGET METRICS

- U-Permit sales
- U-Permit and A-Permit occupancy levels – Observing and determining where space allocation shifts need to be considered

PP-2 DEMAND-DRIVEN PRICING (VISITOR PARKING)

PERMIT PRICING

INTENDED USER GROUP

Visitors

ANTICIPATED COSTS

Programmatic; variable pricing requires enhanced data collection; potential payment system upgrades

PROJECTED IMPACT

Medium

PRIORITY

Low

TIMEFRAME

Short (<2 yr)

DESCRIPTION

Set demand-based pricing thresholds for visitor parking rates:

- Increase visitor pricing in areas of higher demand (>85%)
- Maintain visitor pricing in areas of moderate demand (65-85%)
- Lower visitor pricing in areas of low demand (<65%)

INTENDED BENEFITS

- Reduce competition for primary core visitor spaces and promote balance on the fringes of campus; this may lead to unintended effect of shifting areas of highest demand, or users deciding to pay more resulting in minimal behavior shifts

RELATED STRATEGY

- DDM-1 Integrated Mobility Management Platform
- DDM-3 Leverage Existing Parking Data to Understand Demand
- DDM-4 Multi-modal Data Collection
- PP-3 Increase Permit Prices (Progressive Pricing)
- PP-6 Demand-Driven Pricing (Location-Based)

ACTION ITEM	RESPONSIBLE GROUP
Improve data monitoring regarding availability of spaces and timing to adjust pricing (once annually)	Commuter Services
Adjust visitor prices	Commuter Services
Monitor permit sales and adjust pricing if needed	Commuter Services, TDM Implementation Committee

TARGET METRICS

- Visitor parking occupancy levels
- Permit sales

PP-3 INCREASE PERMIT PRICES (PROGRESSIVE PRICING)

PERMIT PRICING

INTENDED USER GROUPS

Students
Staff/Faculty
Visitors

ANTICIPATED COSTS

Programmatic

PROJECTED IMPACT

Low

PRIORITY

Medium

TIMEFRAME

Long (6-10 yr)

DESCRIPTION

Define progressive pricing structure for temporary permits, based on number of uses per semester

INTENDED BENEFITS

- Reduce reliance on temporary permits as a means of close-in parking; this may lead to reduced temporary permit sales and a corresponding increase in visitor parking sales

RELATED STRATEGY

- PA-5 Tiered Permit
- PP-2 Demand-Driven Pricing (Visitor Parking)
- PP-6 Demand-Driven Pricing (Location-Based)
- TDM-2 TDM Messaging, Outreach, and Communication

ACTION ITEM	RESPONSIBLE GROUP
Update permit policy	Commuter Services
Increase education and marketing of daily/visitor parking system as an alternative option	Commuter Services
Monitor temporary permit sales and visitor parking occupancy	Commuter Services

TARGET METRICS

- Permit sales
- Visitor parking occupancies

PP-4 INCREASE PERMIT PRICES (A-PERMIT)

PERMIT PRICING

INTENDED USER GROUP
Staff/Faculty

ANTICIPATED COSTS
Programmatic

PROJECTED IMPACT
Medium

PRIORITY
Medium

TIMEFRAME
Medium (2-5 yr)

DESCRIPTION
Set thresholds to adjust A-Permit prices in future years

INTENDED BENEFITS
- Promote sustainable behavior toward permit purchases. A-Permit price shifts will likely be more effective at changing behaviors initially than U-Permit/student driven. This may lead to the unintended effect of reduced permit sales (corresponding to increased visitor parking sales)

RELATED STRATEGY
- DDM-1 Integrated Mobility Management Platform
- PP-1 Increase Permit Prices (U-Permit)
- PP-3 Increase Permit Prices (Progressive Pricing)
- TDM-1 UTA Integration
- TDM-2 TDM Messaging, Outreach, and Communication

ACTION ITEM	RESPONSIBLE GROUP
Adjust A-Permit prices	Commuter Services
Inform employees of parking policies and alternative modes	Commuter Services, Administration
Monitor A-Permit and visitor permit sales to see if there are shifts	Commuter Service, TDM Implementation Committee
Monitor U-Permit, A-Permit, and visitor permit sales and parking occupancy levels to see if there are shifts	Commuter Service, TDM Implementation Committee
Improve connectivity to campus for price-averse employees that choose not to purchase a higher priced permit	TDM Implementation Committee

TARGET METRICS
- A-Permit and visitor sales
- U-Permit, A-Permit, and visitor occupancy levels – Observing and determining where space allocation shifts need to be considered

PP-5 INCREASE PERMIT PRICES (GARAGE PARKING)

PERMIT PRICING

INTENDED USER GROUPS

Students
Staff/Faculty
Student Residents
Visitors
Health Sciences

ANTICIPATED COSTS

Programmatic

PROJECTED IMPACT

Low

PRIORITY

Medium

TIMEFRAME

Medium (2-5 yr)

DESCRIPTION

Adjust garage (unreserved) prices to manage demands. Prices could be increased or decreased if the goal is to incentivize utilization of garage

INTENDED BENEFITS

- Promote sustainable behavior toward permit purchases
- This may have the unintended effect of reduced permit sales (corresponding to increased visitor parking sales) in areas with price increases or increased competition in areas with price decreases

RELATED STRATEGY

- DDM-1 Integrated Mobility Management Platform
- PP-1 Increase Permit Prices (U-Permit)
- PP-3 Increase Permit Prices (Progressive Pricing)
- TDM-2 TDM Messaging, Outreach, and Communication
- TDM-1 UTA Integration

ACTION ITEM	RESPONSIBLE GROUP
Improve data monitoring capabilities to help define price adjustment decisions	Commuter Services
Adjust parking permit policy	Commuter Services
Inform change in garage permit prices	Commuter Services, TDM Implementation Committee
Monitor permit sales, as well as occupancy to see if there are shifts parking trend	Commuter Services, TDM Implementation Committee
Improve connectivity to campus for price-averse permit-holders that choose not to purchase a higher priced permit	TDM Implementation Committee

TARGET METRICS

- Permit sales and occupancy levels – observing and determining where space allocation shifts need to be considered
- Visitor parking occupancies to identify shifts

PP-6 DEMAND-DRIVEN PRICING (LOCATION-BASED)

PERMIT PRICING

INTENDED USER GROUPS

Students
Staff/Faculty
Visitors

ANTICIPATED COSTS

Programmatic; variable pricing requires enhanced data collection; potential payment system upgrades

PROJECTED IMPACT

Low

PRIORITY

Low

TIMEFRAME

Long (6-10 yr)

DESCRIPTION

Consider highest demand areas as PAYG only

- Increase visitor pricing in areas of higher demand (>85%)
- Maintain visitor pricing in areas of moderate demand (65-85%)
- Lower visitor pricing in areas of low demand (<65%)

INTENDED BENEFITS

- Reduce competition for primary core visitor spaces and promote balance on the fringes of campus; this may have the unintended effect of simply shifting areas of highest demand, or people may decide to pay more, and behavior shifts will be minimal)

RELATED STRATEGY

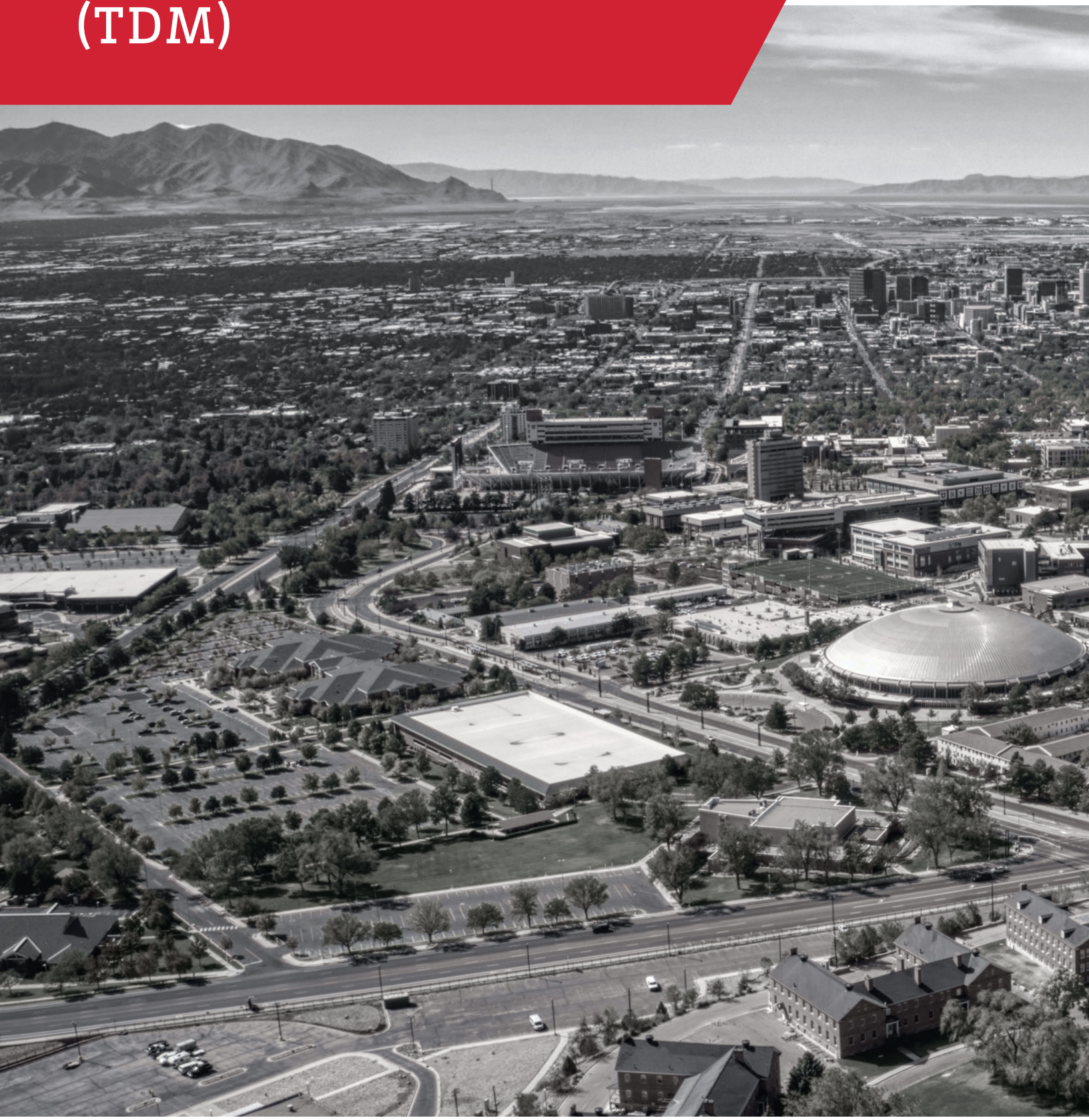
- PA-5 Tiered Permit
- PP-2 Demand-Driven Pricing (Visitor Parking)
- PP-3 Increase Permit Prices (Progressive Pricing)
- DDM-3 Leverage Existing Parking Data to Understand Demand
- TDM-2 TDM Messaging, Outreach, and Communication

ACTION ITEM	RESPONSIBLE GROUP
Adjust permit allocation	Commuter Services
Increase education and marketing of daily/visitor parking system	Commuter Services
Monitor visitor parking occupancy and permit sales	Commuter Services

TARGET METRICS

- Visitor parking occupancy levels
- Permit sales
- Campus Mode Share (Annual Campus Travel Survey)

TRANSPORTATION DEMAND MANAGEMENT (TDM)



TRANSPORTATION DEMAND MANAGEMENT (TDM)

TDM-1 UTA INTEGRATION

TRANSPORTATION DEMAND MANAGEMENT

INTENDED USER GROUPS

Students
Staff/Faculty
Student Residents
Visitors
Health Sciences

ANTICIPATED COSTS

Increased campus shuttle service; UTA cost-sharing

PROJECTED IMPACT

Medium

PRIORITY

Medium

TIMEFRAME

Promote:
Short (<2 yr)
Enhance: Medium (2-5 yr)

DESCRIPTION

Coordinate with UTA to optimize bus service to campus, including end-of-line scheduling and requirements at planned Mobility Hubs.

INTENDED BENEFITS

- Enhanced collaboration with UTA
- Increased transit ridership through service improvements
- Improved transit offering as incentive for non-SOV trips
- Reduced SOV trips to campus
- Reduced demand for vehicle parking on-campus

RELATED STRATEGY

- DDM-1 Integrated Mobility Management Platform
- IN-2 On-Campus Mobility Hub: Health Science
- IN-3 On-Campus Mobility Hub: South Campus, 200 South
- TDM-2 TDM Messaging, Outreach, and Communication

ACTION ITEM	RESPONSIBLE GROUP
Collaborate with UTA to define desired bus service to campus	Campus Planning, Commuter Services
Collaborate with UTA to optimize bus service to campus	Campus Planning, Commuter Services
Monitor bus capacity trends and consider financial support to UTA to provide additional service to meet demand	Commuter Services
Collaborate with UTA to understand current driver shortage and consider potential partnerships to address	Commuter Services

TARGET METRICS

- Campus Mode Share (Annual Campus Travel Survey)
- Total UTA ridership within and to campus

TDM-2 TRANSPORTATION DEMAND MANAGEMENT MESSAGING, OUTREACH, AND COMMUNICATIONS

TRANSPORTATION DEMAND MANAGEMENT

INTENDED USER GROUPS

Students
Staff/Faculty
Student Residents
Visitors
Health Sciences

ANTICIPATED COSTS

Education materials

PROJECTED IMPACT

Low

PRIORITY

Low

TIMEFRAME

Short (<2 yr)

DESCRIPTION

Promote non-motorized modes across all communication channels and materials

INTENDED BENEFITS

- Increased awareness of multi-modal connections to campus
- Encourage non-motorized trips to/from/within campus
- Create and strengthen community norms that support the use of non-motorized travel modes

RELATED STRATEGY

- DDM-1 Integrated Mobility Management Platform
- OA-1 Establish TDM Implementation Committee
- PA-1 Reduce Permit Flexibility
- PA-3 Establish Permit Limits (Freshman Parking)
- PA-4 Establish Permit Limits (Student Parking)
- TDM-1 UTA Integration
- TDM-3 Staff Onboarding and Student Orientation

ACTION ITEM	RESPONSIBLE GROUP
Review current web site and organization to emphasize multi-modal commutes and prioritize representation of non-motorized users; revisit regularly	TDM Implementation Committee
Revisit Commuter Services web content to ensure pertinent and sufficient information is available for all users (i.e., bicycle parking permit instructions); revisit regularly	TDM Implementation Committee
Promote TDM opportunities prominently across U of U website and in hiring/recruiting/onboarding materials	TDM Implementation Committee
Develop communication strategy and calendar to promote multi-modal commuting through existing channels (through education, social norming)	TDM Implementation Committee
Develop and promote challenges, promotions, and opportunities (e.g., Try Transit week, Bike Month, Low Car Challenge, Bike with the President, etc.)	TDM Implementation Committee
Identify sustainable funding for expanded TDM messaging and promotion; consider combining funding from various departments	TDM Implementation Committee

TARGET METRICS

- Campus Mode Share (Annual Campus Travel Survey)
- Commute Satisfaction (Annual Campus Travel Survey)

PEER EXAMPLES

- Portland State University Transportation & Parking Services Website
- University of Washington Transportation Services Website
- Western Washington University Bike Month Events

TDM-3 STAFF ONBOARDING AND STUDENT ORIENTATION

TRANSPORTATION DEMAND MANAGEMENT

INTENDED USER GROUPS

Students
Staff/Faculty
Student Residents
Health Sciences
Research Park

ANTICIPATED COSTS

Programmatic, education

PROJECTED IMPACT

Low

PRIORITY

Low

TIMEFRAME

Short (<2 yr)

DESCRIPTION

Provide TDM and parking policy information material for staff onboarding and student orientation

INTENDED BENEFITS

- Increased awareness of multi-modal connections to campus
- Encourage non-motorized trips to/from/within campus
- Create and strengthen community norms that support the use of non-motorized travel modes

RELATED STRATEGY

- DDM-1 Integrated Mobility Management Platform
- OA-1 Establish TDM Implementation Committee
- TDM-2 TDM Messaging, Outreach, and Communication

ACTION ITEM	RESPONSIBLE GROUP
Develop and distribute information materials	Commuter Services
Expand Travel Options Training for new employees and students	TDM Implementation Committee
Review transportation components of employee onboarding and student orientation to include information related to TDM measures and parking policies	TDM Implementation Committee

TARGET METRICS

- Mode Share (Annual Campus Travel Survey)

TDM-4 CAR SHARE

TRANSPORTATION DEMAND MANAGEMENT

INTENDED USER GROUPS

Staff/Faculty
Student Residents

ANTICIPATED COSTS

Storage/site for vendor

PROJECTED IMPACT

Medium

PRIORITY

Low

TIMEFRAME

Medium (2-5 yr)

DESCRIPTION

Support on-campus carshare:

- Work with vendors to subsidize price and/or make appropriate contractual arrangements
- Provide dedicated parking spaces for carshare vehicles
- Promote carshare to student residents, students, and other potential users

INTENDED BENEFITS

- Reduced demand for on-campus vehicle storage from student residents
- Increased rate of car-free student residents
- Reduced perceived need for staff/faculty to drive, as they have an option for midday trips

RELATED STRATEGY

- DDM-1 Integrated Mobility Management Platform
- PA-1 Reduce Permit Flexibility
- PA-3 Establish Permit Limits (Freshman Parking)
- PA-4 Establish Permit Limits (Student Parking)
- TDM-2 TDM Messaging, Outreach, and Communications

ACTION ITEM	RESPONSIBLE GROUP
Develop RFP for carshare services	TDM Implementation Committee
Procure Carshare vendor	Commuter Services
Identify storage location for carshare vehicles	Commuter Services

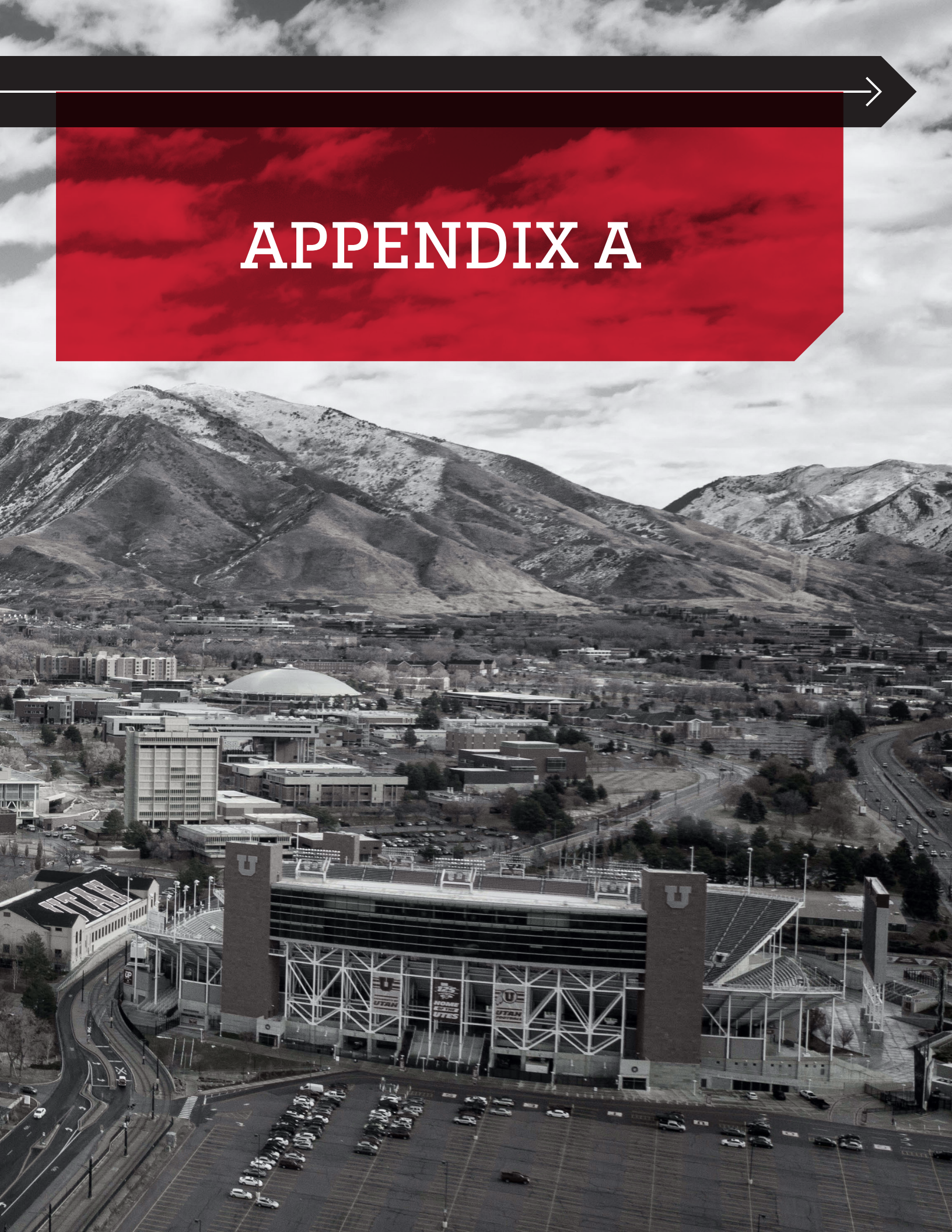
TARGET METRICS

- Mode Share (Annual Campus Travel Survey)
- Total number of vehicle permit requests
- Shared car usage (from vendor) and calculated and cost per trip

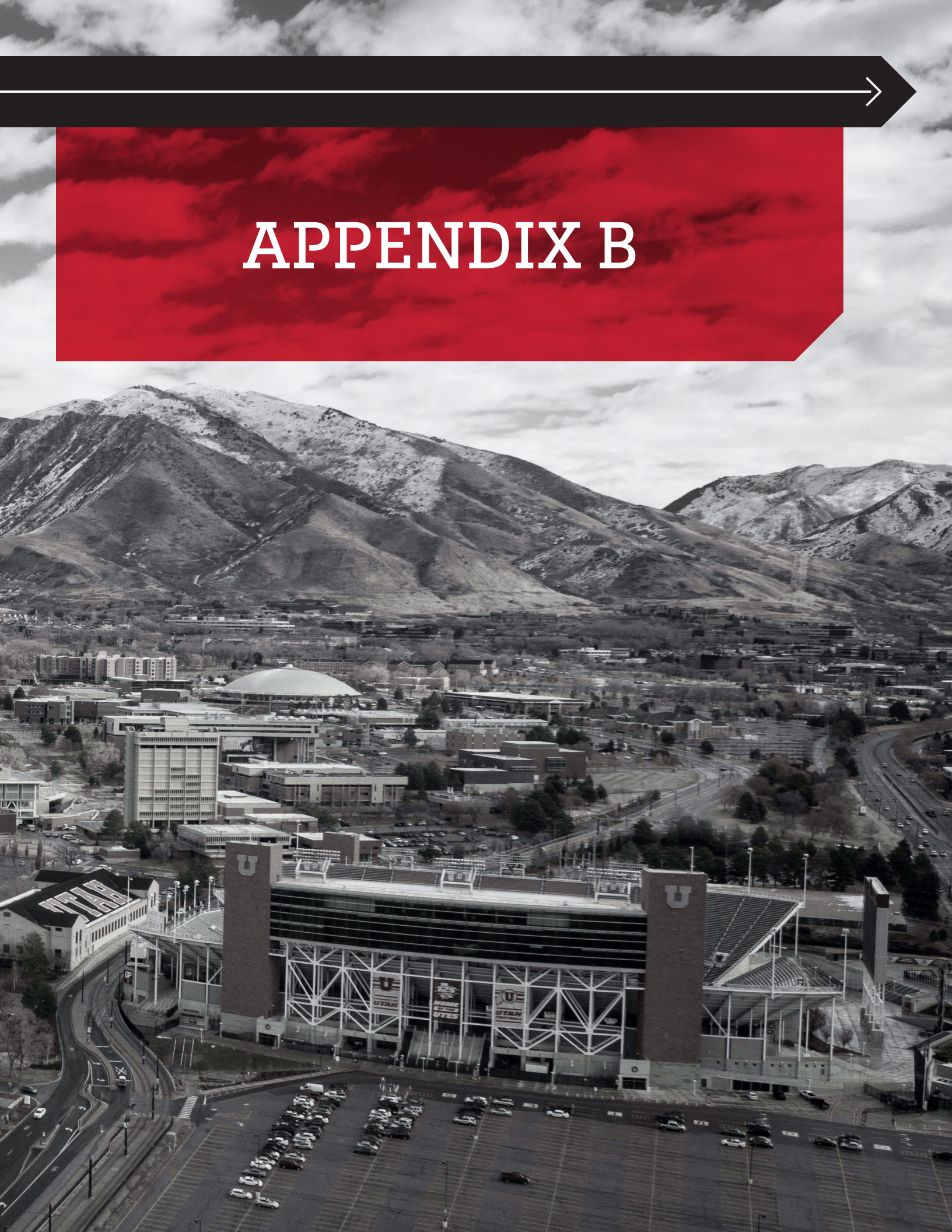
PEER EXAMPLES

- Portland State University Student and Staff/Faculty Carshare
- UC Boulder Carsharing

APPENDIX A



APPENDIX B



APPENDIX C