DOWNTOWN AND SUGAR HOUSE PARKING STUDY

Final Report

November 2016

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in association with
Dixon Resources Unlimited, Inc.

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Project Overview


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Public
Parking

1 Project Overview

Salt Lake City has seen robust economic growth in recent years. In several key mixed-use areas, increased housing and employment has pushed congestion and other questions about mobility and access to the fore. This study is an effort to consider these questions in two key neighborhoods—Downtown and Sugar House—in the context of Salt Lake City's broader efforts to plan for a multimodal future.

In recent years, the City has prioritized housing development and mixed-use growth to achieve the vision of a vibrant and resilient city laid out in a number of previous planning efforts. The city has also invested significantly in transit, bicycle, and pedestrian infrastructure in its urban core and in transit-oriented neighborhoods.

For the foreseeable future, however, a large share of people will continue to drive for most trips, and parking remains a vital consideration. How Salt Lake City approaches parking is fundamental to the success of its multimodal ambitions, its ability to ensure development feasibility and economic vitality, and the preservation of its historic roots.

Through various studies and planning efforts, Salt Lake City has periodically tackled its key parking challenges, yet success has been elusive and many systemic issues remain. This study offers a comprehensive assessment and evaluation of Salt Lake City's approach to parking. It not only documents the key issues, but also offers a well-defined path forward and tangible steps to ensure that parking serves as a tool to achieve broader community values.

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Why Focus On Downtown And Sugar House?

Though parking is certainly not an experience unique to Downtown or Sugar House, these two areas are at the forefront of the change that Salt Lake City is trying to achieve.

Downtown is the region's economic and cultural hub, drawing millions of people every year, and it has seen significant growth in recent years. Various long-term planning efforts have defined downtown's future as a center for urban and sustainable living and diverse economic growth, facilitated by new transportation investments and mixed-use development. Parking remains crucial to the functionality of downtown, with thousands of spaces managed by the city and a variety of private entities. In addition to immediate needs related to recent growth, there is growing recognition that these parking assets are not optimally managed and the sometimes negative experience of parking in downtown could undermine its immediate and long-term success.

Sugar House is an evolving neighborhood with a unique past and bright future. Recent mixed-use development has laid the groundwork for further growth, but in order to address existing parking challenges and grow in a manner that respects the historic character of the neighborhood, it is essential to manage existing parking effectively and be strategic about how much and where new parking is built.

Study Goals

This study was guided by a set of core goals that were developed through dialogue with staff and key stakeholders. They also reflect the community vision defined previous planning studies, such as *Sustainable Salt Lake, Plan Salt Lake, Downtown Community Plan, Downtown in Motion,* and the *Sugar House Master Plan*. This study was created with these goals in mind:

- **Comprehensive:** Ensure that parking is not the end itself, but a means to achieve larger community outcomes
- **Data-driven:** Use observed supply and demand conditions to move beyond perceptions and understand actual behavior, issues, and opportunities
- **User-friendly:** Understand that the parking experience is vital, and make it easy and convenient for all users
- **Cost-efficient:** Maximize use of existing supply and minimize expensive new parking construction
- **Coordinated:** Identify concrete ways to improve city management of parking, while leveraging partnerships with the private sector
- **Flexible:** Ensure that parking policies facilitate a mix of new development opportunities

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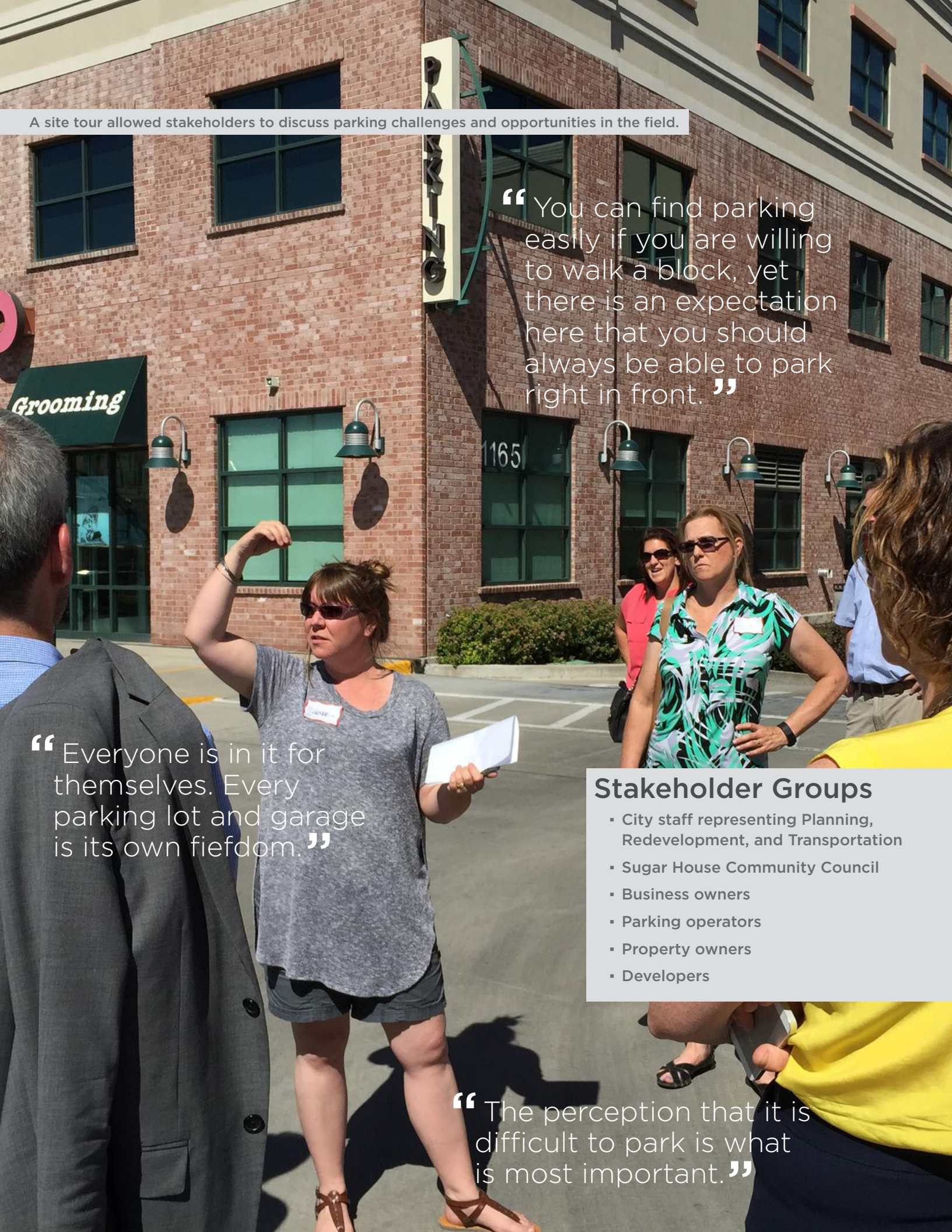
Project Approach and Methodology

The process included six basic phases, with the intent of facilitating detailed analysis and consistent feedback throughout the project. The first phase focused on initial **research**, including a review of previous planning efforts, data collection, and an intercept survey. The second phase further identified parking issues and opportunities through **interviews and a workshop** with key stakeholders. A review of cities with similar challenges was conducted to identify **leading practices**.

A **preliminary list of strategies**, including all potential policy and management ideas, was developed in the fourth phase. Strategies were **refined** based on discussions with city staff and feedback from key stakeholders. Finally, policy and management recommendations were **packaged** to reflect a phased and realistic implementation plan.

Project Phases

2
Stakeholder Input



A site tour allowed stakeholders to discuss parking challenges and opportunities in the field.

"You can find parking easily if you are willing to walk a block, yet there is an expectation here that you should always be able to park right in front."

"Everyone is in it for themselves. Every parking lot and garage is its own fiefdom."

Stakeholder Groups

- City staff representing Planning, Redevelopment, and Transportation
- Sugar House Community Council
- Business owners
- Parking operators
- Property owners
- Developers

"The perception that it is difficult to park is what is most important."

2 Stakeholder Input

In order to accurately document key challenges and opportunities, as well as inform the development of the recommendations, this study included a targeted outreach effort to stakeholders in downtown and Sugar House. This chapter provides a summary of the stakeholder involvement, including interviews, workshop, site tour, and presentations.

Note that this effort was an initial study, not an official plan. Efforts to implement the recommendations will be preceded by a robust effort to engage with the general public.

Stakeholder Interviews

Interviews with key project stakeholders from both downtown and Sugar House were conducted in July 2015. Major themes and points of consensus from the stakeholder feedback include, in no particular order:

- **Parking is generally not a pleasant experience** for visitors or customers as information is limited about where parking is available and if it is okay to park there.
- **Utah's transportation mind-set is very suburban,** and for many, coming to downtown is the only time they will ever pay for parking. That different experience is difficult for many to overcome.
- **Parking is not shared optimally** amongst uses. For the most part, each parking lot/garage is its own "fiefdom."
- **Sugar House is a particular area of concern** as the district grows and more businesses are making their parking "private." The way the parking is managed in Sugar House makes people drive from location to location and discourages walking.
- **There was general consensus that the existing supply of parking is adequate** both in Downtown and Sugar House. Most stakeholders agreed that Salt Lake City does not have a supply problem, but a management problem.
- **Parking wayfinding was universally disliked,** noted as inconsistent and confusing, and identified as a priority for improvement.
- **Downtown has strong transit access** in most areas, so it is easier to support reduced parking and shared parking. Sugar House has less access to transit and transit there is simply not time competitive with driving. More, and more frequent, transit service is a key part of the parking solution in Sugar House.
- **Use of on-street spaces for "active" uses in downtown** takes away parking, but added activity is worth it for businesses.
- **There is a general sense that the zoning code requires roughly the right amount of parking.** Some stakeholders said they did not believe requirements should go any lower.
- **Property owners/developers all indicated that their buildings are generally "overparked"** and they have ample parking availability for all but the busiest 5-10 days.
- **Coordinated public/private management has been proposed in the past, but did not work** over concerns about who would take on financial responsibility, a lack of staffing to implement, no leader on the public or private side, and limited incentives to change existing practices.
- **There is a belief that new development** in adjacent commercial and/or mixed use areas is creating spillover into residential neighborhoods. .

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Stakeholder Workshop

In July 2015 the consultant team facilitated a workshop for city staff and key stakeholders. The workshop included a presentation about the project goals, findings from the data analysis, and a discussion of parking best practices and precedents. The second part of the workshop included a series of trade-off exercises asking stakeholders for their feedback on parking issues and potential solutions. Figure 2-2 and Figure 2-3 summarize the feedback.

Figure 2-1 Stakeholder Prioritization of Parking Issues

Note: Items not in priority order within categories of priority

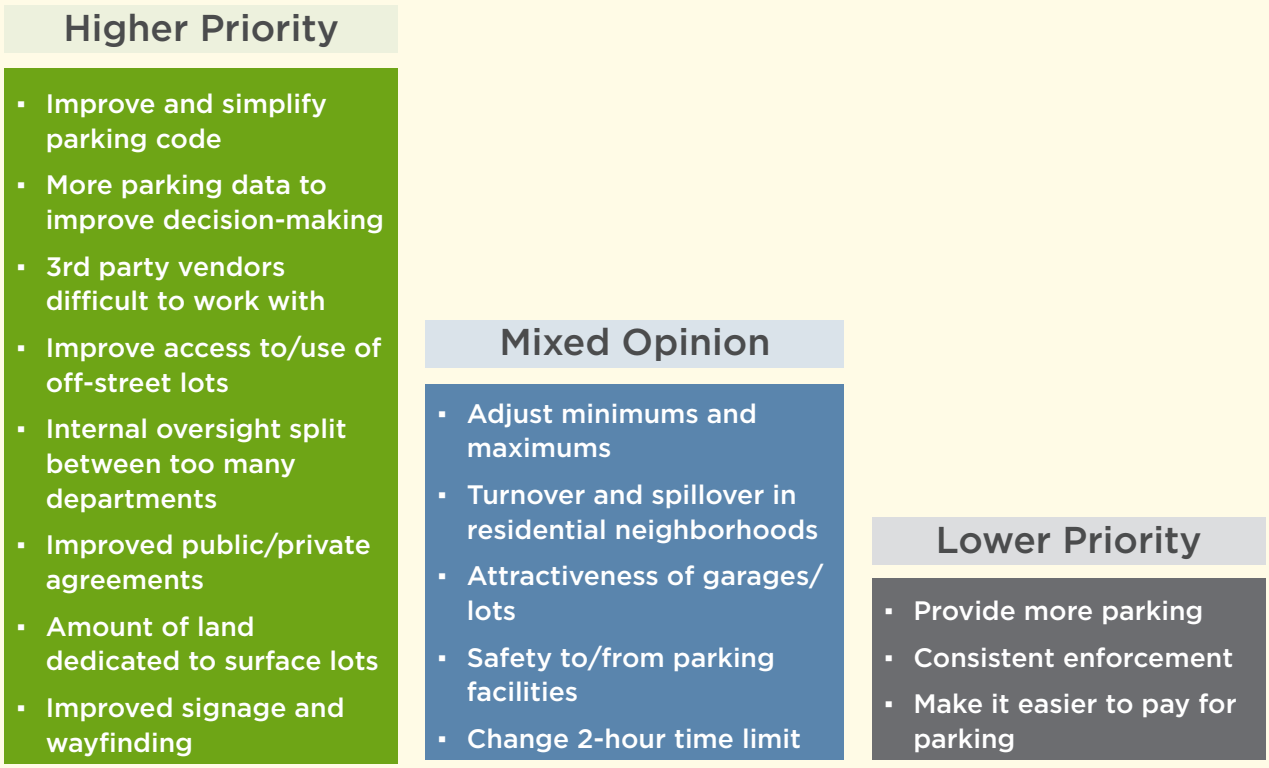
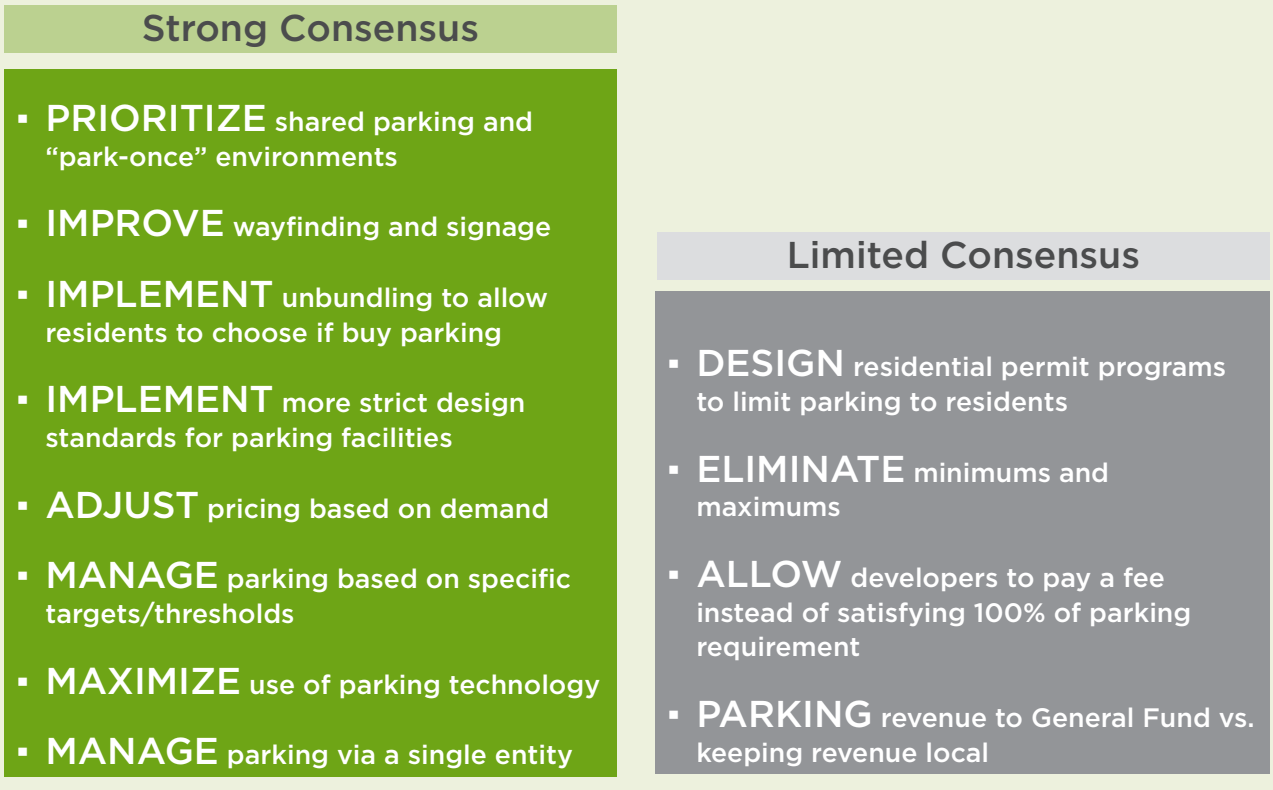


Figure 2-2 Stakeholder Consensus on Potential Parking Strategies



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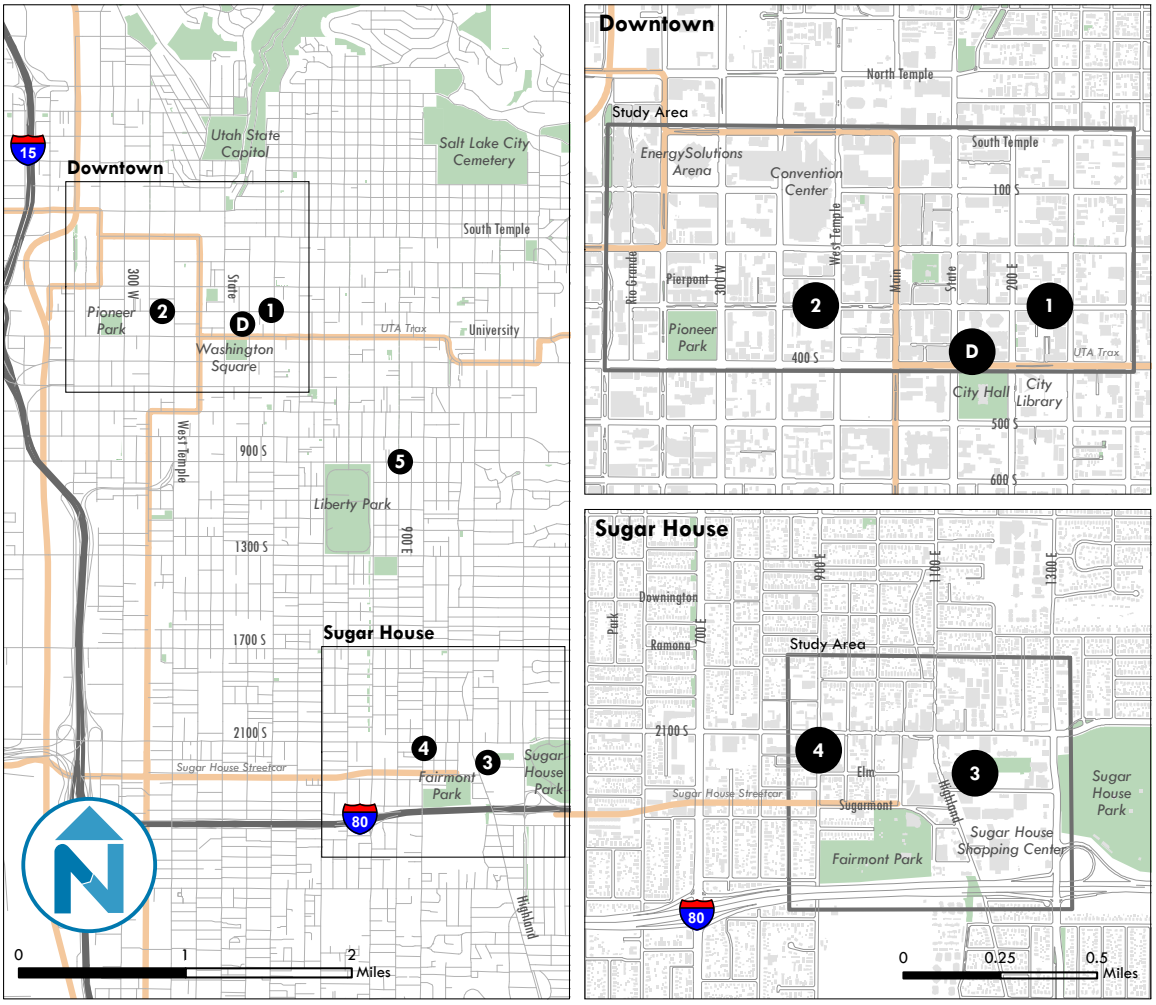
Site Tour

The workshop concluded with a site tour of downtown and Sugar House. The tour offered the consultant team, staff, and stakeholders an opportunity to discuss parking conditions in the field and brainstorm potential solutions. The tour included two stops in Sugar House, three in downtown, and one in the 9th and 9th area. Discussion topics included management practices for on- and off-street spaces, managing spillover in neighborhood commercial centers, the feasibility of shared parking, and impacts of parking on street design and walkability.

Figure 2-3 Salt Lake City Parking Study: Walking Tour Guide



D **Downtown Alliance**
Workshop location

1 **Downtown: 300 S and 300 E**
How does parking demand for on-street spaces compare to that in adjacent off-street lots? How is parking managed in this area?

2 **Western Downtown: 300 S and West Temple**
Consider the space taken up by off-street lots near this corner. About what percentage of spaces are occupied? How do surface lots impact the pedestrian experience?

3 **Whole Foods Parking Lot: Highland and Wilmington**
How much turnover do you see in this lot? Would you drive or walk if you had to go to the nearby Old Navy after Whole Foods? How about Toys "R" Us?

4 **Accessory Parking in Sugar House: 2100 S and 900 E**
How many different entities own and manage parking in the areas of Sugar House you can see from here?

5 **9th and 9th: 900 S and 900 E**
What can be done to improve management of limited on-street spaces in neighborhood commercial centers like this one?

Stakeholder Presentations

The consultant team also made several presentations to city staff and project stakeholders to discuss preliminary recommendations. City staff also spoke with the Sugar House Community Council, the Sugar House Transportation Committee, the Sugar House Chamber of Commerce, and the Transportation Advisory Board. Stakeholders provided feedback on the recommendations and helped to screen, revise, and tailor the final package of recommendations. Specific input on implementation was also provided to craft the phasing recommendations. The recommendations described in Chapter 4 reflect all phases of stakeholder input.

3
Existing Conditions

3 Existing Conditions

The Existing Conditions Analysis reveals a number of key findings that revolve around several common themes, and Figure 3-1 provides a summary of them. As described below, the findings were informed by a review of the planning context, data collection and analysis of parking occupancy and turnover, insights from an intercept survey, assessment of the zoning code, and the stakeholder input described in Chapter 2.

Themes of the findings include the general **oversight** of parking management and enforcement, **customer experiences** with parking (e.g. wayfinding, pricing, and other areas), and the overall **supply of parking and built environment**. The final package of recommendations described in Chapter 4 is organized to respond directly to these findings. The appendix includes a detailed Existing Conditions report for the study.

Oversight: The lack of staff resources and public/private coordination is the fundamental challenge to effective management of the parking system. The benefits of increased coordination between the public and private sectors include increasing the amount of parking supply and demand data available to planners and policy makers and an enforcement approach that is more consistent across public and private parking supplies. More consistent enforcement will help more effectively deter certain parking behaviors.

Customer Experience: The parking system is not effectively communicated - lack of consistent signage and parking information creates an experience that can be confusing or intimidating. Regulations are also highly variable throughout the study areas, not calibrated to respond to actual parking behavior, and further contribute to negative perceptions about parking.

Parking Supply and the Built Environment: Available data show that Salt Lake City does not have a parking supply problem. Certain blocks or areas can have high utilization at certain times of day, but parking is typically available within a short walk. To maximize the sharing of existing parking supply, further encourage mixed-use development, and prioritize multimodal travel, the zoning code would benefit from targeted revisions.

Figure 3-1 Summary of Key Findings

Oversight

Management

The overall management of parking is fragmented with several city departments and a variety of private operators overseeing the various elements of parking operations throughout the city. There is limited cooperation between private operators and the city which leads to limited availability of data that would be helpful in making informed parking policy decisions.

Enforcement

The city generally takes a more "friendly" approach to issuing violations that can lead to repeat offences. The fragmented approach to management between the city and private operators leads to overly punitive enforcement in certain districts, particularly within private lots.

Customer Experience

Wayfinding and Info

Despite extensive past efforts there is still a limited amount of information available about where public parking is located and how much parking is available in real-time. Furthermore, signage that does exist to direct people to appropriate facilities is often inconsistent, particularly when it is also communicating restrictions and time limits.

Pricing

There is no established relationship between the price of on-street and off street parking. The price of on-street parking does not reflect actual demand and there is a high variance in the price of privately managed off-street parking.

Perceptions

While data suggest that, on a district-wide basis and on a typical day, parking demand does not exceed 60% of available capacity in either Downtown and Sugar House, there is still a belief that parking is scarce in these areas. Furthermore, inconsistent enforcement practices between city on-street parking and privately managed off-street parking leads to anxiety about where and how to park legally.

Parking Supply and the Built Environment

Utilization

Analysis of available data indicates that while there is high demand for parking in certain locations, there is still high availability of parking in broader areas, with most parkers being able to find parking within a short walk of their destinations.

Zoning and Land Use

The city's existing code has good ingredients as it relates to parking, but it is still complicated and offers opportunities for refinement. Over time, the city's parking requirements have resulted in a large portion of land being dedicated to parking, which in turn discourages walking and makes a "park once" strategy difficult to implement. The proliferation of surface lots degrades the public realm and their access points intrude into pedestrian spaces. Finally, there is a lack of incentives written into the code to encourage a shared parking approach whenever appropriate.

Planning Context

A substantial amount of planning work is underway or was completed for the two study areas, much of which examined key issues related to parking. The most relevant documents include:

- **Sustainable Salt Lake - Plan 2015:** A framework document that lays out a number of goals, strategies, and performance targets across multiple sectors to improve the long-term environmental outcomes. Parking is related to all of the transportation goals and strategies, but two "2015 Targets" are specific:
  - Establish a city parking management entity.
  - Launch a city-specific information application that provides locations and status of parking lots and parking meters.
- **Plan Salt Lake:** A community-driven planning process that defines a city-wide 25-year vision. The plan is organized by 13 "Guiding Principles," within each is a set of specific initiatives and targets. While parking is not specifically referenced, the plan includes a goal of reducing auto dependency, and parking management and policies will have a significant impact on Salt Lake City's ability to achieve this and other goals.
- **Downtown Community Plan:** A 25-year plan for downtown that focuses on improving livability through a transportation system that prioritizes biking, walking, and transit over private vehicles. A specific parking goal was developed and three specific parking actions were also proposed:
  - Examine parking policy to determine the right balance of supply and demand.
  - Update zoning regulations to locate surface parking lots in appropriate locations.
  - Update zoning regulations to require parking structures to be wrapped by buildings instead of having frontage on public streets.
- **Downtown in Motion:** Downtown's transportation master plan, offering a vision for future transportation investment in downtown across all modes of travel. Parking was analyzed in detail and a series of phased parking recommendations were proposed to be implemented by 2030. The recommendations focus on: improved management of on-street spaces; improved management of the overall system through a new management entity and new public/private parking agreements; and zoning code revisions to better support future development.

The Downtown in Motion study identified over 34,000 off-street parking spaces within the downtown.

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- **Parking Management Study:** Study to address key deficiencies in how parking is managed in downtown by creating a new parking management entity. The study's overall recommendation was to create a "vertically" integrated downtown parking system in which parking is managed by one entity and all city functions are consolidated under a single department with oversight by a parking administrator.
- **Sugar House Master Plan:** A comprehensive plan to guide future development in the context of increasing popularity and congestion. It outlines a number of parking policies designed to mitigate spillover parking into residential neighborhoods, limit negative impacts from parking on the pedestrian experience, and ensure that parking supply is maximized through shared parking policies.
- **Sugar House Business District Circulation Plan:** Proposes new investments in the transportation network and is designed to reinforce the ongoing transformation of the Sugar House neighborhood into a walkable, mixed-use place for a diverse range of residents and businesses. Seven priority infrastructure projects are assessed and discussed. The Plan also calls for the evaluation of a new parking management entity in Sugar House to better plan and manage parking.

New development and impacts on neighborhood parking were identified as key issues in Sugar House.

Occupancy and Turnover

Methodology

The Downtown and Sugar House Parking Study is focused on the central portions of each neighborhood, as shown in Figure 3-2. Given the size of the study areas, the data collection was narrowed to representative portions of each study area, called "Occupancy Sampling Areas." Sampling areas were selected based on an analysis of land-use patterns, housing density, and residential density.

For each sampling area, the study team gathered inventory and occupancy data across representative block faces and off-street lots. Data was collected in four cycles each day, roughly running from 10 a.m. to 6 p.m. on an average Tuesday and 12 p.m. to 8 p.m. on an average Saturday. The project team also collected turnover data for a limited number of blocks and off-street lots in both study areas using the Temporary Battery Operated Parking Sensor (TBOPS) system. The TBOPS system is programmed to detect and track each unique vehicle in its field of view, allowing for analysis of total vehicles per space and average length of stay.

A Note on Data

The data presented in this report are not intended to represent occupancy patterns for all of Downtown or Sugar House. Instead, this project analysis of supply and demand provides a preliminary snapshot of occupancy dynamics in the two study areas. The study team validated some trends observed in Downtown using more comprehensive data available through on-street parking kiosks, and overall, the data do generally indicate overall patterns that are likely applicable across the two study areas.

Additional and consistent data collection is recommended (Chapter 4) to gain a more conclusive understanding of the relationship between parking supply and demand in the study areas.

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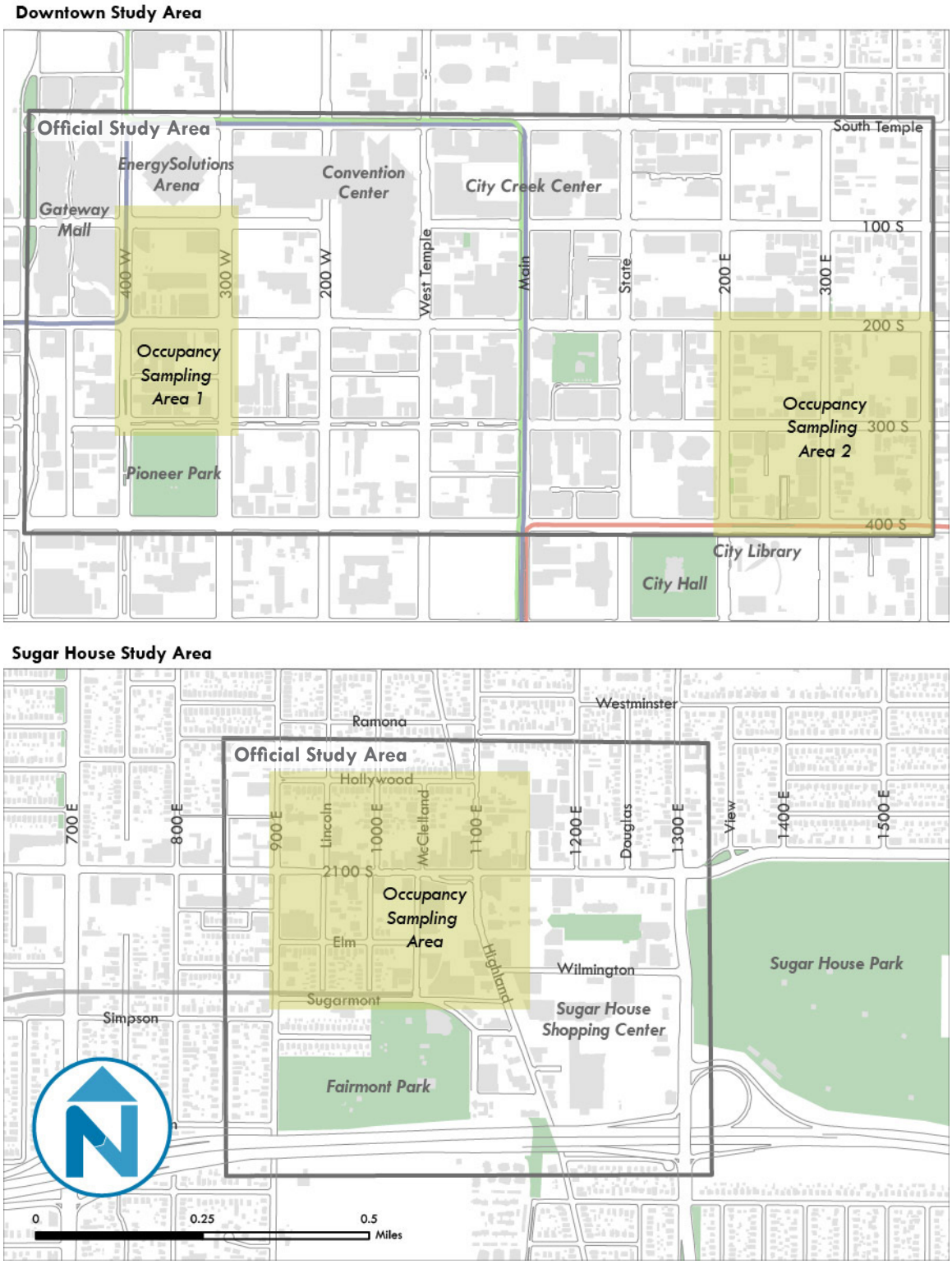
Figure 3-2 Downtown and Sugar House Study Areas and Occupancy Sampling Areas



Results

Parking Occupancy

Parking occupancy never reached higher than 62% in any data collection period in either study area, leaving nearly 40% of parking available at peak and far more than that most of the time. Figure 3-3 shows the overall occupancy trends for Tuesday. Occupancy peaked during the mid-day at 58% for the Downtown and at 55% in Sugar House, before leveling off at 53% during the remaining two periods. Figure 3-4 shows the overall occupancy trends for Saturday. Occupancy peaked during the early afternoon in Sugar House at 62%, while the peak in the Downtown was during the early evening at 52%.

Figure 3-3 Overall Study Area Occupancy, Tuesday

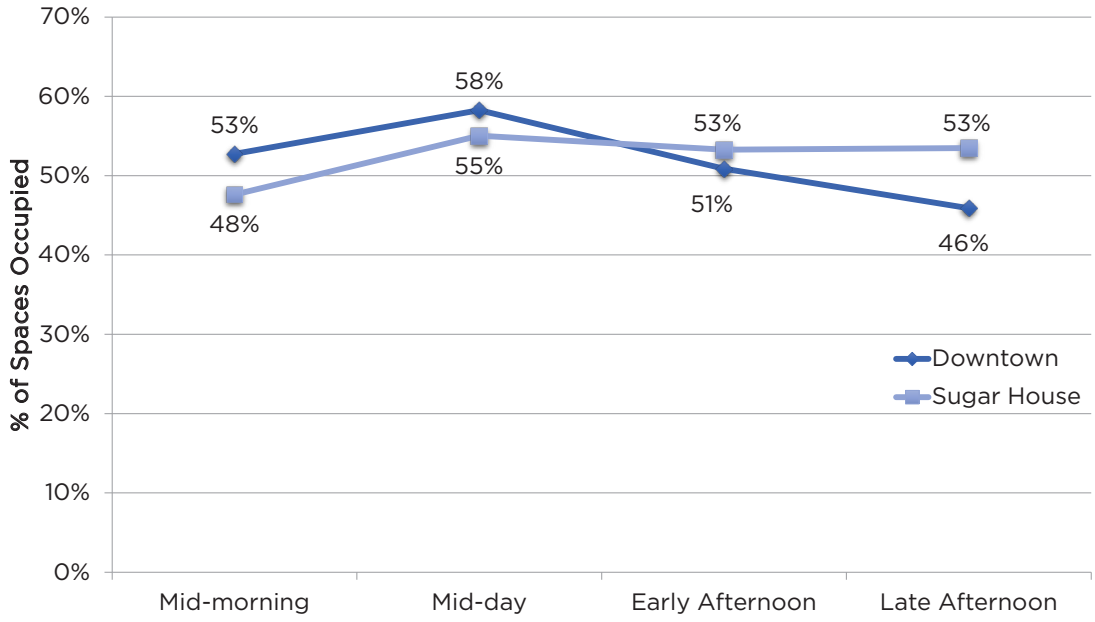
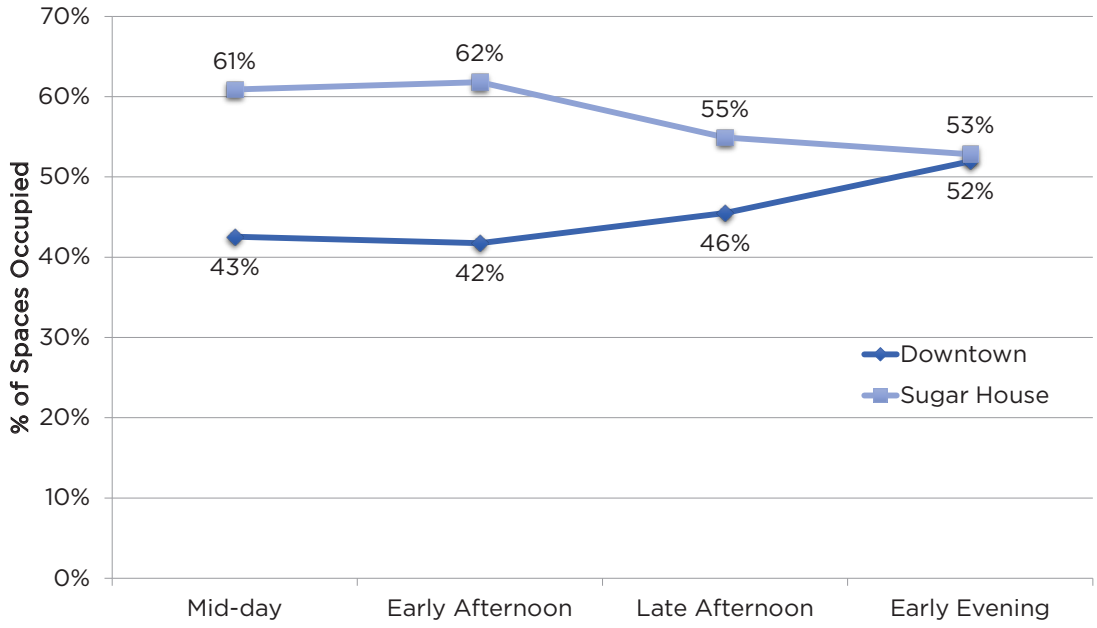


Figure 3-4 Overall Study Area Occupancy, Saturday



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Parking Demand

While overall parking occupancy was low in both study areas, demand in each district varies by location throughout the day, with certain areas experiencing high demand. Figures 3-5 and 3-6 show the spatial distribution of parking occupancy in Downtown on Tuesday and Thursday, respectively. Most block faces and facilities were below 70% occupied during the observation period, but a certain number had higher levels of demand, notably on 300 South and 300 East. Figure 3-7 and 3-8 show similar variable demand in Sugar House on both days, with higher demand on Elm Avenue, S 1000 East, and the lots for Smith Shopping Center and the State Liquor Store on Ashton Avenue.

Parking demand varies significantly in the downtown, with full blocks adjacent to empty spaces.

Figure 3-5 Downtown Parking Demand, Tuesday (Midday)

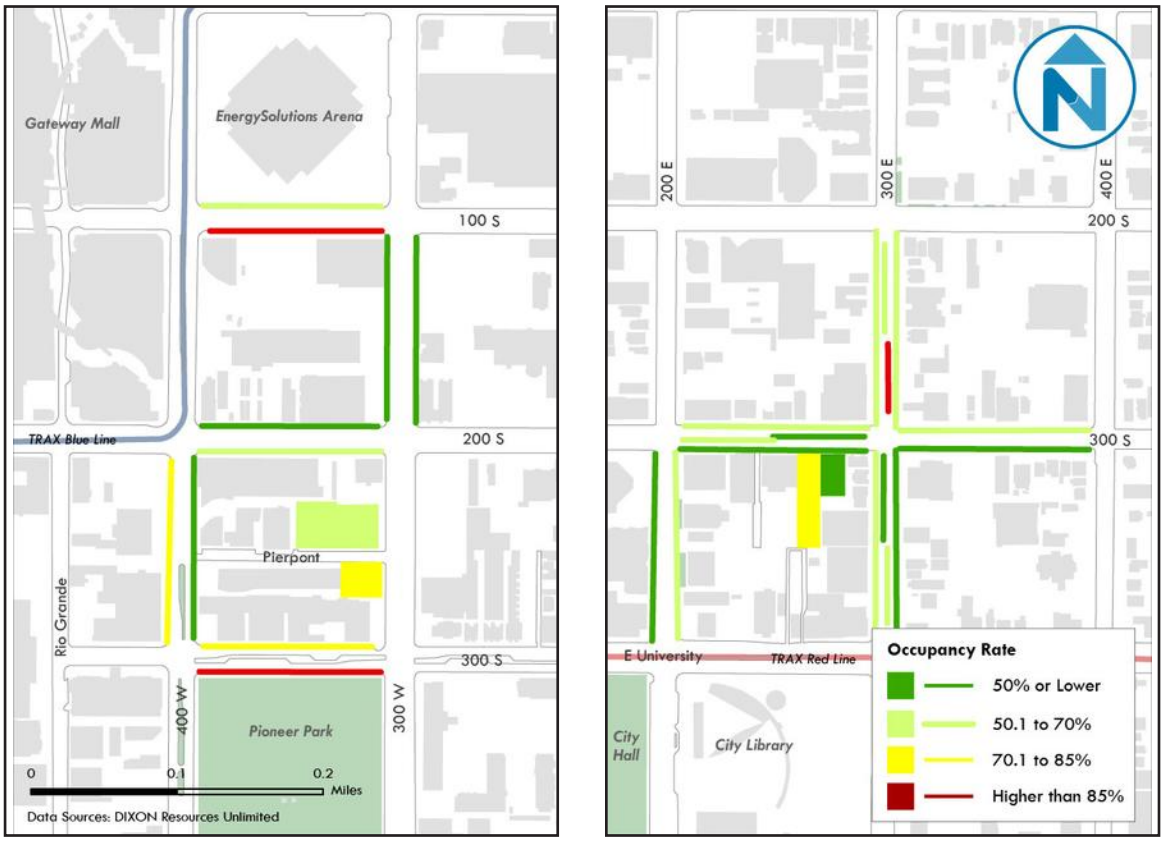

Figure 3-6 Downtown Parking Demand, Saturday (Early Evening)

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Figure 3-7 Sugar House Parking Demand, Tuesday (Mid-morning)

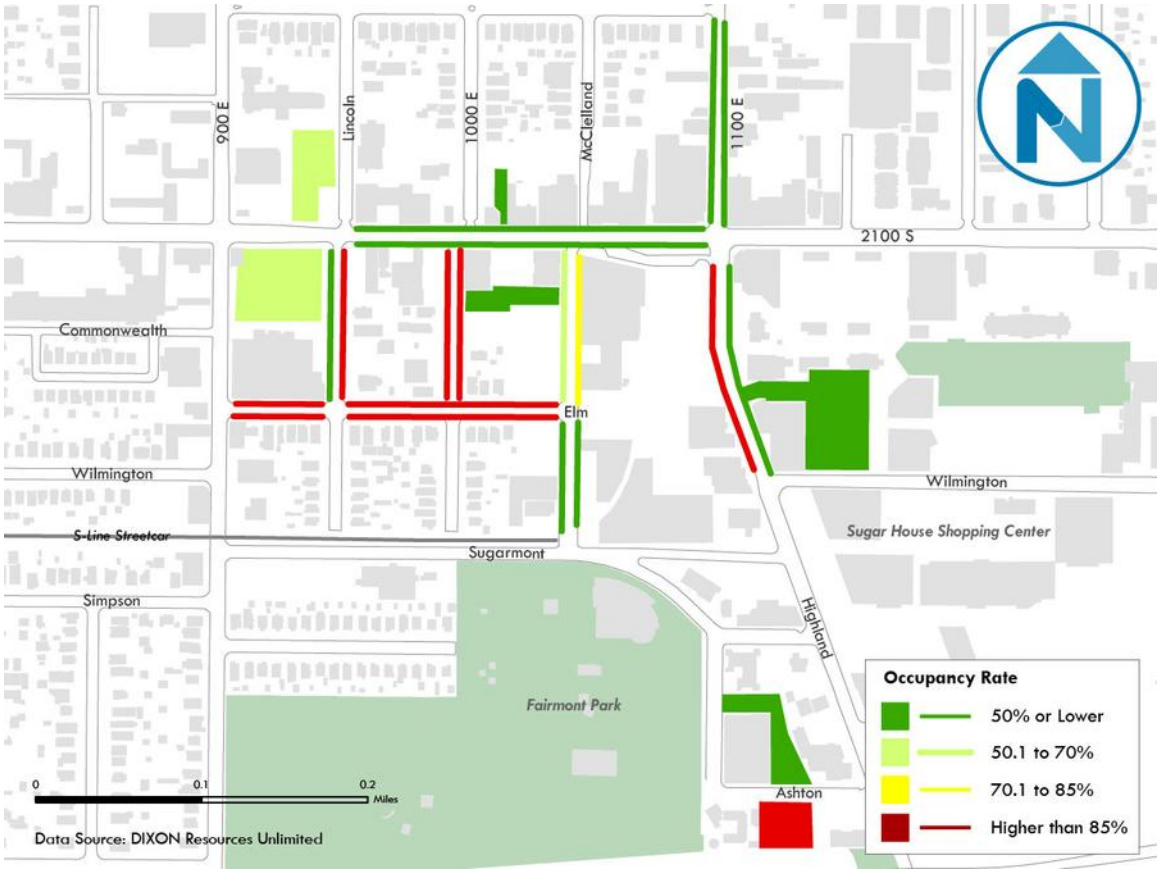
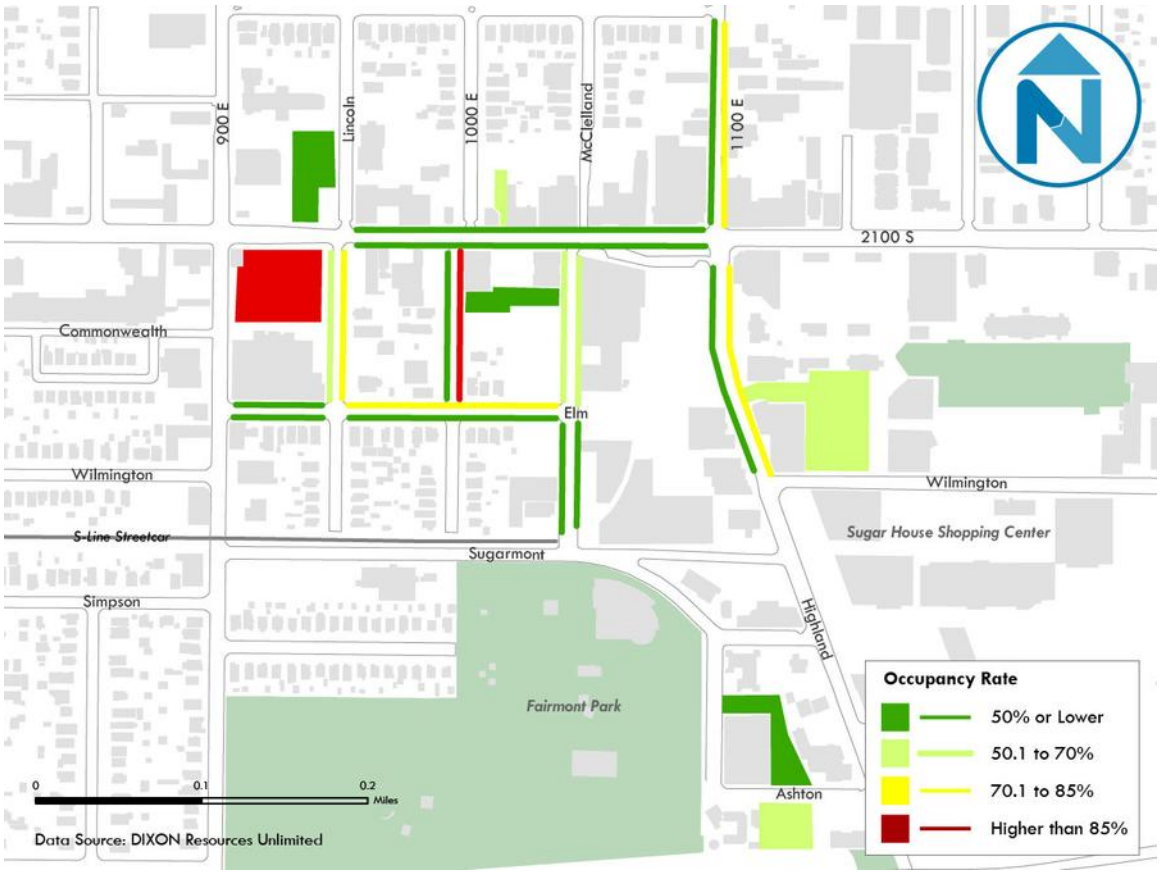


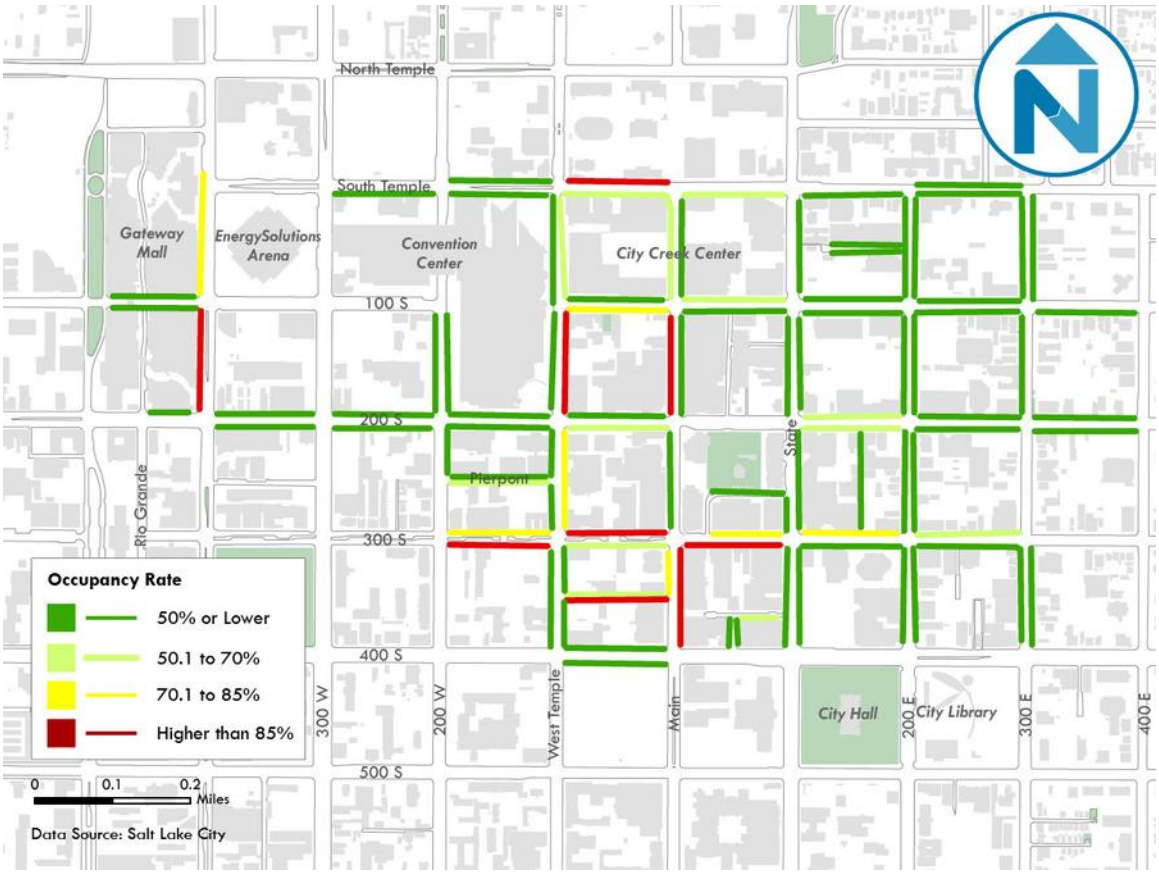
Figure 3-8 Sugar House Parking Demand, Saturday (Late Afternoon)



On-Street Occupancy

On-street occupancy in the Downtown study area was also estimated using multi-space meter and pay-by-phone data. Occupancy was estimated for six snapshots throughout the day on a typical Tuesday, every two hours from 10 a.m. to 8 p.m. Figure 3-9 shows the variable parking demand by location at 6 p.m. At that time, a number of block faces between Main and West Temple and around 300 South/Broadway were above 85% occupied, but most block faces were less than 50% occupied.

Figure 3-9 Downtown Payment-Estimated On-Street Occupancy, Tuesday 6 p.m.



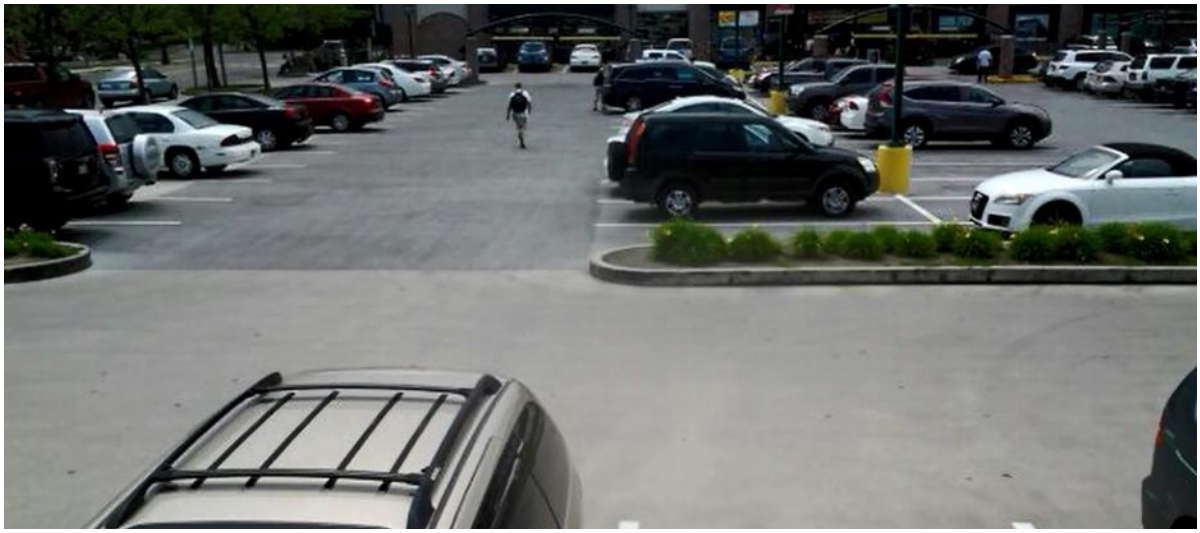
Turnover

Figure 3-10 shows estimated turnover for the block in the Downtown study area monitored by TBOPS, as well as the equivalent data for Sugar House. The observations on 300 South showed a slightly longer average length of stay than did three of four facilities in Sugar House. Stays in the Whole Foods lot were the shortest, averaging just over 30 minutes, while stays at the 24 Hour Fitness were longest, at just over 1.5 hours.

Figure 3-10 Summary of TBOPS Turnover Data

Facility	Spaces Monitored	Unique Vehicles Detected	Vehicles per Space	Average Length of Stay
300 South	25	143	5.7	0:51
Highland Street (Weekday)	16*	68	4.2	0:36
Highland Street (Weekend)	16*	45	2.8	0:37
Whole Foods	73	438	6.0	0:32
24 Hour Fitness	52	123	2.4	1:32

* Spaces unmarked; number of spaces approximated based on length of curbside space available, using an average parking space length of 18 feet.



TBOPS cameras capture parking data on 300 S and in the Whole Foods parking lot in Sugar House.

Intercept Survey

The project team completed intercept surveys in both study areas to gain a deeper understanding of user experiences and their opinions on how to improve parking in each area, in addition to basic data on their trip and demographics. Using a survey-response-entry app on handheld devices, surveyors collected responses from 120 people in downtown and 62 people in Sugar House. Key findings include:

- The vast majority of respondents in both Sugar House and Downtown found a parking spot within less than five minutes (Figure 3-11).
- More than 80% of respondents in Sugar House were able to find a space within one block of their final destination. In downtown, it was just less than 60% (Figure 3-12).
- In general, respondents from both Sugar House and Downtown said finding parking was "very easy" or "somewhat easy." About 20% of Downtown respondents said that finding parking was "very hard" (Figure 3-13).
- Respondents were asked about their willingness to pay for parking *if it made it easier to find a space and revenue was used to improve transportation.* About 60% of Downtown respondents were neutral or in favor of paying for parking, and less than 20% were "strongly opposed." Opposition to paid parking was much higher in Sugar House (Figure 3-14).

Figure 3-11 Parking Search Time

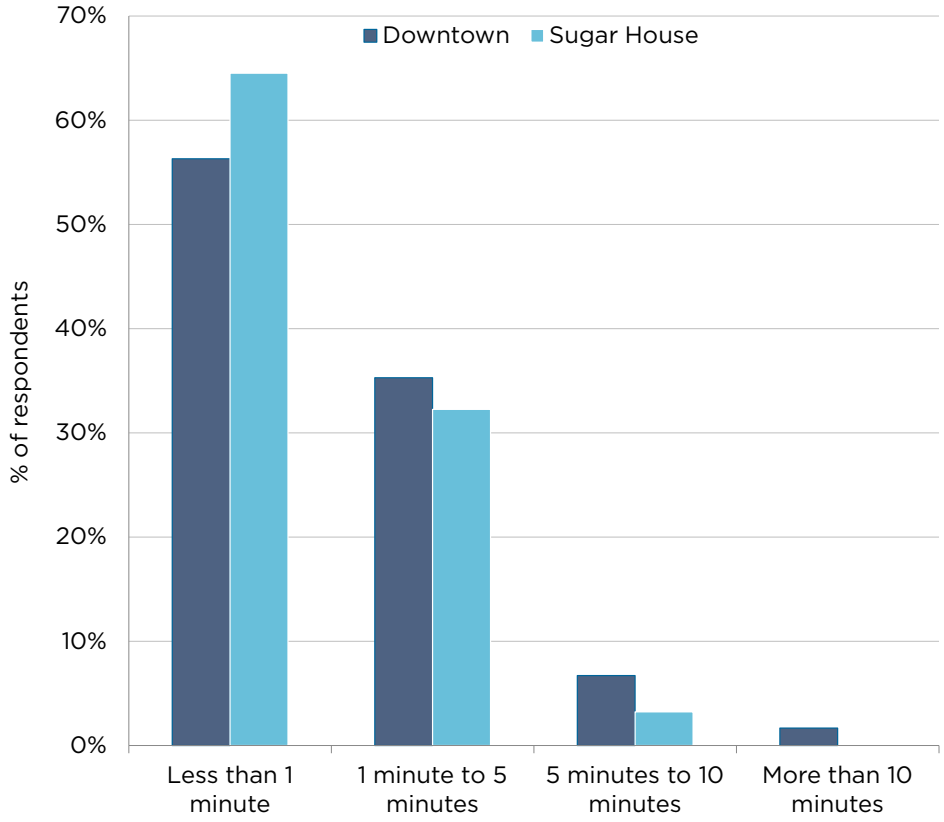


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Figure 3-12 Distance from Parking to Destination

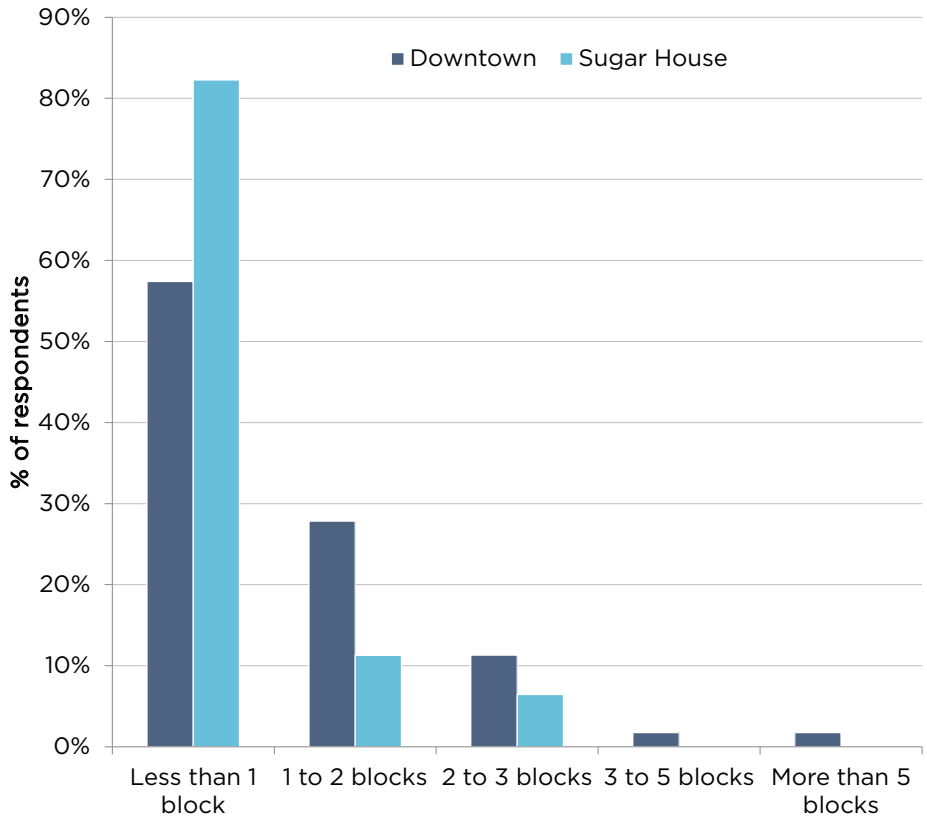


Figure 3-13 Ease of Finding a Space

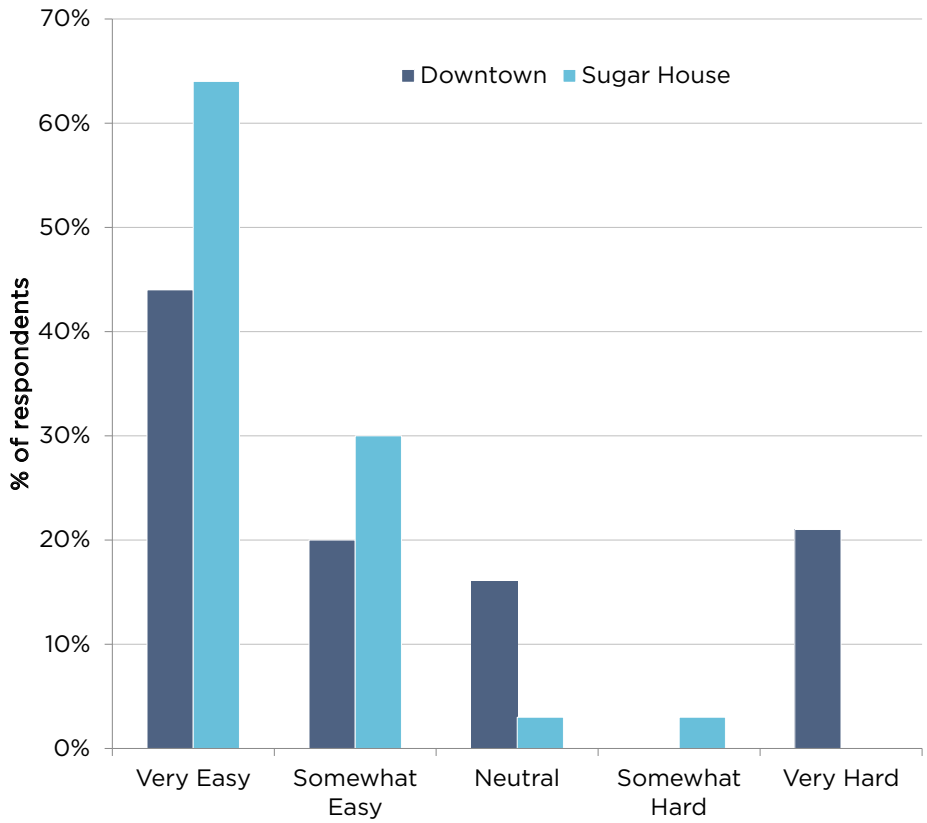
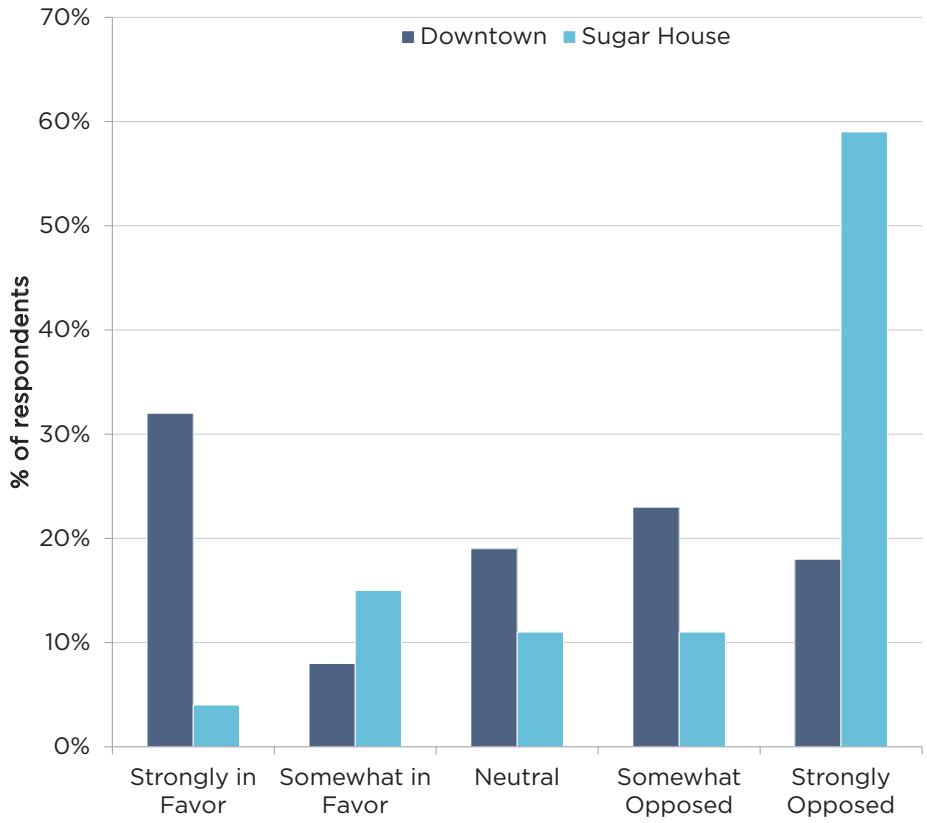
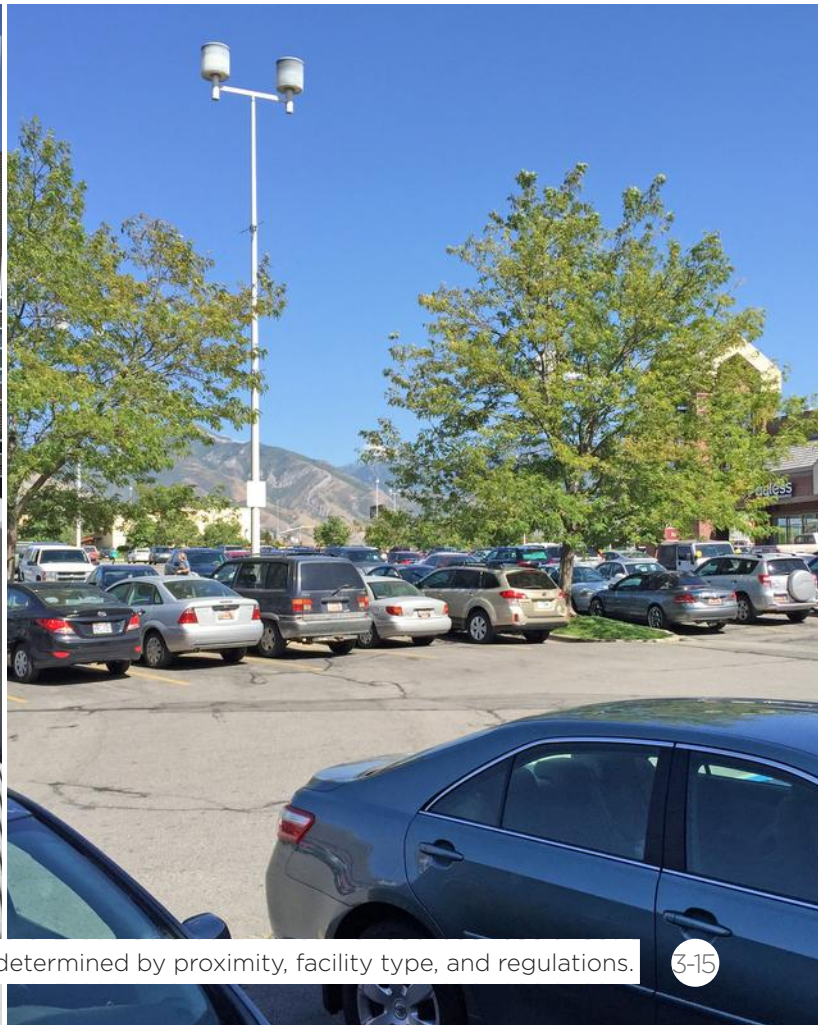


Figure 3-14 Willingness to Pay for Parking





The "ease" of finding parking is determined by proximity, facility type, and regulations.

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Zoning And Policy

The existing parking policies and guidelines for the Downtown and Sugar House study areas were evaluated to provide a shared understanding of the policy framework that determines how parking is built, designed, and managed in Salt Lake City. Key elements are summarized below.

Minimum and Maximum Parking Requirements

Figure 3-15 provides a summary of the minimum parking requirements for Salt Lake City by zoning district, per Chapter 21A.44.030. Like almost every city, Salt Lake City requires a minimum number of parking spaces per land use. There are two major exceptions to providing minimum parking. For non-residential uses below a certain size in the D-1, D-2, D-3, D-4, G-MU districts, no minimum number of parking spaces is required. For residential uses in these districts, the city requires one space for every two units.

Within the "core" of Transit Station Area (TSA) district, no minimum number of parking spaces is required for any uses unless a project exceeds 10,000 square feet in D-3 or GMU, or 25,000 square feet in D-1, D-2, or D-4.

Salt Lake City has also established parking maximums throughout the city. Maximum ratios are generally established as 125% of the minimum parking requirement, while the D-1, D-2, D-3, D-4, G-MU, and TSA districts have district-specific maximum parking requirements.

Reductions in Parking

Chapter 21A.44.040 includes provisions that allow for the reduction of required parking spaces based on certain conditions. In exchange, the City incentivizes new development to contribute to other goals related to improved mobility by transit, biking, and walking. Reductions in parking supply are available under the following conditions.

Shared Parking: The zoning code recognizes that different land uses have different periods of peak demand, and different uses can share parking supply to reduce the overall number of spaces provided. Chapter 21A.44.040.B.1 provides the required methodology for determining shared parking supply based on land use, time of day, and day of the week.

Pedestrian-friendly Development: Chapter 21A.44.040.B.8 also allows for a reduction in parking spaces if the proposed development includes elements that improve walkability near the project. The provisions only apply to "recreational, cultural or entertainment" or "retail goods and services" in the CB, CN, RB, MU, R-MU, R-MU-35, and R-MU-45 districts.

Proximity to Mass Transit: The minimum number of spaces can be reduced by 50% if the project (new multi-family residential, commercial, office or industrial are eligible) is located within 1/4th mile of a fixed transit station.

Transportation Demand Management (TDM): To reduce the number of single occupancy vehicle trips, the parking code (Chapter 21A.44.050) allows for adjustments to the parking requirements if TDM programs are included. The provisions only apply to uses requiring at least five parking spaces. A 25% reduction or increase in parking up to double the minimum is allowed if certain "major" or "minor" strategies are utilized.

Figure 3-15 Parking Requirements, by Zoning District

Use	Requirement	
	Minimum	Maximum
D-1, D-2,D-4		
Non-residential	0-25,000 SF: none; 25,000 SF plus: 1 space per 1,000 SF usable floor area	0-25,000 SF: 1 space per 1,000 SF usable floor area; 25,000 SF plus: 2 spaces per 1,000 SF usable floor area
Single-family	1 space per DU	Equal to minimum
Two-family	.5 spaces per DU	Equal to minimum
All other residential	.5 spaces per DU	Equal to minimum
D-3, G-MU		
Non-residential	0-10,000 SF: none; 10,000 SF plus: 1 space per 1,000 SF usable floor area	0-10,000 SF: 1 space per 1,000 SF usable floor area; 10,000 SF plus: 2 spaces per 1,000 SF usable floor area
Single-family	1 space per DU	Equal to minimum
Two-family	.5 spaces per DU	Equal to minimum
All other residential	.5 spaces per DU	Equal to minimum
Transit Station Area (TSA)		
Residential	No minimums. TSA Transition Zone: 50% of required parking.	Core: 1 space per DU. Transition: 1.5 spaces per DU.
All other uses		3 spaces per 1,000 SF usable floor area
Mixed-use		Calculated on ratios for each type of use that may occupy each principal building.
R-MU, R-MU-35, R-MU-45, MU		
Single-family/Two-family	1 space per DU	125% of required minimum spaces
Multi-family	.5 spaces per DU	125% of required minimum spaces
CN, CB		
Residential	1 space per DU	125% of required minimum spaces
Mixed-use (2 or more uses)	1 space per DU	125% of required minimum spaces
All other districts		
All uses	Per Table 21A.44.030	125% of required minimum spaces

Source: Salt Lake City Municipal Code, Chapter 21A.44.030

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Bicycle Parking

Figure 3-16 summarizes the bicycle parking requirements. Most of the requirements are based on a percentage of the required vehicle spaces.

Figure 3 16 Requirements for Bicycle Parking

Use	Required Parking
Residential and Commercial	5% of vehicle spaces. Minimum of 2 spaces required.
Office	10% of vehicle spaces. Minimum of 5 spaces required, with 25% secure spaces.
Educational	1.5 spaces per 20 students and 1 space per 10 employees. Minimum of 10 spaces required.
Manufacturing	2% of vehicle spaces. Minimum of 2 spaces required, with at least 1 secure space.
All other uses	5% of vehicle spaces. Minimum of 2 spaces required.

Source: Salt Lake City Municipal Code, Chapter 21A.44.050.B.3

Permit Parking Program

Salt Lake City's Residential Permit Parking (RPP) Program was established in 1985. The primary goal of the program is to mitigate spillover parking impacts to residents and businesses by establishing parking regulations for on-street spaces. There are two types of regulations: 1) time limits, such as 2-hour parking, 8 a.m. to 5 p.m.; or 2) no parking, such as No Parking, 7 a.m. to 3 p.m. Chapter 12.64 of the Municipal Code includes the regulations governing the CPP.

In order to purchase a residential permit, a resident must submit an application with proof of residence and an annual fee of $37 per vehicle. There are currently nine residential permit zones within Salt Lake City. Most of the zones are located near major trip generators such as University of Utah and Capitol Hill.

Other Parking Programs

The City also has programs to address electric and other green vehicle parking, freight traffic and deliveries, and business parking permits.,

4
Recommendations


Public
Parking
DOWNTOWN
PARKING
SLC
TRANSIT
TOKEN
P
PLEASE PAY KIOSK
IN ADVANCE

4 Recommendations

This chapter includes the final package of parking recommendations for the Downtown and Sugar House study areas. The recommendations were informed by the stakeholder input (Chapter 2) and directly respond to the key findings from the existing conditions analysis (Chapter 3).

Figure 4-1 provides a summary of the recommendations. Each recommendation is described in a summary "sheet," which includes a brief summary of the strategy, a detailed description, specific rationale, anticipated benefit, the action steps towards implementation, and estimated costs.

Note that while this study focused on Downtown and Sugar House, some recommendations extend beyond those areas based on an assumption that certain parking challenges are consistent citywide.

Figure 4-1 Final Package of Recommendations

	Immediate	Short-Term	Long-Term
Oversight	Better coordinate city's parking-related functions under new parking program. Hire program manager and increase staffing Engage and coordinate with the private sector Continue efforts to establish data-sharing protocol with meter technology provider, IPS Group	Coordinate with the private sector with focus on consistent reporting/data, pricing, and enforcement Continue to evaluate citation rates	Unify parking system management with strong public-private partnership Coordinate transportation policy decisions across modes to support parking management
Customer Experience	Initiate and complete a parking communications plan, focused on wayfinding, information, and branding Modify signage ordinance to require consistent parking information Identify and overcome obstacles to modifying business licensing protocols to require a receipt for parking payment	Determine long-term approach to meter technology Identify pedestrian network gaps and prioritize walking improvements	Design, pilot, and implement a performance-based parking management program.
Parking Supply and the Built Environment	Consistently improve data collection processes to better inform decision making Revise the Residential Parking Permit program to better manage spillover parking	Create new public shared parking supply in strategic off-street facilities. Coordinate on- and off-street prices Revise zoning code to: • Adjust minimum/maximum requirements • Incentivize lower parking demand • Maximize attractive urban design • Ensure flexibility in meeting parking requirements	

Blue Text: Management/Operations Recommendations
Grey Text: Regulation, Zoning, and Policy Recommendations

TABLE OF FIGURES

Three key points should be emphasized. First, recommendations were **organized on two axes – category of parking issue and timeline**. The issue categories directly correlate to the key findings summarized in Figure 3-1. The timeline for implementation includes three general time periods – Immediate, Short-term, and Long-term – and generally indicate priority of implementation.

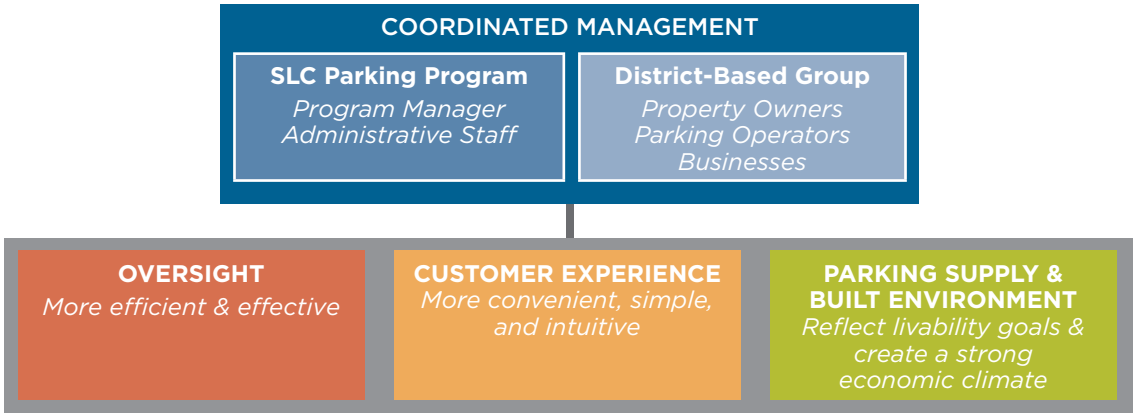
Second, the recommendations are designed to allow for **phased implementation** (Figure 4-2). This approach recognizes that all of the strategies cannot be done at one time or within the next year, but will require additional planning and allocation of resources. Furthermore, many of the strategies are dependent on one another and will only be successful if implemented in logical stages, with additional planning building to execution and unification of all the strategies.

Finally, long-term success will ultimately be determined by **improved coordination** within the city and between the public and private sectors (Figure 4-3). If Salt Lake City is to address its systemic parking issues, it must take a different approach to how it manages its parking system. As detailed in this chapter, this approach requires creation of a more coordinated city parking program to manage the overall system. This program would be guided by a program manager and dedicated staff. The second key component is coordination with new district-based groups, such as the Downtown Alliance, that can organize management of parking amongst the various private property owners and parking operators.

Figure 4-2 Phased Strategies

The strategies are designed to phased, with immediate effort building to long-term implementation.

Figure 4-3 Comprehensive Management



Success is entirely dependent on a comprehensive management approach supported by additional staff and formal collaboration with the private sector.

Immediate Recommendations

Oversight	Better coordinate city's parking-related functions under new parking program. Hire program manager and increase staffing. Engage and coordinate with the private sector Continue efforts to establish data-sharing protocol with meter technology provider, IPS Group
Customer Experience	Initiate and complete a parking communications plan, focused on wayfinding, information, and branding Modify signage ordinance to require consistent parking information Identify and overcome obstacles to modifying business licensing protocols to require a receipt for parking payment
Parking Supply and the Built Environment	Consistently improve data collection processes to better inform decision making Revise the Residential Parking Permit program to better manage spillover parking

Blue Text: Management/Operations Recommendations

Grey Text: Regulation, Zoning, and Policy Recommendations

BETTER COORDINATE PARKING-RELATED FUNCTIONS UNDER NEW PARKING PROGRAM; HIRE PROGRAM MANAGER AND INCREASE STAFFING

Timeline: IMMEDIATE

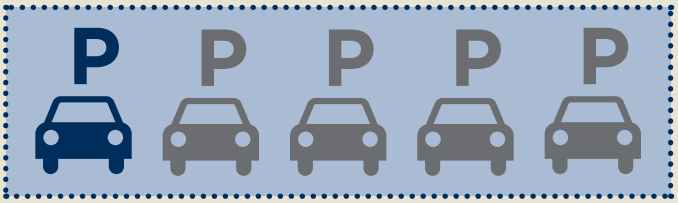
Category: Oversight

The Problem—

Public and private sector parking would benefit from improved coordination

The Solution—

Create a consolidated Parking Program



Benefits

- **To City:** Additional staffing capacity and leadership to guide parking management efforts in downtown and local districts. A coordinated approach will allow parking to better support larger transportation and planning efforts. Long-term savings are possible with improved internal oversight. Improved negotiating position with private sector. Significant improvement in knowledge of parking systems and assets, which can be used to improve customer information. Potential for increased revenue.
- **To Customers:** Improved management of system will make create a more convenient and user-friendly parking experience.
- **To Property Owners/Businesses:** Improved city capacity to address parking challenges and respond to private sector concerns. Additional public financial and technical support to facilitate private sector cooperation. Streamlined interface with city on parking issues.

Cost/Resource Estimate

- **Program Manager:** $80-110k per year, plus benefits
- **Parking Staff:** $60-90k per year per staff member, plus benefits
- Staff time to manage and implement consolidation efforts

Summary

Consolidate city parking functions under a new parking program. Hire a program manager and administrative staff to provide coordinated management and policy guidance.

Description

Salt Lake City's parking functions are spread across several city departments. The city should create a consolidated parking program and hire a new program manager. The new program manager should be a seasoned parking professional, with experience managing municipal systems of similar complexity and demonstrated understanding of parking's role in an integrated, multimodal transportation system.

Rationale

- City lacks dedicated parking staff and leadership on parking issues
- Addressing systemic parking challenges is difficult and inefficient within existing organizational structure
- City has limited capacity to collect data, understand parking behavior, and use data to inform parking management to support larger mobility and development goals
- A more streamlined structure might make engaging with the private sector easier

Action Plan

- Conduct internal audit of all parking functions and/or staff time across city departments
- Analyze financial implications, develop job descriptions, and identify funding for new program manager and staff
- Engage with existing departments to negotiate as needed
- Finalize new organizational chart, incorporating all necessary functions
- Legislative approval of creation of new program
- Establish consolidated office location for all members of the parking program
- Conduct national search to identify new program manager and staff
- Conduct goal setting exercise and develop strategic work plan

[†] The 2012 Parking Management Study provides additional resources on improved management, including a draft job description for a new program manager.

ENGAGE AND COORDINATE WITH THE PRIVATE SECTOR

Timeline: IMMEDIATE, SHORT-TERM , and LONG-TERM

Category: Oversight

Benefits

- **To City:** Formal process by which to engage and partner with diverse private sector stakeholders. Potential to make private spaces part of "public" system, thereby reducing need to build more parking. Enhanced knowledge of parking assets and parking behavior.
- **To Customers:** A seamless parking system that makes it easier to park. Less anxiety about tickets/towing. Improved and consistent parking information.
- **To Property Owners/Businesses:** Increased utilization of parking assets and potential for more revenue. Leverage public and private resources to invest in needed parking infrastructure, such as district-wide wayfinding and new technology. Private sector entity will represent interests and speak with a unified voice on parking issues.

Cost/Resource Estimate

- Some investment needed to enable private-sector entities to take a significant role and help with priority action items (i.e. wayfinding study) in each study area. Funding should be a mix of public dollars and private sector match.
- Staff time to engage with private sector and initiate/execute creation of parking entity. Would be within responsibilities of new Director and staff.

Action Plan

- Successful implementation will require an incremental approach, and is dependent on creation of a more coordinated city parking program.
- Facilitate stakeholder workshops to build relationships and understand motivators/barriers to cooperation.
- Secure commitment from Downtown Alliance and identify staffing plan.
- Identify incentives for participation, including ongoing city facilitation, information sharing, technical assistance, and priority action plan.
- Identify a shared funding strategy, including initial public funding (i.e. parking revenue) and private sector match (i.e. fair share funding formula – cost per space) to start program. Evaluate long-term funding, including fees and dedicated share of parking revenue.
- Identify and secure commitments from committee members. Formalize communication protocols.
- Develop and implement initial work plan and priority actions, such as a communications program and wayfinding study.

Summary

City should formally partner with the private sector in Downtown and Sugar House to create strategic plan for coordination (immediate), execute plan for coordination (short-term), and unify system management (long-term).

Description

The city should partner with the private sector to establish a district-based entity to lead private sector parking management and coordinate with the newly established parking program. Initial implementation would focus on the downtown, but the model should be applied to other districts. It is recommended that the Downtown Alliance take on the official role within the downtown.

As shown in Figure 4-5 on page 4-5, the partnership is envisioned as collaborative, and the primary role of the Downtown Alliance would be to actively engage property owners, businesses, and parking operators to create a unified voice for the private sector.

A key step to success will be building relationships with the key private stakeholders and articulating the benefits of participation. Other key functions would include implementation of parking programs and ongoing and consistent data reporting by the private stakeholders to help inform overall management.

The Downtown Alliance would be guided by an Advisory Body made up of a cross-section of key stakeholders. In addition to oversight by the Downtown Alliance Director, it is recommended that additional staff be hired within the Downtown Alliance to specifically manage the parking responsibilities.

Ultimately, this body would be advisory in nature and the City would retain decision-making authority over its parking assets. However, in order to formalize this relationship and foster collaboration, it is recommended that the City and Downtown Alliance identify a shared funding strategy.

Rationale

- The existing system results in inefficient use of existing supply, in which thousands of private spaces sit empty for all but the busiest days.
- Private facilities each have their own signage, operating hours, rates, and enforcement policies. From a customer perspective, the parking experience is confusing, not intuitive, and creates a negative perception about parking in Salt Lake City.
- A fragmented approach to parking management undermines efforts to improve overall mobility and investments in transit-oriented communities.
- Previous studies have recommended improved public-private coordination of parking management, but did not move forward due to a lack of leadership, resources, and resistance to change. A more comprehensive approach, with a new city parking program, offers a path forward.

CONTINUE EFFORTS TO ESTABLISH DATA-SHARING PROTOCOL WITH METER TECHNOLOGY PROVIDER, IPS GROUP

Timeline: IMMEDIATE

Category: OVERSIGHT

Pay stations provide a wealth of data, but the city does not currently maximize the system functionality.

Benefits

- **To City:** Developing a strong understanding of the DMS will provide the city with a greater knowledge the operational effectiveness of the city's pay stations and detailed insight into trends for determining rate structures and pay station need or placement.
- **To Customers:** Improved monitoring and managing of the DMS and pay stations will ensure customers are consistently encountering functioning pay stations which are performing transaction requests by the customers.
- **To Property Owners/Businesses:** Improved management and knowledge of the DMS creates better oversight of pay stations operations. Consistent performance creates ease of use to customers who may then patronize local businesses and properties.

Cost/Resource Estimate

- Training classes are included in the City's existing service agreements with IPS Group at no cost to the City and its staff other than the staff time commitment for the training sessions.

Summary

Better utilize IPS Group's parking machine Data Management System (DMS) to gain further insight and understanding of city's pay station data.

Description

Pay-to-park data can yield a wealth of insights on spatial and temporal demand patterns. IPS Group is the provider of the city's pay station technology, and the company's pay stations are integrated into a web-based management system known as DMS. The DMS provides designated city staff the ability to view financial, administrative, technical, and summary information related to the IPS Group pay stations. In addition, the DMS allows staff to communicate with the pay stations to perform remote rate changes, update display information, and complete firmware downloads. City staff do not currently maximize use of these features.

Improved understanding and use of the DMS will provide valuable insight to the city on pay station performance from an operational perspective and, even more importantly, the amount of revenue that is generated from each pay station throughout the city. In doing so, the city will have a better understanding of parking demand and utilization. The Visual Analytics tool which will allow the city to forecast and analyze trends and large sets of data.

The city should engage IPS Group to ensure proper training of staff members to regularly monitor and manage meter data. This requires scheduling the data management and reporting training provided by the city's contract with IPS Group. This functionality should feed into city development of an ongoing parking data collection program.

Rationale

- The DMS allows customers to create a customizable dashboard and identify trends and patterns in parking behavior.
- Use of the DMS will allow the city to run reports related to maintenance, revenue or collections of individual pay stations or meter sub-areas throughout the system.
- Provides a level of oversight that can set the city up to make sure the city's parking system is operating efficiently–i.e., monitoring usage rates and/or hotspots and shifting enforcement resources into the highest activity areas.

Action Plan

- Ensure that the city continues to maintain a single staff member as a primary point of contact with IPS Group to be responsible for the direct oversight, administration, and assessment of the meter performance, maintenance and reporting systems.
- IPS Group should conduct a thorough, comprehensive, and ongoing training program to appropriate city personnel. The training should include information on revenue reconciliation, maintenance summaries, and inventory, as well as trend analysis on both micro and macro levels in order to understand customer behavior in an area-by-area basis or in the city as a whole. Users will have the ability to access the DMS via the internet and will also have the ability to receive text message alerts and automated reporting.

INITIATE AND COMPLETE A PARKING COMMUNICATIONS PLAN, FOCUSED ON WAYFINDING, INFORMATION, AND BRANDING

Timeline: IMMEDIATE

Category: CUSTOMER EXPERIENCE

Parking wayfinding varies from facility to facility.

Benefits

- **To City:** Direct motorists to underutilized off-street facilities, freeing up the most convenient "front-door" curbside spaces, and maximizing the efficiency of a parking system. Eliminates traffic caused by cars "cruising" for on-street parking. Helps dispel perceived (but not actual) shortages in parking. Ability to collect more robust parking data.
- **To Customers:** Can reduce parking search time in half. Improved overall experience and perception of parking. Multiple methods to find information.
- **To Property Owners/Businesses:** Can increase visits, facility utilization, and revenue. Public partnership would likely cost share improvements to parking facilities.

Cost/Resource Estimate

- Communications/wayfinding study: $50-100k
- Infrastructure: $500k - $1m
- Operations and maintenance: $50-100k per year
- Staff time for evaluation, implementation, and administration of program.

Summary

The city should fund a comprehensive parking communications program, with the initial phase focused on a new wayfinding program in the downtown. Outcomes would inform citywide roll out and development of a performance-based management system.

Description

This recommendation would prioritize a comprehensive approach to address core issues around underutilized existing supply and an inconvenient parking experience, incorporating the following elements:

- A public **parking brand or identity,** which could utilize the existing Park SLC logo and color palette
- Communications package that includes a new **menu of tools**: wayfinding/signage, brochures and maps, parking website, and mobile phone apps
- **Wayfinding** would include a suite of static, directional, pay station, informational per lot/garage, arrival/entry, and dynamic variable message signs (VMS).
- VMS would allow for continually updated **real-time info**, be integrated across garages and managed from a single location, and allow for distribution to websites and mobile apps.

Successful implementation would require a strong public/private partnership to ensure that private facilities also utilize the communications methods. A first step will be for the city to finance the initial planning efforts and install improvements at public parking locations and participating private facilities. Future collaboration and cost sharing agreements would enable broader roll out of the program.

Rationale

- A lack of consistent parking information, especially wayfinding and signage, is a priority issue
- The city and Downtown Alliance have invested in various strategies (Park SLC and parkingslc.com), but the system is incomplete
- Negative user perceptions are driven in part by confusing signage
- Off-street lots and garages have available parking, but are not utilized
- Private lots/garages use their own signage and no common identity has been established
- A lack of data impedes ability to provide parking information or inform planning

Action Plan

- Identify funding source for wayfinding/branding study
- Identify public/private partners via City parking program and Downtown Alliance
- Issue competitively-bid RFP and conduct study to develop overall strategy, brand, design elements, real-time/VMS/website/mobile technology, and installation locations
- Install signage at all public facilities and roll-out other elements of communication program. Could include pilot program for private lots/garages.
- Develop and implement ongoing strategy to integrate private parking facilities into program
- Track, monitor, and integrate data into planning processes

Seattle, San Francisco, Walnut Creek, Portland, and Berkeley utilize a variety of static and real-time methods to communicate parking location, availability, and regulations.
Images from SFpark, seattle.gov and sdotblog.seattle.gov, Nelson\Nygaard

MODIFY SIGNAGE ORDINANCE TO REQUIRE CONSISTENT PARKING INFORMATION

Timeline: IMMEDIATE

Category: CUSTOMER EXPERIENCE

Existing informational signage is inconsistent and confusing.

Benefits

- **To City:** Consistent signage can improve the aesthetic look of a district. Signage can direct people to available parking more easily. Better utilization of existing facilities. Facilitates consistent enforcement practices.
- **To Customers:** Improved parking information. Consistent signage can reduce anxiety about tickets and reduce enforcement/compliance incidents.
- **To Property Owners/Businesses:** Improved experience for customers and users. Likely increase in parking utilization and revenue.

Cost/Resources Estimate

- Staff time for legislative work and enforcement.

Summary

Revise the city's existing signage ordinance to require clear, consistent signage elements in all publicly available off-street lots/garages.

Description

This recommendation would prioritize revisions to Chapter 21A.46 of the municipal code to ensure that parking signage reflects the overall look and feel of other parking signs in the area and that each lot/garage have an informational sign that displays prominent and consistent information about parking rates, operating hours, payment, and enforcement.

Specific recommendations include:

- Require that parking signage be updated with consistent design elements at the entryway to each publicly available off-street facility upon completion of site modifications. Design elements would be informed by findings and recommendations of the wayfinding study. Note that this requirement may need to apply more narrowly to parking-related site modifications.
- As possible given legal guidance, require that consistent information be displayed on signs at publicly available parking lots, including: price, hours and regulations, payment media accepted, and enforcement details.
- As possible given legal guidance, include regulatory language on the size of signs and fonts to ensure legibility. Compliance could be determined by the zoning administrator, based on factors that include: location, color, size, shape, and lettering.
- Extend the public parking signage provisions (21A.46.075) to commercial areas throughout the city, allowing for different designs in different areas but consistent designs within each area.

Rationale

- Signage is crucial to clearly communicating parking locations and regulations, as well as making sure that parking is visible, accessible, and effectively utilized.
- Signage can help reinforce an area's identity by using the look and feel of a given area.
- The city's existing signage ordinance permits private uses to post signage and regulates certain elements of their design, but it lacks detailed design standards that would ensure that off-street lots/garages have the same design elements or information. Chapter 21A.46.070.J requires that "a projecting parking entry sign shall be located at the parking entry level of the building." Chapter 21A.46.075 provides guidelines for neon public parking signs and where/when they are permitted.
- The inconsistent approach to parking signage is a key factor in the overall negative perception of parking, especially in downtown.
- In addition to developing a wayfinding and signage program, the city can utilize the authority of the municipal code to better regulate parking signage.

Action Plan

- Conduct a comprehensive review of municipal provisions related to parking signage
- Identify code sections for revision and draft language
- Legislate code changes

IDENTIFY AND OVERCOME OBSTACLES TO MODIFYING BUSINESS LICENSING TO REQUIRE A RECEIPT FOR PARKING PAYMENT

Timeline: IMMEDIATE

Category: CUSTOMER EXPERIENCE

Many existing facilities have outdated payment technology, which creates an inconvenient and unfriendly parking experience.

Requiring a receipt will facilitate upgrades to payment technology, including pay-by-phone.

Benefits

- **To City:** Improved parking infrastructure and potential for increased demand in existing underutilized lots. Potential for streamlined and enhanced data collection.
- **To Customers:** Improved customer experience through improved infrastructure and diversified payment methods. Reduced potential for fraud.
- **To Property Owners/Businesses:** Strong potential for increased usage of parking lots and additional revenue. Reduced incidents of payment dispute.

Costs

- Staff time for identifying and overcoming obstacles and drafting and implementing code revisions; implementation and enforcement of new requirements.

Summary

City should identify and overcome obstacles to revising business licensing provisions to require the issuance of a printed receipt for any payment of parking.

Description

This recommendation would require issuance of a parking receipt for any transaction within a private parking lot/garage. The primary focus of this recommendation is unattended parking lots that charge for parking, yet have outdated or inoperable Revenue Control Equipment (RCE). Specific revisions to Title 5 of the municipal code could include:

- Operator must either 1) use Pay and Display RCE that issues a parking ticket or, 2) use RCE that utilizes electronic payment to record license number, parking space number, or some other means of identifying the occupant as having paid rent.
- A facility that uses electronic payment must have individually numbered and clearly marked parking spaces. The RCE must be able to record the occupied parking space number to track period of occupancy and confirm payment.
- The receipt must contain a statement warning the occupant that the vehicle may be towed for failing to pay or display the receipt.
- Operator shall post a sign at every location where the occupant pays rent or in at least two places that are otherwise conspicuous.
- Operator shall not tow or charge additional rent to any vehicle that entered while the RCE was not fully operational and for a period of eight hours after the RCE is restored to full function.

Rationale

- Many private parking facilities that charge for parking are not attended and do not have payment infrastructure to provide a receipt. This condition is inconvenient and can result in actual/perceived fraud.
- This requirement is consistent with existing standards for on-street spaces, per Chapter 12.56.150.B.
- By requiring a receipt, all parking facilities will be required to provide adequate payment technology, thereby enhancing the user experience. Use of technology can also facilitate easier price adjustments, clarity about parking rates, and improve parking data collection.
- There may be obstacles to implementing this recommendation, and City staff should work to identify and overcome them

Action Plan

- Identify appropriate ordinance section. Draft and adopt new language.
- Identify any obstacles to implementation and work to overcome them.
- Provide a transition timeline for operators to implement changes.
- Enforce receipt requirement.

CONSISTENTLY IMPROVE DATA COLLECTION PROCESSES TO BETTER INFORM DECISION MAKING

Timeline: IMMEDIATE

Category: PARKING SUPPLY & THE BUILT ENVIRONMENT

A formal data collection plan would provide a better understanding of demand by facility and inform crucial parking management decisions.

Benefits

- **To City:** Enable well-informed decisions about management, pricing, and enforcement. Facilitates periodic adjustments to pricing and regulatory structures, allowing a performance-based management structure. Improves transparency in decision-making and public understanding of parking behavior.
- **To Customers:** Improved information about parking availability and overall improved parking experience. Data can be utilized to adjust prices to improve parking availability in high demand areas.
- **To Property Owners/Businesses:** Sharing of parking data will improve overall management of system, creating greater utilization and revenue, especially if parking data is integrated into real-time availability and wayfinding infrastructure. Potential to leverage public investments and reduce operating costs in private lots/garages.

Cost/Resource Estimate

- Staff time for developing approach and methodology, coordinating with private sector, and implementing approach. Would be included in responsibilities of program manager and staff.
- $25-75k for deployment of technology or use of third-party data collection, depending on type and scale of data collection.

Summary

Develop a citywide parking data collection program, to improve management and facilitate a long-term transition to a performance-based management program.

Description

In parking, it is only possible to manage what is measured. It is highly recommended that the city develop an ongoing parking data collection plan to document inventory, regulations, and occupancy for public and private facilities. Parking data is a central input to efforts to change parking prices, adjust time limits, direct enforcement resources, increase shared-parking supplies, and inform zoning code changes.

Data collection would include a combination of manual field surveys, gate data for lots/garages, payment/meter/enforcement data, and outputs from future technologies. Specific elements should include private off-street, on-street meters, and on-street, non-metered parking.

The initial focus of data collection should be in downtown, but the methodologies could be rolled out to other districts as parking issues emerge or to inform specific planning decisions.

A key challenge will be securing participation from the private sector. It is reasonable to expect that private operators will not want to share proprietary data, An incentive-based pilot program via the Downtown Alliance that targets property owners, and not just operators, is one potential method for securing participation.

Rationale

- Salt Lake City has very limited inventory and occupancy data.
- Perception is that parking is constrained and supply should be increased, despite sample data showing availability at most times.
- Regular, comprehensive data collection will inform planning decisions about adding more supply, reducing requirements, and modifying regulations.
- Improved technology should reduce long-term costs. License plate readers, meter data, and data-collection apps should be used strategically with other technologies.

Action Plan

- Formalize as part of new parking program responsibilities.
- Identify priority data collection areas in downtown and other neighborhoods.
- Establish strategy that defines specific methodologies, with a long-term plan for a performance-based management program.
- Partner with the private sector to identify willing property owners. If needed, establish a pilot program that provides incentives for participation and/or utilizes a cost-sharing approach in exchange for data sharing.
- Integrate data into ongoing reporting to continually inform management of system.
- Report and distribute parking survey results on an annual basis.

REVISE THE RESIDENTIAL PERMIT PARKING PROGRAM TO BETTER MANAGE SPILLOVER PARKING

Timeline: IMMEDIATE

Category: PARKING SUPPLY & THE BUILT ENVIRONMENT

Guide to Preferential Parking Districts 1-11

The map of West Hollywood has eleven (11) preferential parking districts which are referenced for your convenience. Use the map to reference where you may use your district parking permit and become aware of the district expiration date where you live.

A **PREFERENTIAL PARKING DISTRICT** is a residential area with streets or boundaries where parking restrictions require vehicles to display a valid permit to park during certain hours.

West Hollywood utilizes progressive pricing to manage demand for permits. Residents can easily renew permits online and employers can also purchase permits for their employees in certain districts.

Source: http://www.weho.org/home/showdocument?id=2337

Benefits

- **To City:** Better utilization of existing on-street spaces. Reduced enforcement and administrative costs. Help to reduce parking spillover in existing residential neighborhoods.
- **To Customers:** More convenient and user-friendly permit program. Reduced spillover and more certainty about on-street parking availability.
- **To Property Owners/Businesses:** Sale of "excess" permits to non-residents would allow employees to park on-street. Additional revenue could fund neighborhood improvements.

Cost/Resource Estimate

- Staff time for legislative work and program administration

Summary

Revise the Residential Parking Program (RPP) to ensure that the number of permits issued correlates to on-street supply, user convenience is improved, and enforcement is streamlined.

Description

Modify elements of Chapter 12.64 and the RPP program to:

- Limit the number of permits issued per household and/or per RPP area. The number of permits should be linked to on-street supply to ensure that permits are not excessively oversold.
- Consistently monitor on-street parking occupancy. If demand is low, sell any "excess" permits to non-residents. If demand is high, implement a cap and "wait list" to handle remaining demand.
- Update costs on an annual basis and make any necessary adjustments to reflect reductions or increases to program and permit services. Evaluate moving beyond a "cost-recovery" pricing model to use revenue to fund sub-area mobility improvements.
- Adjust prices to reflect demand and evaluate a progressive pricing structure in which each additional permit sold is more expensive.
- As needed, modify RPP boundaries to exempt all non-R-1-5000 and R-2 uses from RPP eligibility.

Rationale

- The existing program does not limit the number of permits sold or correlate sales to actual on-street supply. An oversell ratio should be allowed, but an limited number of permits can impact availability.
- Sale of permits to non-residents when demand is low can ensure that the existing on-street supply is effectively utilized when residents are gone for the day.
- Progressive pricing can effectively limit the number of permits sold, reduce parking demand, and ensure that driveways and garages are used for vehicle parking.

Action Plan

- Collect inventory, occupancy, and permit sales data in RPP sub-areas
- Revise code language to establish policies for pricing changes and use of RPP permit revenue
- Set sub-area permit caps and pricing structure to balance supply and demand. Evaluate low-income subsidies.
- Create marketing/communications for RPP
- Monitor data and adjust pricing and regulations

Short-Term Recommendations

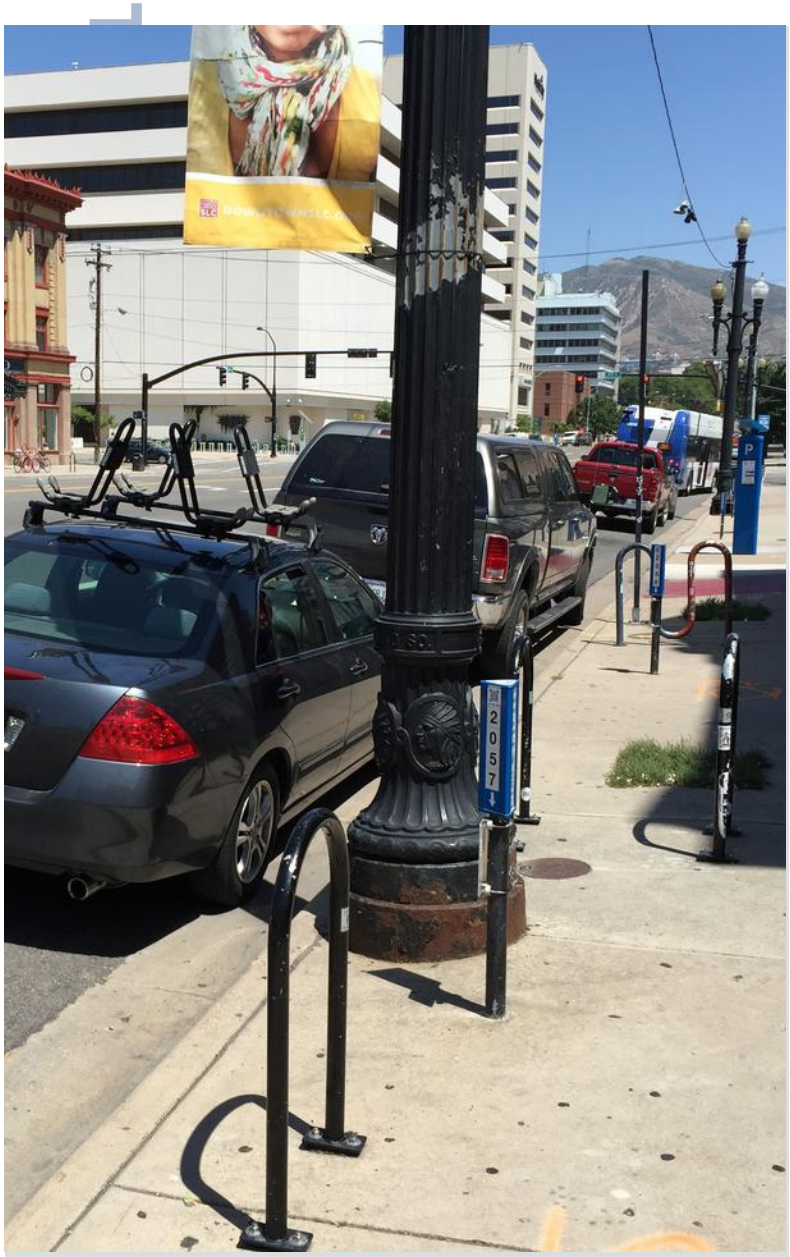
Oversight	**Coordinate with the private sector with focus on consistent reporting/data, pricing, and enforcement** Continue to evaluate citation rates
Customer Experience	**Determine long-term approach to meter technology** Identify pedestrian network gaps and prioritize walking improvements
Parking Supply and the Built Environment	**Create new public shared parking supply in strategic off-street facilities. Coordinate on- and off-street prices** Revise zoning code to: • Adjust minimum/maximum requirements • Incentivize lower parking demand • Maximize attractive urban design • Ensure flexibility in meeting parking requirements

Blue Text: Management/Operations Recommendations
Grey Text: Regulation, Zoning, and Policy Recommendations

CONTINUE TO EVALUATE CITATION RATES

Timeline: SHORT-TERM

Category: OVERSIGHT



Properly calibrated citation rates can ensure compliance with parking regulations, especially in high demand commercial corridors.

Benefits

- **To City:** An increase in citation fine amounts will discourage habitual offenders and customers as whole from illegal parking. The city could see an increase in citation revenue in the short-term, but with the implementation of performance-based management it is likely that compliance will improve and citations will go down.
- **To Customers:** Improved parking availability.
- **To Property Owners/Businesses:** A reduction in illegal behaviors that impact parking availability and access.

Cost/Resource Estimate

- Staff time to conduct rate evaluation, adjustment, and implementation.

Summary

Salt Lake City's current citation penalties are low relative to many major cities. The city should continue evaluating citation penalties and consider adjusting them to more effectively influence behavior.

Description

Appropriate fines can provide an effective deterrent to illegal parking, yet the city's current fine structure is lower than many major cities.

Salt Lake City should continue to regularly evaluate parking penalties to ensure that they are effectively influencing behavior (benchmarking is currently done annually). To do so, the city and its parking enforcement division will need to continue evaluating citation data to determine trends in citations issued and the presence of illegal behavior. Additional training to current field staff and a pro-active marketing campaign are recommended. The city may also need to update the municipal code and the parking bail schedule if fine rates are adjusted.

City staff and the code enforcement officers (CEOs) currently focus on customer service and pro-active enforcement education. However, if officers lack consistent policy enforcement, customers are able to violate the rules knowing the likelihood of receiving a parking ticket is minimal. The city's current warning to citation ratio is close to 75:25, resulting in a significantly lower number of citations actually being issued, which also perpetuates policy violations. The city should aim for a more balanced warning to citation ratio in order to improve compliance.

Rationale

- Two key things affect how reliably people will heed parking regulations:
  - The reliability of enforcement
  - Size/type of penalty when they do not heed regulations
- Salt Lake City's fine rates are lower, based on Cost of Living Index, than typical conventions.
- Adjusting fine rates is one step to ensure people more reliably heed regulations.

Action Plan

- Continue regularly analyzing existing citation and compliance data to identify trends by citation type and location.
- Regularly review average fine rates in comparable cities, focusing on those with high rates of parking compliance (adjusted to cost of living).
- Develop marketing program and conduct appropriate outreach.
- Coordinate citation changes with overall enforcement approach.

DETERMINE LONG-TERM APPROACH TO METER TECHNOLOGY

Timeline: SHORT-TERM

Category: CUSTOMER EXPERIENCE

Parking meters have presented operational challenges, but recent investments have improved performance. The city should plan ahead for replacement in 8-10 years.

Benefits

- **To City:** The city can replace its parking equipment in an organized and efficient manner. Upgraded parking technology and equipment will help ensure the city is utilizing up-to-date technology and optimizing its operational performance. Supports a transition to performance-based management.
- **To Customers:** Customers will benefit from the easy of completing a parking transaction at a meter or pay station that is intuitive, technologically friendly, and operating with high levels of uptime.
- **To Property Owners/Businesses:** Improved and updated parking meter technology will increase the likelihood that customers are making valid, quick, and user-friendly transactions.

Cost/Resource Estimate

- **Meters/Pay Stations:** Replacing the IPS meters will cost $450-$500 per single-space meter and roughly $6,000 per multi-space meter. If the city chose to pursue other vendors, the cost per multi-space pay station ranges from $5-12k.
- **Current Pay Station/Pay-by-Phone:** Costs covered through usage fees.

Summary

The city should evaluate their meter technology in the next five to seven years and plan for replacing infrastructure in eight to ten years. All technology should be evaluated in the context of a future transition to performance-based management.

Description

Salt Lake City has recently invested in IPS Group multi-space pay station technology. The implementation is a substantial improvement from the City's previous vendor, though IPS's new system was implemented as a retrofit to existing hardware. Per industry standards, it is recommended that cities evaluate their parking technology every 10 years. As part of this evaluation, it is recommended that the city explore single space or pay-by-plate technology.

The recent retrofit upgrades to the pay stations replaced the interior components and front-facing dashboard to customers. The pay stations now operate using IPS Group hardware, software, and firmware. While a significant improvement, equipment will become outdated and the existing kiosk will deteriorate due to normal wear and tear.

The City already allows pay-by-phone, a convenient payment alternative that allows those with smartphones to pay by credit card through their phones and extend their meter time remotely. The City should work with private operators to encourage them to offer pay-by-phone as well.

Rationale

- IPS Group's technology was installed recently, but the Aparc meter cabinets are roughly four to five years old. The useful life of the infrastructure is roughly 10 years.
- Single-space, smart-meter technology is often considered to be more efficient due to visual indicator lights on the back of the meters showing whether a space has paid time remaining or not. Pay-by-plate can further reduce and streamline enforcement.
- Pay-by-phone has emerged as a convenient parking payment option in many cities, including Salt Lake City. Pay-by-phone should be an option in public and private off-street parking facilities.

Action Plan

- Work with private operators to add pay-by-phone as a payment option.
- Develop an internal strategic plan as it relates to paid parking in order to determine the route the City may want to proceed.
- Define whether the City may want to replace current pay stations with new pay stations or alter infrastructure and replace with single-space meters in certain locations and/or citywide.
- Define the City's allotted budget towards new/retrofit parking equipment (capital expenditure or incremental replacement)

IDENTIFY PEDESTRIAN NETWORK DEFICIENCIES AND PRIORITIZE WALKING IMPROVEMENTS

Timeline: SHORT-TERM

Category: CUSTOMER EXPERIENCE

300 West , near 200 South

East McClelland Street

The interface of surface parking with the pedestrian realm can impact pedestrian comfort and safety. Typical conditions in downtown (top) and Sugar House (bottom).

Benefits

- **To City:** Minimize the number of short driving trips within each area, reducing congestion and local emissions, by encouraging visitors to park once and walk between destinations
- **To Customers:** More comfortable walking environment, enabling a lower stress experience and more efficient trips to each area for multiple stops at shops, restaurants, and other attractions
- **To Property Owners/Businesses:** A customer base that is more willing to park once and make multiple stops at local businesses

Cost/Resource Estimate

- **Initial Analysis:** $25,000, includes staff time
- **Interventions and/or Grant Program:** $100k-$1m, depending on scale of program

Summary

The city should conduct additional analysis of street frontages to identify areas in which curb cuts can be modified or closed to reduce dangerous mid-block modal conflicts and where surface parking lot frontages can be masked by landscape or urban design treatments.

Description

The primary goal of this recommendation is to better facilitate shared parking, allowing for efficient use of parking because motorists can park once and complete multiple daily tasks on foot before returning to their vehicle. Success of shared parking, however, is dependent on the quality of the pedestrian environment.

The top photo, located on 300 West near 200 South, shows a portion of street frontage made significantly less comfortable for pedestrians because of two curb cuts in quick succession. The curb cuts provide separate, yet redundant access points. The parking lots could be slightly reconfigured with minimal impacts to parking inventory or circulation, allowing one of the curb cuts to be closed. Additional landscaping and pedestrian scale lighting would improve the attractiveness of the surface lots for those accessing business on 200 South. Similar conditions are shown in the bottom photo, on East McClelland Street in Sugar House, where successive curb cuts are in place, both with wide turning radii.

A more comprehensive analysis would assess curb frontages in key corridors and prioritize the most urgent pedestrian connections.

Rationale

- Surface parking lots can have a negative impacts on pedestrian conditions, making destinations feel further apart than they actually are
- Driveways and curb cuts are needed, but they should be minimized to reduce conflicts between drivers and pedestrians
- Cities have found ways to reduce the effect of both issues, through driveway design adjustments, visual screening (through hedges, walls with murals, etc.), and other approaches

Action Plan

- Working with the Downtown Alliance and other interested groups, identify the blocks or portions of street frontage on which the effect of surface parking and curb cuts have the most significant effect on the pedestrian environment
- Identify and design interventions, i.e. landscaping or other visual barriers, curb cut reductions, traffic calming, and other strategies
- Could include starting a matching grant program to sponsor smaller-scale improvements to frontages by private lot owners
- Per other recommendation, improve wayfinding to help visitors feel more comfortable

Surface parking lots discourage pedestrian activity and street vitality.

CREATE NEW PUBLIC SHARED PARKING SUPPLY IN STRATEGIC OFF-STREET FACILITIES; COORDINATE ON- AND OFF-STREET PRICES

Timeline: SHORT-TERM

Category: PARKING SUPPLY & THE BUILT ENVIRONMENT

Many private lots and garages are underutilized. A partnership with the city could maximize use of existing facilities and revenue for property owners.

Benefits

- **To City:** More efficient use of existing parking supply and ability to manage supply as a cohesive unit. Coordinated pricing and regulatory structures between on- and off-street facilities, which serve to evenly distribute demand. Use of public resources to incentivize private operators to make improvements. Additional public supply at fraction of cost of new construction.
- **To Customers:** Improved parking experience through coordinated parking system and upgraded parking facilities.
- **To Property Owners/Businesses:** New and/or maximized revenue source for private property owners. Potential for subsidized infrastructure improvements and reduced enforcement burden.

Cost/Resource Estimate

- Staff time for developing agreements, resources, and engagement/negotiations with private sector.
- Capitol and ongoing costs to lease private spaces, including infrastructure upgrades, enforcement, and monitoring. Costs partially offset by sharing agreement and/or share of revenue. TBD by "market."

Summary

It is recommended that the city directly engage private property owners to lease underutilized off-street parking facilities in areas with high demand. The primary goal is to transition a portion of the city's private parking into public/shared parking.

Description

It is recommended that the city directly lease parking from a private landowner or entity for use of public parking or a specific need (e.g. events). Initial implementation would likely occur in the downtown core in strategic lots/garages. This recommendation will require effective collaboration between the city parking program, Downtown Alliance, and private property owners.

Shared parking agreements should be developed to serve as a template for future negotiations and allow the city/private stakeholders to negotiate around keys issues such as cost/revenue sharing, enforcement, liability/insurance, infrastructure improvements, and ongoing flexibility. Upon acquisition of off-street supplies, parking rates and regulations would be coordinated to distribute parking demand more effectively across the downtown. A summary of key considerations is shown in Figure 4-4.

Rationale

- Many private parking facilities are underutilized and are not part of the "public" supply
- The city has limited control over off-street parking and minimal ability to manage as a comprehensive system
- The city can cost-effectively increase public supply, and a per space cost that is likely cheaper than new parking construction (Figure 4-5)
- Common concerns have been overcome by many cities via shared parking agreements, which address liability and cost sharing for upgrades

Action Plan

- Inventory and identify potential lots/garages/property owners, based on parking demand and availability
- Evaluate return on investment and financing approach
- Develop shared parking resource library (including marketing/education materials) to demonstrate benefits to private sector. Engage with property owners to determine needs.
- Develop a base standard of care for maintenance and operations
- Developing standard agreement packages that can be adapted/refined†
- Identify and initiate pilot project(s), including pricing and regulations adjustments
- Monitor, document, and report

† See Appendix for sample shared parking agreements

Figure 4-4 Key Leasing Considerations

Lessor / Lessee	Terms & Extension	Use of Facilities	Maintenance	Operations	Enforcement & Security
Public	Evaluate return on investment (per individual facility or system)	Need available hours (and number of spaces) to be ample enough for investment	Evaluate added cost of maintenance and operations	Revenue collection; posting signage; could include maintenance	May assume enforcement role (if no gate)
Private	Long enough to ensure adequate return on investment; ensure terms allow for future redevelopment	Ensure base user can get use at end of sharing period (provide flexibility)	If maintenance and operations already exists and is effective, it will likely want to be continued	If maintenance and operations already exists and is effective, it will likely want to be continued	Not necessary if gated (already can tow)

Figure 4-5 Comparison of Hypothetical Leasing vs. Construction Costs to City

	# of spaces	Capital Cost per space	Annual O&M per space	Annual Cost per space	Daily Cost per space
Lease	500	$75 / month	$300	$1,200	$4.00
Build	500	$20,000	$500	$2,176	$7.25

Assumptions:

- Includes land acquisition costs for construction
- Capital costs based professional judgement, survey of monthly parking rates, and national median per space construction costs (Parking Structure Cost Outlook for 2014, Carl Walker Inc.)
- O&M costs based on industry averages
- Loan payments based on 30 years at 5%
- Assumes 25 usage days per month

REVISE THE ZONING CODE TO ADJUST MINIMUM AND MAXIMUM REQUIREMENTS

Timeline: SHORT-TERM

Category: PARKING SUPPLY & THE BUILT ENVIRONMENT

Revised parking requirements can reduce housing costs and maximize shared parking.

Benefits

- **To City:** Simplified and consistent approach to development process and determination of parking standards. Maximize creation of shared parking districts and public supply. Reduce overall parking supply and demand in mixed-use, transit-oriented districts. More land available for residential, office, and commercial development. Improved housing affordability.
- **To Customers:** Increased availability of shared, public parking. Additional electric vehicle and bicycle parking amenities. Improved housing affordability.
- **To Property Owners/Businesses:** Provides significant development flexibility, allowing the "market" to determine parking supply. Potential for significant development cost savings with reduced parking requirements.

Cost/Resource Estimate

- Staff time for legislative work and enforcement

Summary

Revise minimum and maximum parking requirements to simplify the parking code, incentivize shared parking, and modify electric vehicle and bicycle parking requirements.

Description

- Revise Table 21A.44.030 per Figure 4-6 (page 4-21), including consolidating downtown districts, creating requirements for the CSHBD1/2 districts, eliminating all minimums in the D1-D4, G-MU, and TSA districts, and requiring a portion of all parking within certain districts be shared.
- Revise Table 21A.44.030 per Figure 4-7 (page 4-22) to reduce and consolidate land use categories across the city and simplify minimums.
- Revise Chapter 21A.44.050.B.2 as such:
  - Multifamily Residential: At least 3% of total spaces, but not less than one
- Revise Chapter 21A.44.050.B.3 per Figure 4-8 (page 4-22).

Rationale

- Existing land use categories and parking requirements are overly complicated
- Mins/maxs in the downtown, TSA, and G-MU districts should be consistent. The existing data indicates lower parking demand and significant parking availability within these districts, as well as a vision to maximize multimodal travel. Eliminating minimum parking requirements can support the city's broader development and growth goals.
- Linking maximum parking requirements to the provision of shared parking can incentivize the creation of additional shared parking and minimize underutilized private supply.
- Bicycle parking should not be linked to vehicle parking spaces, but determined by bicycle demand by use.
- Some of these changes would apply in areas beyond Downtown and Sugar House, as zoning districts generally go beyond study area boundaries

Action Plan

- Identify relevant code sections and draft code language
- Review proposed changes with key staff and stakeholders
- Legislate code revisions
- Monitor code impacts through parking data collections processes

MINIMUM PARKING REQUIREMENTS

Minimum parking requirements dictate how much parking must be built, depending on a development's size and land use category. They are often set based on a particularly influential industry guidebook, *ITE Parking Generation*, which uses a limited number of suburban sites to generate an average parking demand for each of more than 100 land use categories. The presumption that parking demand is the same for every building with the same land uses is often inaccurate. Density and diversity of nearby land uses, the price of parking, and the convenience of transit service are key determinants of parking demand.

Minimums increase the cost of housing and construction by forcing developers to dedicate a portion of a limited building envelope to car storage, at great expense – between $20,000 and $40,000 per space. The provision of each additional space increases rents by an average of $225 per month.* Assuming typical development costs, the provision of a parking space per unit can increase development costs by 12.5%, or 25% with two parking spaces.†

* www.reinventingparking.org/2015/06/how-much-does-one-parking-spot-add-to.html
† www.vtpi.org/park-hou.pdf

Figure 4-6 Proposed Parking Requirements, by District

Use	Requirement	
	Minimum	Maximum
D-1, D-2, and D-4		
Non-residential	No minimums up to 25,000 GSF, 1 space per 1,000 GSF thereafter	1 space per 1,000 GSF
Residential	.5 spaces per DU	.5 spaces per DU
D-3 and G-MU		
Non-residential	No minimums up to 10,000 GSF, 1 space per 1,000 GSF thereafter	1 space per 1,000 GSF
Single-Family/ Two-Family	1 space per DU	1 space per DU
Multi-Family	.5 spaces per DU	.5 spaces per DU
TSA		
Non-residential	No minimums	2 spaces per 1,000 GSF, of which no more than .5 spaces per 1,000 GSF may be reserved
Residential	No minimums	1 space per DU
R-MU, R-MU-35, R-MU-45, MU		
Non-residential	1 space per 1,000 GSF, of which no more than .5 spaces per 1,000 GSF may be reserved	2 spaces per 1,000 GSF, of which no more than 1 space per 1,000 GSF may be reserved
Single-family/Two-family	1 space per DU	1.25 spaces per DU
Multi-family	1 space per DU	1.25 spaces per DU
CN, CB		
Non-residential	1 space per 1,000 GSF, of which no more than .5 spaces per 1,000 GSF may be reserved	2 spaces per 1,000 GSF, of which no more than 1 space per 1,000 GSF may be reserved
Residential	1 space per DU	1.25 spaces per DU
CSHBD1, CSHBD2		
Non-residential	1 space per 1,000 GSF, of which no more than .5 spaces per 1,000 GSF may be reserved	2 spaces per 1,000 GSF, of which no more than 1 spaces per 1,000 GSF may be reserved
Residential	1 space per DU	1.25 spaces per DU
All other districts		
All uses	Per Table 21A.44.030	Equal to minimum for FB, 125% of minimum for all other zones

Figure 4-7 Proposed Parking Requirements, by Land Use

Use	Requirement
Residential	
Multi-family	2 spaces per DU (>2 BRs)
	1 space for 1 BR/DU
	.5 spaces per SRO (< 600 SF)
Single-family attached/detached	2 spaces per DU
Hotel/motel/B&B	1 space per 2 separate rooms
Group/communal living/care facility	.5 spaces per DU
Affordable/senior	.5 spaces per DU (10 or more units, 25% plus affordable/senior)
Fraternity/sorority/dormitory	.5 spaces per DU
All other residential	1 space per DU
Institutional	
Hospital	1 space per bed
Places of assembly	1 space per 6 seats
Homeless shelter/nursing care/assisted living	.5 spaces per employee
Schools	K-8: 1 space per 3 employees
	Senior HS: 1 space per 3 faculty, plus 1 space per 3 FTE, plus 1 space per 10 students
	College/University: 1 space per 3 faculty, plus 1 space per 3 FTE, plus 1 space per 10 students, or per Master Plan parking standards
	Vocational/trade: 1 space per 3 employees
Recreation / Entertainment	
Commercial/manufacturing	2 spaces per 1,000 GSF
Restaurants/taverns	2 spaces per 1,000 GSF
Retail goods/services	2 spaces per 1,000 GSF
Office	2 spaces per 1,000 GSF
Places of assembly (theater, arena/stadium)	1 space per 6 seats
Field of play	10 spaces per field
Club/lodge	2 spaces per 1,000 GSF
Gym/health club/pool	2 spaces per 1,000 GSF
Library	1 space per 1,000 GSF
All other uses	2 spaces per 1,000 GSF

Figure 4-8 Proposed Bicycle Parking Requirements

Use	Short-Term *(2 spaces minimum)*	Long-Term*(2 spaces minimum)*
Single-family residential	None	None
Multifamily residential w/o private garage	.1 spaces per bedroom	.5 spaces per bedroom
Civic/Cultural/Recreational	1 space per 5,000 GSF	1 space per 15 employees
Health care/hospitals	1 space per 20,000 GSF	1 space per 20 employees
Education	1 space per 20 students	1 space per 15 employees
College/University	1 space per 10 students	1 space per 10 employees, plus 1 per 10 students; or 1 per 20,000 GSF (whatever is greater)
	Or per Master Plan	Or per Master Plan
Transit stations	2% of AM peak daily ridership	7% of AM peak daily ridership
Restaurant	1 per 2,000 GSF	1 per 10,000 GSF
Retail	1 per 4,000 GSF	1 per 10,000 GSF
Office	1 per 10,000 GSF	1.5 per 10,000 GSF
Public off-street garages/lots	1 per 10 vehicle spaces Unattended surface lots excepted	1 space per 20 vehicle spaces Unattended surface lots excepted

Short-term: Unsheltered/unsecured rack that typically provides parking for less than two hours
Long-term: Sheltered/secure rack or locker that typically provides parking for more than two hours

REVISE ZONING CODE TO INCENTIVIZE LOWER PARKING DEMAND

Timeline: SHORT-TERM

Category: PARKING SUPPLY & THE BUILT ENVIRONMENT

Figure 4-9 Proposed TDM Strategies and Reductions

Reduction Allowed	**10%**	**25%**	**50%**	**75%**
	2 minor	2 minor	2 minor	3 minor
		1 major	2 major	3 major
Eligible Strategies	**Minor**		**Major**	
	Guaranteed ride home program		Parking cash out / pay-not-to-drive	
	Marketing/outreach program (website, handbook, "move-in" packet)		Free/subsidized transit passes	
	Priority parking for ridesharing		Price on-site parking (required in D1-D4, TSA, G-MU)	
	Rideshare matching		Unbundle parking (required in D1-D4, TSA, G-MU)	
	Showers/lockers		On-site transportation coordinator	
	Additional bike parking		Shuttle to transit and/or Park-n-Ride	
	Bike share subsidy		Rideshare/biking subsidy	
	Alternate work schedule		Car sharing subsidy	
	Ped and/or bike friendly design		Car sharing sponsorship	
	On-site bike repair		Pre-tax commuter benefits	
	Other (per approval)		Other (per approval)	
Required TDM Program Elements	Annual monitoring/reporting program with resident/employee/tenant survey			
	Require through covenants, conditions and restrictions, or other enforceable real property interest that run with the land, that all commercial tenant associations, major employers, residential tenant association, and homeowner's associations submit and implement TDM program			

Benefits

- **To City:** Reduce overall parking supply and demand in mixed-use, transit-oriented districts. More land available for residential, office, and commercial development. Improved housing affordability.
- **To Customers:** Improved housing affordability. Additional commuter and travel benefits to subsidize costs of transit, biking, walking, car sharing, or ridesharing.
- **To Property Owners/Businesses:** Provides significant development flexibility, allowing for reductions in parking requirements. Potential for significant cost savings with reduced parking requirements.

Cost/Resource Estimate

- Staff time for legislative work and enforcement

Summary

It is recommended that the city provide require and incentivize reduced parking demand and minimize the need for construction of new parking supply.

Description

TDM: Modify Chapter 21A.44.050 to require a TDM program for any new residential development with 10 or more units and any new non-residential development with more than 20,000 SF of net new space in the D1-D4, TSA, and G-MU districts, regardless of parking provided. The TDM program in D1-D4, TSA, and G-MU must include a minimum of two "minor" strategies and one "major" strategy per Figure 1, but a flexible approach to program development is recommended. Projects in all other districts are eligible for parking reductions per Figure 4-9. Annual monitoring and reporting is required for all programs and TDM requirements must be tied to the parcel.

Parking Pricing: Require that all shared parking be "priced" in D1-D4, TSA, and G-MU districts via unbundling and direct pricing. In all other districts, unbundling and parking pricing are considered "major" TDM programs and can be used to achieve a parking reduction.

- **Commercial:** All commercial spaces shall be unbundled from the cost of a leased commercial space, and the per space cost shall be included as a separate line item in the lease.
- **Residential (10+units):** Payment for residential parking spaces shall be unbundled from the cost of rent or purchase and listed as a separate line item. It is recommended that spaces leased on a monthly basis and be variably priced.
- **All shared parking spaces** shall be priced at an hourly or daily rate to meet target occupancy rates. A variable parking rate for off-peak hours may also be introduced.

Rationale

- The D1-D4, TSA, and G-MU districts all prioritize multimodal travel, transit-oriented development, and reduced reliance on the automobile. TDM and parking pricing can incentivize lower parking demand and travel by other modes.
- The existing parking code includes provisions for TDM, but many effective strategies are not included and the reductions are not correctly calibrated to the relative strength of the strategies.
- Unbundling is one of the most effective demand-reduction strategies, but is currently permitted only as a "minor" TDM incentive. Unbundling changes parking from a required purchase to an optional amenity. Among households with below-average vehicle ownership rates, allowing this choice can provide a substantial financial benefit. Studies of have found that units with bundled parking sell for 11% to 12% more than comparable units without parking included.*

Action Plan

- Identify relevant code sections and draft code language
- Review proposed changes with key staff and stakeholders
- Identify city staff to manage TDM compliance
- Legislate code revisions
- Monitor code impacts through parking data collection processes

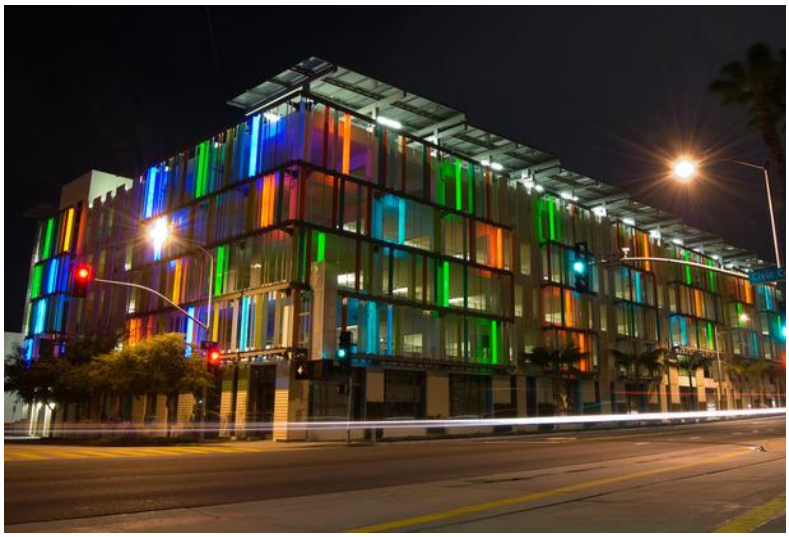
* Wenyu Jia and Martin Wachs. "Parking Requirements and Housing Affordability: A Case Study of San Francisco." University of California Transportation Center Paper No. 380,1998 and Amy Herman, "Study Findings Regarding Condominium Parking Ratios," Sedway Group, 2001.

REVISE ZONING CODE TO MAXIMIZE ATTRACTIVE URBAN DESIGN

Timeline: SHORT-TERM

Category: PARKING SUPPLY & THE BUILT ENVIRONMENT

The design of surface lots and garages can negatively impact pedestrian comfort and the attractiveness of a street.



Chattanooga, Kansas City, and Santa Monica have all successfully utilized wrapping and ground floor uses to integrate parking garages into walkable districts.

Benefits

- **To City:** Incentivize infill development on small lots. Better utilization of existing lots/garages. Supports pedestrian activity and park-once environment. Reduced land dedicated to parking.
- **To Customers:** More attractive and walkable environment. Reduced conflict with vehicles entering/exiting parking facilities.
- **To Property Owners/Businesses:** Provides significant development flexibility, especially on smaller lots or with changes in use.

Cost/Resource Estimate

- Staff time for legislative work and enforcement

Summary

Revise the parking code to ensure parking facilities are designed in manner that supports walkable, safe, and attractive communities.

Description

- Modify Chapters 21A.44.010.B, 21A.44.010.C, 21A.44.020.I.4, and 21A.44.030.C to be consistent and to exempt
  - all intensifications of use less than 1,000 SF
  - all changes of use in D1-D4, TSA, and R-MU districts exempt all changes of use less than 5,000 SF in the CN, CB, CS, CC, and CSHBD1/2 districts
  - exempt uses in buildings less than 5,000 SF in D1-D4, TSA, R-MU, CN, CB, CS, CC, and CSHBD1/2 districts
- Modify Chapter 21A.44.020.F to strengthen access/ design requirements, including:
  - Maximize primary access points via alleys or secondary streets
  - Minimize curb cuts, driveway widths
  - Require wrapping and ground floor uses for all new parking structures
  - Increase parking maximum if parking is below-grade or in a completely wrapped structure
  - Require pedestrian-scale lighting that directly illuminates primary routes
  - Modify Chapter 21A.44.020.F.8 to "clear and direct pedestrian pathway"
- Permit tandem/stacked parking to fulfill parking requirement for non-residential uses if valet, or automated vehicle release for stacked parking, is provided during at all hours of operation. Permit in residential uses if tandem/stacked spaces are assigned on a per unit basis. Minimum space size of 8.5' x 34-36'.

Rationale

- Changes of use, particularly on small lots, can impact development feasibility and prevent well-designed infill projects. Exempting such projects from parking requirements can unlock infill development. Existing parking supply in downtown is adequate to accommodate increased demand.
- Poorly designed parking lots/garages can have a significant impact on the streetscape, limit pedestrian activity, and increase conflicts with pedestrians.
- Tandem and/or stacked parking can reduce the number of required spaces and improve design flexibility.

Action Plan

- Identify relevant code sections and draft code language
- Review proposed changes with key staff and stakeholders
- Legislate code revisions
- Monitor code impacts through parking data collections processes

REVISE ZONING CODE TO ENSURE FLEXIBILITY IN MEETING PARKING REQUIREMENTS

Timeline: SHORT-TERM

Category: PARKING SUPPLY & THE BUILT ENVIRONMENT

Santa Monica's in-lieu fee program helped revitalize the 3rd Street Promenade by allowing parking to be built as part of a public system.

Benefits

- **To City:** Better utilization of existing lots/garages. Supports a park-once environment. Potential revenue stream to fund public parking and/or mobility improvements. Reduced parking variances.
- **To Customers:** More attractive and walkable environment. More public parking supply.
- **To Property Owners/Businesses:** Provides significant development flexibility, especially with constrained sites. Reduce need for parking variances.

Cost/Resource Estimate

- Staff time for legislative work and enforcement

Summary

Revise the parking code to ensure that there are alternatives by which to meet parking requirements.

Description

- Modify Chapter 21A.44.040.B.4 to extend the maximum distance to/from a shared park-and-ride facility to 1,200 feet
- Modify Chapter 21A.44.040.B.5 to extend the maximum distance to/from a shared off-site facilities to 1,200 feet in the D1-D4, TSA, and G-MU districts. For all other districts, maximum distance should be 1,000 feet.
- Eliminate Chapter 21A.44.040.B.6.a requiring that on-street parking have no time restrictions
- Pending compliance with state law, add a provision for a parking in-lieu fee to allow applicants to pay a designated per space fee instead of providing on-site parking spaces.* Key considerations include:
  - Per space fee, recommended to be less than the equivalent per space construction cost, as it provides more financial incentive to choose the in-lieu option.
  - Area of applicability, recommended to be CN, CB, R-MU, R-MU-35/45/75, MU, CN, CB, and CSHBD1/2; expand as needed
  - Percent of spaces eligible, recommended to be 100%
  - Fee adjustments, recommended to index to local consumer price index (CPI)
  - Payment options, recommended to be either a lump sum or annualized over 2-4 years
  - Use of revenue (paid to a fund administered by the City), recommended to include new parking construction, leasing of spaces, or mobility improvements

* Would not be applicable to D1-D4, TSA, and G-MU districts, which are proposed to have no minimum parking requirements.

Rationale

- Existing parking code includes option for off-site, shared parking, but the threshold should be increased, especially in the downtown core. Use of shared off-site facilities can reduce the amount of parking built and maximize use of existing parking facilities.
- The parking code is silent on in-lieu fees, one of the best mechanisms to maximize design flexibility and facilitate shared public parking.
- In-lieu fees do not impose additional fees, but provide an option for projects having difficulty meeting minimum requirements on-site due to space constraints, financial feasibility, or both.
- On-street spaces should be allowed to count towards minimum requirements, but code should not dictate on-street management practices.

Action Plan

- Identify relevant code sections and draft code language
- Review proposed changes with key staff and stakeholders
- Legislate code revisions
- Monitor code impacts through parking data collections processes


CENTER
WALKER CENTER
CHANGE
THE FUTURE
THE WORLD
TIME

Long-Term Recommendations

COORDINATE TRANSPORTATION POLICY DECISIONS ACROSS MODES TO SUPPORT PARKING MANAGEMENT

Timeline: LONG-TERM

Category: OVERSIGHT

Proactive coordination between departments can ensure that parking supports biking, walking, and transit investments.

Benefits

- **To City:** Ensures that the location and design of off-street parking facilities is strategic, relative to the needs of other modes. Parking policy and management support investments in transit, biking, and walking to reduce congestion and vehicle trips.
- **To Customers:** Improves pedestrian and bicyclist safety. Ensures that transit riders are supported by parking policy and management.
- **To Property Owners/Businesses:** Reduced development costs and improved coordination during development processes.

Cost/Resource Estimate

- Staff time for additional coordination between departments

Summary

Ensure that decisions about parking requirements, pricing, and design are coordinated with overall mobility goals and multimodal investments.

Description

Because parking supplies are often located off-street and managed by private operators, cities often consider them separately from other decision-making processes about roadways, transit, bike, and pedestrian infrastructure.

However, the quantity, location, and price of parking has a large and direct impact on the use of all transportation infrastructure. Building large amounts of low- or no-cost parking in a given area incentivizes visitors to drive and park, rather than taking other modes. The location and design of parking facilities can also have a major impact on the comfort and safety of transit riders, bicyclists, and pedestrians.

Regular, ongoing coordination between a future parking program and other city departments is essential. Integrated, multimodal coordination can be built into planning and project initiation processes, through template questionnaires and forms that must be filled out at various stages of the development approval process. Ensuring that Utah Transit Authority, bike/pedestrian, and redevelopment staff have regular coordination meetings with the leaders of a new parking program called for in this study can facilitate proactive coordination.

Rationale

- Parking should be viewed as one component of the transportation system, not simply part of land-development processes.
- Parking can have a big impact on the success of transit and non-motorized infrastructure. The amount and regulation of parking will impact transit ridership. Excessive parking makes the pedestrian environment less inviting and reduces opportunities for transit-accessible uses.
- Design of parking facilities can impact bicyclist/pedestrian safety and comfort – curb cuts create conflict points, while on-street parking can provide physical separation from fast-moving traffic.
- Coordination is often best achieved through ongoing communication and the inclusion of relevant actors at key points in decision-making processes.

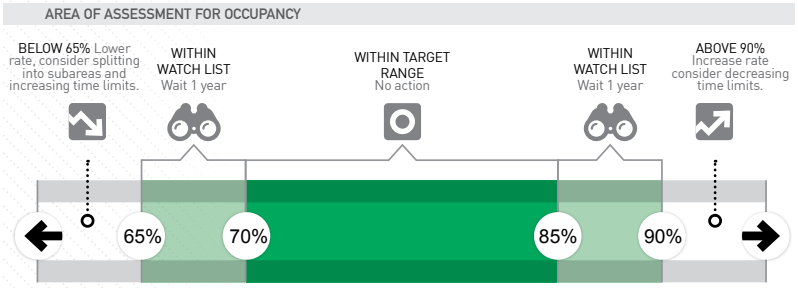
Action Plan

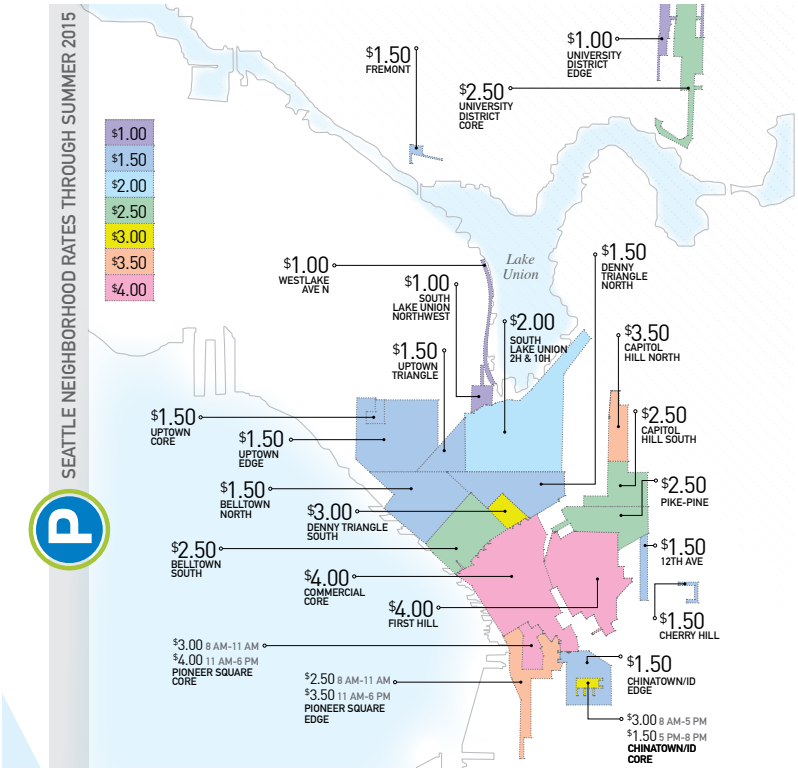
- As recommended, create a new parking program with program manager and staff
- Establish working group or coordination meetings between key staff members from all relevant departments. Specific areas in which coordination can be crucial:
  - **Parking and transit:** Ensure that parking is appropriately regulated and that active space is prioritized over parking in the areas immediately around transit stops; effective enforcement is also critical in areas near transit stations and stops.
  - **Parking and bicycle/pedestrian:** Ensure that bike and pedestrian rights of way are appropriately protected through parking access points.
- Make transit, bicycle, and pedestrian considerations on equal footing with decisions about parking in transportation impact review and other the land-development processes.

DESIGN, PILOT AND IMPLEMENT A PERFORMANCE-BASED PARKING MANAGEMENT PROGRAM

Timeline: LONG-TERM

Category: CUSTOMER EXPERIENCE; PARKING SUPPLY & THE BUILT ENVIRONMENT





Seattle's performance-based management program uses annual data to adjust pricing and regulations so that parking is consistently available. Consistent methodologies allow for simple adjustments.

Source: Seattle DOT

Benefits

- **To City:** Formal policy framework to actively manage parking system focused on availability, not turnover or revenue. Reduced search time for parking, resulting in less local congestion and vehicle emissions. Reduced illegal parking. Better demand distribution and utilization of parking assets. Improved perceptions of parking through information, technology, and ease of payment.
- **To Customers:** Consistent parking availability and reduced search time. Longer time limits and improved flexibility. Improved information and ease of payment. Potential for lower costs and fewer citations.
- **To Property Owners/Businesses:** Improved economic vitality as parking is readily available for customers. Potential for reinvestment of revenue back into local district. Improved perception of parking and customer satisfaction.

Cost/Resource Estimate

- Pilot performance-based program: $500k-$1m, including staff time
- Marketing program: $50-100k
- Annual data collection: $75-150k

Summary

Develop and implement a performance-based parking management program that adjusts pricing and regulations to meet availability targets for on- and off-street parking.

Description

By setting specific availability targets and adjusting pricing/regulations, performance-based parking management makes it easy to find a parking space. The program uses observed data to adjust rates periodically – up when/where demand is high and down when/where demand is low. A typical occupancy target for curb spaces is approximately 85% and 90-95% for off-street lots/garages.

The "right price" is the lowest price that will achieve the target. Pricing should not be uniform, but vary by season, day of week, time of day, and length of stay. Time limits should also be adjusted, with the ultimate goal of eliminating on-street time limits in certain areas, using pricing to generate turnover, and allowing customers to park for longer periods of time.

Program should start as a downtown pilot, centered on the Main Street and 300 South commercial corridors. This area could be expanded or rolled out to other neighborhoods as needed. Simple and consistent methodologies are better, with one or two rate adjustments per year.

Rationale

- Managing parking with the goal of consistent availability can serve as the organizing principle for Salt Lake City.
- Downtown parking rates and regulations do not vary based on demand. A "front-door" parking space costs as much or more as a space that is a few blocks away.
- On- and off-street prices are not coordinated and there is limited information about parking availability. System is generally inconvenient for users.
- Popular spaces fill at busy times, creating a "no parking" perception. Existing parking assets are underutilized.

Action Plan

- Gather data (see "Immediate") and develop methodologies to establish baseline condition and collect consistent data.
- Modify Chapter 12.56 to adopt specific ordinance language:
  - Target occupancy rates
  - Grant staff authority to change regulations without action by Council
  - Minimum/maximum hourly rates (raise $2 per hour cap)
- Identify pilot boundaries and any sub-areas
- Create a communication plan, integrated with previous wayfinding and branding efforts. Conduct outreach to key stakeholders to educate about the program goals.
- Ensure that technology infrastructure is in place to collect data, adjust rates, make easy payments, enforce properly, and distribute information on multiple platforms.
- Adopt simple methodology, thresholds, and actions. Potential actions include: lower/raise rates by time of day/location ($.25 increments), extend/shorten enforcement hours, and adjust time limits.
- Evaluate use of net new revenue to fund local improvements via a Parking Benefit District.
- Monitor and report data annually. Provide open access to parking data.