

Table of Contents

1.	Exec	cutive Summary	4
2.	Intro	oduction	6
	2.1.	Project Background	6
	2.2.	Stakeholder Engagement	7
	2.3.	Online Survey	10
	2.4.	Financial Modeling Workbook	10
	2.5.	Ordinance Review	10
3.	Park	ring Demand Management	11
	3.1.	Time Limits	13
	3.2.	Paid Parking	17
	3.3.	Mobile Payment	19
	3.4.	Rate Structures	21
	3.5.	Electric Vehicles	28
4.	Enfo	prcement	32
	4.1.	Staffing and Hours of Operation	32
	4.2.	Compliance	34
	4.3.	Management Structure	35
	4.4.	Citation Management	37
	4.5.	Meter Bagging	38
	4.6.	License Plate Recognition	38
	4.7.	Booting	40
5.	Com	mercial Loading	44
6.	Emp	oloyee Permit Parking	48
	6.1.	Permit Rate Comparison	49
7.	Spe	cial Events	54
	7.1.	Paid Event Parking	54
	7.2.	Alternative Modes of Transportation	54
8.	Maii	ntenance and Revenue Collections	57
	8.1.	Meter Collections	57
	8.2.	Meter Maintenance	58
9.	Park	king Benefit District	60
10). Tr	ansportation Demand Management	62

1. Public Transportation	0∠
2. Bicycling	63
3. Shuttle Program	65
4. Carpooling	66
5. Survey and Incentive Program	66
Shared Parking	69
Residential Preferential Parking	72
Parking Garage	75
Outdoor Cafés	78
Wayfinding and Parking Guidance	82
Education and Outreach	86
Conclusion	92
1. Near-Term Implementation Packages	92
2. Comprehensive Implementation Guide	92
ndix A. Online Survey Results	96
ges	
1. Davia Na Danagking Cign	4.4
e 2. IPS Single-Space Meter	
	17
S ,	
e 3. IPS Pay Statione 4. Passport's Parking Kitty Application for Portland	18
e 3. IPS Pay Statione 4. Passport's Parking Kitty Application for Portlande 5. Enforcement Officer using Handheld	18 21 37
e 3. IPS Pay Statione 4. Passport's Parking Kitty Application for Portlande 5. Enforcement Officer using Handhelde 6. Chico Meter Bag	18 37 38
e 3. IPS Pay Statione 4. Passport's Parking Kitty Application for Portlande 5. Enforcement Officer using Handhelde 6. Chico Meter Bag	18 37 38 39
e 3. IPS Pay Station	18 37 38 39
e 3. IPS Pay Station	18 37 38 39 41
e 3. IPS Pay Station	18 37 38 39 41 44
e 3. IPS Pay Station	18 37 38 39 41 44
e 3. IPS Pay Station	
e 3. IPS Pay Station e 4. Passport's Parking Kitty Application for Portland e 5. Enforcement Officer using Handheld e 6. Chico Meter Bag e 7. LPR Mounted on City of Davis Enforcement Vehicle e 8. Paylock SmartBoot e 9. Barnacle Windshield Immobilizer e 10. Double Parked Vehicles in Chico e 11. Double Parked Box Truck in Chico e 12. City of Chico Employee Parking Recommendations e 13. Paso Robles Flyer (Front) e 14. Paso Robles Flyer (Back) e 15. Time limit signage for Thursday Night Market e 16. Chico Velo Bike Valet e 17. Medeco Electronic Lock e 18. Broken IPS meter with note from driver	
e 3. IPS Pay Station e 4. Passport's Parking Kitty Application for Portland e 5. Enforcement Officer using Handheld e 6. Chico Meter Bag e 7. LPR Mounted on City of Davis Enforcement Vehicle e 8. Paylock SmartBoot e 9. Barnacle Windshield Immobilizer e 10. Double Parked Vehicles in Chico e 11. Double Parked Box Truck in Chico e 12. City of Chico Employee Parking Recommendations e 13. Paso Robles Flyer (Front) e 14. Paso Robles Flyer (Back) e 15. Time limit signage for Thursday Night Market e 16. Chico Velo Bike Valet e 17. Medeco Electronic Lock e 18. Broken IPS meter with note from driver	
e 3. IPS Pay Station e 4. Passport's Parking Kitty Application for Portland e 5. Enforcement Officer using Handheld e 6. Chico Meter Bag e 7. LPR Mounted on City of Davis Enforcement Vehicle e 8. Paylock SmartBoot e 9. Barnacle Windshield Immobilizer e 10. Double Parked Vehicles in Chico e 11. Double Parked Box Truck in Chico e 12. City of Chico Employee Parking Recommendations e 13. Paso Robles Flyer (Front) e 14. Paso Robles Flyer (Back) e 15. Time limit signage for Thursday Night Market e 16. Chico Velo Bike Valet e 17. Medeco Electronic Lock e 18. Broken IPS meter with note from driver e 19. Tracking B-Line Bus Arrival	
e 3. IPS Pay Station e 4. Passport's Parking Kitty Application for Portland e 5. Enforcement Officer using Handheld e 6. Chico Meter Bag e 7. LPR Mounted on City of Davis Enforcement Vehicle e 8. Paylock SmartBoot e 9. Barnacle Windshield Immobilizer e 10. Double Parked Vehicles in Chico e 11. Double Parked Box Truck in Chico e 12. City of Chico Employee Parking Recommendations e 13. Paso Robles Flyer (Front) e 14. Paso Robles Flyer (Back) e 15. Time limit signage for Thursday Night Market e 16. Chico Velo Bike Valet e 17. Medeco Electronic Lock e 18. Broken IPS meter with note from driver e 19. Tracking B-Line Bus Arrival e 20. Bike parking e 21. The Free Ride Shuttles	
e 3. IPS Pay Station e 4. Passport's Parking Kitty Application for Portland e 5. Enforcement Officer using Handheld e 6. Chico Meter Bag e 7. LPR Mounted on City of Davis Enforcement Vehicle e 8. Paylock SmartBoot e 9. Barnacle Windshield Immobilizer e 10. Double Parked Vehicles in Chico e 11. Double Parked Box Truck in Chico e 12. City of Chico Employee Parking Recommendations e 13. Paso Robles Flyer (Front) e 14. Paso Robles Flyer (Back) e 15. Time limit signage for Thursday Night Market e 16. Chico Velo Bike Valet e 17. Medeco Electronic Lock e 18. Broken IPS meter with note from driver e 19. Tracking B-Line Bus Arrival	
	4. Carpooling

Image 24. SKIDATA PARCS gated entrance with LPR at UTC Garage in San Diego	.75
Image 25. Chico Outdoor Cafe	
Image 26. Chico Public Parking Sign	.82
Image 27. San Jose Parking Guidance Signage	.83
Image 28. Google Maps Parking Information	.84
Image 29. Park Smart Branding	
Image 30. San Jose Parking Data	
Image 31. CSUC Off-Campus Parking Information	
Image 32. SacPark Parking Information	
Image 33. Seattle DOT: Can I Park Here?" Brochure Excerpt	
Image 34. Seattle Parking Flag	
Image 35. Play like a Parking Pro Flyer	
Image 36. Parking Kitty Zone Map	.90
T. I.I	
Tables	
Table 1. Summary of Stakeholder Meeting Feedback	8
Table 2. Parking Rate Comparison	
Table 3. Potential Zone-Based Rate Model with Peak and Non Peak Season Pricing	
Table 4. Potential Escalating Rate Model	
Table 5. Potential Staffing Plan for Existing Hours of Operation and Staffing, Mon – Fri	
Table 6. Potential Staffing Plan with Updated Hours of Operation and Additional PT Staff	
Table 7. City of Davis Parking Citation Fine Amounts	
Table 8. Permit Rate Comparison	.49
Table 9. Sample Revenue Distribution Schedule	.60
Table 10. Potential Escalating PPA Rate Structure	.73
Table 11. Comprehensive Implementation Guide	.93
Figures	
Figure 1. Near-Term Implementation Packages	4
Figure 2. Parking Occupancy Data Collection Area	
Figure 3. Downtown Parking Study May 10, 2018 Mid-Day Parking Occupancy Map	
Figure 4. Go! Downtown Chico Parking Map	
Figure 5. San Mateo Parking Zones	
Figure 6. Redwood City Parking Zones	
Figure 7. Potential Parking Zones	.25
Figure 8. SacPark Escalating Payment Guide	.27
Figure 9. Go! Downtown Chico Parking Webpage	
Figure 10. Near-Term Implementation Packages	

1. Executive Summary

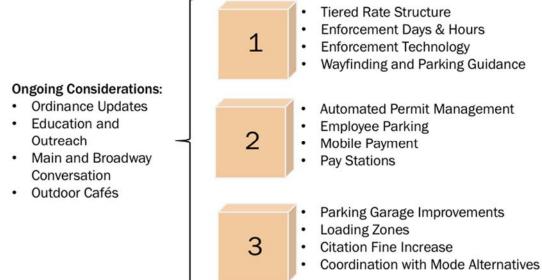
This Downtown Access Action Plan (DAAP) outlines the near-, mid-, and long-term steps needed to implement an effective and efficient parking program in the City of Chico (City). The provided recommendations take into consideration previous studies, on-site operational audits, and extensive stakeholder feedback. Each DAAP recommendation is organized by phase with a list of detailed implementation steps and required follow-up actions. These recommendations are meant to address the current and long-term parking challenges in Chico. Implementing these recommendations will provide immediate parking management benefits and establish the basis for future improvements. The recommended steps and timelines are meant to be realistic and achievable.

Stakeholder engagement was a critical component of this study. The DAAP recommendations were developed following multiple site visits on July 30th - 31st, and October 1st. A series of meetings were held with both City staff and external stakeholders. The City's Public Works Department, Police Department, and Finance Department provided valuable input during these stakeholder group meetings. Additionally, a Steering Committee comprised of stakeholders who live, work, and own businesses in and around downtown was assembled, including representatives of the Downtown Business Association, Chamber of Commerce, the Children's Museum and local property developers.

During the final Steering Committee meeting on March 4, staff and stakeholders had the opportunity to prioritize the report recommendations to inform the overall recommended implementation process. Based upon the prioritization discussed during this meeting, initial recommendations were organized into three primary "implementation packages" for the near-term, along with a number of ongoing considerations that impact each package:

Figure 1. Near-Term Implementation Packages

Tiered Rate Structure
 Tiered Rate Structure



The timing and organization of each recommendation is outlined within the individual report sections, and a comprehensive implementation guide is provided within the report conclusion. A number of DAAP recommendations for consideration are summarized below:

- Utilize a tiered rate structure to improve parking availability. A tiered rate structure can
 promote turnover, maximize parking supply, and encourage alternative modes of
 transportation.
- Implement parking management technologies such as an automated permit management system, mobile payment, and license plate recognition cameras to provide efficiencies that will optimize the operation.
- Provide consistent parking enforcement to improve compliance with posted regulations.
- Utilize a customer service-based Parking Ambassador model for enforcement.
- Consider extending paid parking and time limit hours of operation into peak demand periods such as evenings and weekends.
- Improve wayfinding and parking guidance with additional technology solutions and integrations.
- Upgrade the parking garage technology and provide ongoing maintenance and upkeep to the facility.
- Implement a low-income service worker permit for downtown employees.
- Establish efficient and secure meter maintenance, revenue collection, and reconciliation procedures.
- Address the regulation of shared mobility devices such as bicycles and scooters.
- Pursue shared parking agreements with nearby property owners for use of existing parking supply for public parking.
- Establish a no re-parking rule to improve the effectiveness of time limits by requiring that drivers move their vehicle a certain distance at the conclusion of a parking session.

For every strategy, the City should take a proactive approach to parking management that includes ongoing consideration for data-driven decisions, stakeholder feedback, technology, and transportation demand management.

2. Introduction

This Downtown Access Action Plan (DAAP) outlines the near-, mid-, and long-term steps needed to implement an effective and efficient parking and mobility program in the City of Chico (City). The provided recommendations take into consideration previous studies, on-site operational audits, and stakeholder feedback. Each DAAP recommendation is organized by phase with a list of detailed implementation steps and required follow-up actions. These recommendations are meant to address the current and long-term parking and mobility challenges of the Chico community. Implementing DAAP recommendations will provide immediate parking management benefits and establish the basis for future improvements. The recommended steps and timelines are meant to be realistic and achievable.

2.1. Project Background

In 2006, the City commissioned Nelson\Nygaard and HDR Town Planning to prepare a Chico Downtown Access Planning Charrette (Access Plan) in order to evaluate downtown circulation, parking, and development. The Access Plan recommends improvements to the circulation of pedestrians, bicycles, cars, delivery trucks, emergency vehicles, and transit both within the downtown core and the California State University, Chico (CSUC) campus; recommends ways to improve the primary streets and paths that connect to downtown; and, recommends improvements to both public and private parking availability for all citizens, including students. The planning area is bounded by 1st Street on the northern edge to 9th Street on the southern edge, and from Orient and Flume Streets on the eastern edge to Normal and Chestnut Streets on the western edge.

The Access Plan proposes strategies and techniques for increasing pedestrian, bicycle, private motor vehicle, and transit safety and convenience, to provide a balance between the need or desire to drive, walk or bike, and to make the streetscape more attractive and user-friendly for all modes of circulation. Background research and stakeholder feedback was collected through interviews, meetings, questionnaires, site tours, and data review.

In 2014, Nelson\Nygaard revisited the Access Plan to move the City ahead on implementing parking management and technology best practices. During this time, Nelson/Nygaard updated stakeholder feedback, along with previous recommendations, to evaluate the potential for using any new parking revenues (e.g., from extended hours of operation) to support better downtown public services and/or facilities; the potential for creating additional parking by implementing diagonal parking on Main Street and Broadway; and, the potential for redesigning Main Street, Broadway, and other streets to make downtown a more attractive place to live, work and shop.

These reports served as background material in order for DIXON to assess what aspects of the Access Plan are still feasible in the City and desired by the community. During recent stakeholder meetings, DIXON discussed loading zone locations, evening parking enforcement, parking zones, wayfinding, downtown bike lockers, parking revenue distribution, and shared parking opportunities.

The City recently updated the Bicycle Plan, which has the goal of providing guidance for building a bikeway network that encourages people of all ages and abilities to choose active transportation, create a stronger community, and help businesses thrive. There are a total of nine goals within the plan including providing safer routes between residential neighborhoods and commercial areas, providing adequate bicycle storage facilities, and promoting bicycling as a part of the inter-modal transportation system. The City Council adopted the Bicycle Plan on April 16, 2019. The DAAP incorporates recommendations based upon the Bicycle Plan to ensure a consistent and effective approach to improving mobility in Chico.

The 2030 General Plan was also considered during the development of the DAAP to ensure that recommendations in the report are consistent with current City goals for downtown. There are several concepts that the City has planned for Downtown Chico that will improve mobility and parking access in downtown Chico such as, parking and access management, and enhance downtown gateways, landmarks and wayfinding. Specific goals that the City has planned for downtown that will influence parking demand in downtown are establishing a park once and walk environment, supporting all modes of transportation in and around downtown, and enhancing the pedestrian environment.

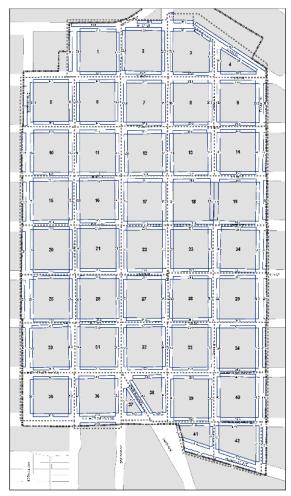


Figure 2. Parking Occupancy Data Collection Area

Occupancy data referenced in the DAAP was collected recently by City staff. Average onstreet occupancy data collected for the month of October 2015 found that most blocks between 1st and 4th Streets had average occupancy rates above 50%. Half of those blocks experienced occupancy rates above 85% at 3:00 p.m. The occupancy rates for the noon lunch hour were even higher with almost 75% of the block faces between 1st and 4th Streets having occupancy rates above 85% on average for the month. The City has conducted regular occupancy studies to maintain accurate representations of parking demand in Chico. April 2018 data shows an average occupancy within the same boundary as 73%, and all other downtown block faces experiencing an average occupancy of 43%. Data suggests that, while the area between 1st and 4th Streets experiences high occupancy rates, on average, downtown still has nearby locations where parking is readily available.

2.2. Stakeholder Engagement

Stakeholder engagement was a critical component of this study. The DAAP recommendations were developed following multiple site visits on July 30th - 31st, and October 1st. A series of meetings were held with

both City staff and external stakeholders. The City's Public Works Department, Police Department, and Finance Department provided valuable input during these stakeholder group meetings. Additionally, a Steering Committee comprised of stakeholders who live, work, and own businesses in and around downtown were assembled, including representatives of the Downtown Business Association, Chamber of Commerce, the Children's Museum and local property developers. A summary of stakeholder feedback and recommendations is included below in Table 1.

Table 1. Summary of Stakeholder Meeting Feedback

Stakeholder Meeting	Stakeholder Ideas and Suggestions
Public Works, Maintenance	 Elimination of parallel parking Modernization of parking meters Addressing meter feeding and time limit overstays Rate structure adjustments based upon demand Improved maintenance tracking software Additional loading zone locations and regulations Expanding paid parking hours of operation Replace single-space meters in the garage with pay stations Creation of rideshare loading zones Addition of street sweeping regulations in the South Campus area
Police Department, Parking Enforcement	 Improve curb paint and signage Hire additional staff for enforcement Adjust hours of operation to start and end later Address double parking during commercial loading Move to using digital parking permits
Finance Department	 Address potential customer service concerns with citation management vendor Allow users to pay for citations in real-time Utilize mobile payment for parking Consider the increasing demand for residential development downtown
Steering Committee	 Adjust paid parking hours of operation to start and end later Add weekend paid parking and enforcement Improve parking signage, education and outreach Address meter feeding and time limit violations Consider a merchant validation program Pursue shared parking agreements

- Proceed with an angle parking conversion
- Improve pedestrian and bicycle access and infrastructure
- Clean and paint the garage
- Consider a valet parking program for cars and bicycles

On November 6th, the City also released an online survey, totaling 15 questions, to allow residents of the City to participate in the information gathering process. The survey included questions designed to provide DIXON and the City with information on the topics of paid parking, time limits, amount of time spent in downtown by visitors, where they are parking, and what they would like changed. Results of the survey will be valuable for prioritizing and reviewing the recommendations within the DAAP.

DIXON also held 3 teleconference meetings with City staff and the Steering Committee to discuss the following topics:

- Parking Reductions an In-Lieu Fees,
- The 2006 Access Plan recommendations and results, and
- The Outdoor Café Ordinance and Policies

Prior to developing the DAAP comprehensive implementation guide, on March 4, DIXON returned to Chico for a final Steering Committee meeting to discuss draft report recommendations and solicit feedback regarding the prioritization of implementation steps. On the same date, DIXON also presented an overview of draft recommendations to the Internal Affairs (IA) Committee for feedback. Staff and stakeholder priorities ultimately shaped the development of the initial near-term implementation packages and ongoing implementation steps.

1. Parking Reductions and In-Lieu Fees

The discussion during this stakeholder meeting was a result of a current City examination of the in-lieu district, including boundary and fee changes and potential adjustments of parking minimum requirements. Recommendations from steering committee members included removing the district completely, lowering the fee to increase development and potentially changing the minimum parking requirements to be based on rooms in a unit instead of as individual units.

2. 2006 Access Plan

DIXON and stakeholders held this meeting to get a better understanding of what stakeholders still wanted implemented from the study. Stakeholders discussed:

- Loading zone locations,
- Evening parking enforcement,
- Parking zones,
- Wayfinding,

- Bike lockers in downtown,
- Parking revenue distribution and,
- Shared parking opportunities in downtown

The discussion was a valuable opportunity for DIXON to further understand what aspects of the Access Plan were still feasible in the City and desired by the community.

3. Outdoor Café Ordinance and Policies

Due to the impact that outdoor cafes have on pedestrian and parking access in downtown Chico it was important to have a separate discussion with stakeholders regarding the existing outdoor café policy. Stakeholders suggested revising the policy to be more specific about the location of sidewalk expansions, clearer restrictions, and a defined design policy. Recommendations also included:

- Having DCBA involved in the approval process,
- The proper allocation of the permit fees and,
- Restricting the number of outdoor cafés allowed to convert parking spaces per block

More information about outdoor cafés can be found in Section 13.

2.3. Online Survey

The City of Chico posted an online survey regarding parking in downtown Chico. The survey was intended to collect information about how people currently access and park in the downtown area and feedback about potential downtown parking policies. The City received a total of 183 responses. Overall, a majority of the respondents live in Chico and visit downtown Chico more than once per week. Most respondents visit downtown to eat and stay for one to two hours. An overview of survey responses is included in Appendix A.

2.4. Financial Modeling Workbook

DIXON developed a Financial Modeling Workbook that will allow the City to estimate potential paid parking revenues based on a variety of different rate structures. The workbook lets the City adjust paid parking variables such as rates, hours of operation, compliance, and occupancy to project how changes in rates and demand may influence revenue and expenses. The City can utilize this workbook to determine any necessary adjustments to the existing rates and to forecast existing and future rate structures that will meet the goals of the City.

2.5. Ordinance Review

DIXON conducted a detailed ordinance review to identify any issues in the City's municipal code that may affect future implementation actions, streamline the City's ability to make program adjustments, and future proof the City for future parking technology. Recommended ordinance changes are included throughout the report as applicable.

3. Parking Demand Management

The parking industry standard for the target occupancy rate is 85 percent. At this rate, there are enough vacant parking spaces to: 1) minimize congestion from drivers searching for spaces; and 2) reduce oversupply, which is an inefficient and costly use of valuable land. Timed and paid parking are two strategies that, when properly enforced, can influence driver behavior and parking utilization. As a result of the Access Plan, the City adopted an ordinance (below) to establish the 85 percent occupancy rate. This DAAP includes numerous recommendations that can help the City achieve the 85 percent occupancy rate while improving the parking experience.

Chico Municipal Code 10.20.015 - Parking occupancy rate established.

- A. To accomplish the goal of managing the supply of parking, to make it reasonably available when and where most needed, a target occupancy rate of eighty-five percent (85%) is hereby established within public parking areas.
- B. When necessary, the Director shall cause a survey or other method to determine the average occupancy rate for each parking area. Based on this occupancy determination, the Director shall provide Council with feasible options for managing parking in these areas. (Ord. 2463 §2)

The City also experiences two distinct parking seasons as a result of CSUC. Parking occupancy fluctuates based upon the CSUC academic schedule. Classes are in session from late August until the end of May. There is also a Summer Term from early June until the end of August, however the City can expect that the Fall, Winter and Spring seasons will be most impacted. The City should consider the seasonal nature of parking demand when adjusting rate structures or implementing policies.

Proper parking management strategies can improve the utilization and availability of existing parking supply. Without strategic management, parking demand will often cluster tightly around certain locations, resulting in constrained availability precisely where most drivers prefer to park. For Chico, this location is in the core of downtown, roughly 1st to 4th Streets and Salem Avenue to Flume Street and around the campus. The City should ensure the effective distribution of parking demand to optimize its use of existing parking capacities. Without management cues directing customers toward less visible parking options, this pattern can create a strong perception that "there is nowhere to park," even when available parking can be found on nearby blocks or within parking facilities.

Based upon a recent occupancy study conducted in May 2018, the parking areas surrounding the campus were heavily impacted. Figure 2 below includes the occupancy data from the downtown parking survey. The occupancy rates varied significantly, with some areas reaching between 70 and 100% occupancy and others with less than 40% occupancy during the midday data collection period.

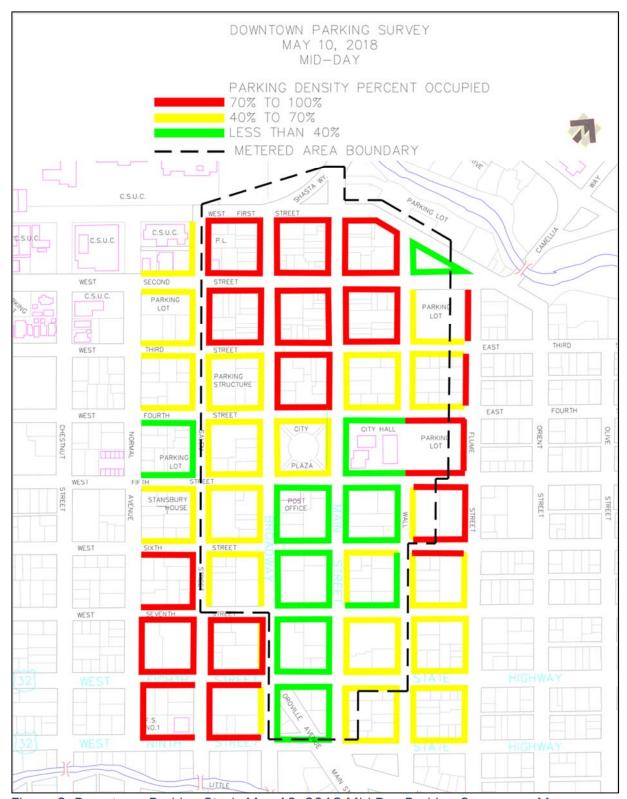


Figure 3. Downtown Parking Study May 10, 2018 Mid-Day Parking Occupancy Map

3.1. Time Limits

The City currently uses time limits, combined with paid parking, to manage parking demand in downtown. The City currently has a mix of 2-hour and 36-minute time limits on-street and 10-hour limits in most off-street spaces. The smart metered parking spaces have 2-hour time limits and the other metered parking stalls have either a 2 or 10-hour time limit. The time limits vary in the unmetered parking stalls. The off-street parking facilities have a mix of time limits between 2 and 10-hours. Lot 3, the parking garage, has two-hour limits on the first two levels and 10-hour limits on the top level. A map overview of the parking regulations is included below in Figure 3. By offering a variety of time limits, the City can ensure that there is parking available for a number of uses.

Time limits can be an effective way to influence driver behavior. However, visitors and employees that need or want to stay in the City for an extended duration should have adequate long-term park options so that they are not forced to move their cars every few hours to avoid citations. This approach is often described as the "Park Once" philosophy. Depending on the length of stay, the time limits should be structured to minimize the amount of vehicles re-parking or shuffling their car around downtown. Turnover should be encouraged for prime on-street parking spaces, therefore long-term parking should be located off-street. When long-term visitors or employees utilize short-term on-street parking, this reduces the real rate of turnover in spaces that should be maximized to improve access to downtown.

Based upon on-site observations and stakeholder feedback, a number of downtown employees are avoiding the time limit restrictions by feeding the parking meters. While this is prohibited, the City is not currently enforcing the time limits in the metered areas. The lack of enforcement is likely resulting in low compliance rates with the posted time limits. This makes it challenging to understand the actual demand for short versus long-term parking downtown.

The City should also consider the hours of operation for time limits. Feedback from the Parking Steering Committee included consideration for extending the time limits into the evening and weekends as a priority. The purpose of having time limits is to encourage turnover and improve the management and efficient utilization of parking resources. Knowing that parking demand often continues later into the evening and over the weekend, time limits could be beneficial to manage parking demand during these times. The City could consider shifting the hours of operation later into the day, with both later start and end times, while maintaining the existing total number of hours. Many stakeholders indicated that parking demand is low in the morning before most businesses are open. The City could also consider establishing time limits on Saturdays due to the relatively high parking demand over the weekend. Based upon the impact of Saturday enforcement, Sunday enforcement could also be considered in the future. Ultimately, the hours of operation should reflect the peak demand periods in an effort to optimize the use of parking supply.

To improve the effectiveness of existing time limits, it is also recommended that the City implement a "no reparking" rule. A no reparking ordinance would require drivers to move their cars either out of the block face, lot, or a certain distance away to be allotted a new time limit period. This would prohibit meter feeding and rubbing chalk of tires for avoiding time limit restrictions. For example, the City of Davis has a no re-parking ordinance that prohibits drivers from re-parking on the same block face or within the same parking lot for a period of double

the length of the posted time limit. Davis municipal code section 22.08.255 is provided below for reference:

City of Davis Municipal Code Section 22.08.255 Reparking restrictions in timed parking zones within and around the downtown core area.

- a) On-street parking on a city street. A vehicle will be deemed to have been stopped, parked or left standing for longer than the time allowed in this section, if it has not been moved at least "out of the block face" following the expiration of the posted time limit in a timed parking zone. A "block face" consists of the legal parking spaces on both sides of the street on a block (in which the vehicle is parked), bounded by an intersection at each end. A vehicle may not re-park in the same block face sooner than a "timeout period" (equal to double the posted time limit) following the time at which a vehicle was initially parked.
- b) Off-street parking in a city-owned/leased parking lot or structure. A vehicle will be deemed to have been stopped, parked or left standing for longer than the time allowed in this section, if it has not been moved out of the parking lot or structure following the expiration of the posted time limit in a timed parking zone. A vehicle may not re-park in the same parking lot or structure sooner than a timeout period (equal to double the posted time limit) following the time at which a vehicle was initially parked.

To implement a no reparking rule in Chico, the City will need to update municipal code Section 10.20.050. While a block face policy is simple to communicate, it may be less effective than a zone-based system. If the City were to establish parking zones, then the code could prohibit drivers from reparking within a larger area. However, if the City decides to implement a zone-based policy, the zones must be clearly communicated and signed.



Image 1. Davis No Reparking Sign

The City of Davis has effective no reparking signage posted throughout the downtown area (Image 1). This signage clearly communicates the no reparking rule using the red coloring and the diagram of a block face. This ensures that the public is fully aware of and in full understanding of the rules, regardless of if they've read the municipal code or not.

Ideally, a sign should be placed at the beginning and at the end of each time limited block face. For short segments with between 1 to 5 parking spaces, 1 time limit sign at the entrance to the time limited area is sufficient. For block faces that are longer than 200-250 feet, the City could add a 3rd sign in the middle of the block face for ease of messaging to drivers. Reducing the amount of signage on the street would improve the aesthetic of downtown while still effectively communicating parking regulations to drivers.

Based upon the lack of consistent time limit enforcement downtown, initially it is recommended that the City maintain the existing time limits downtown. Once a no reparking ordinance and consistent enforcement has been implemented, the City will have a clearer understanding of the actual impact of the posted time limits. Ongoing monitoring of occupancy in the short versus long-term parking locations will inform the City of any necessary adjustments to time limits. Any adjustments should be consistent with reaching the 85% occupancy target.

The City could also consider implementing a number of 30-minute or 1-hour time limits throughout downtown to support shorter term visitor and customer trips. These spaces would ideally be evenly applied throughout downtown, possibly with 1 on each side per block face. This will ensure that short term visitors can easily access any area of downtown, and it will not disproportionally impact certain businesses over others. There are some existing 36-minute stalls which could be converted to 30-minute spaces for consistency.

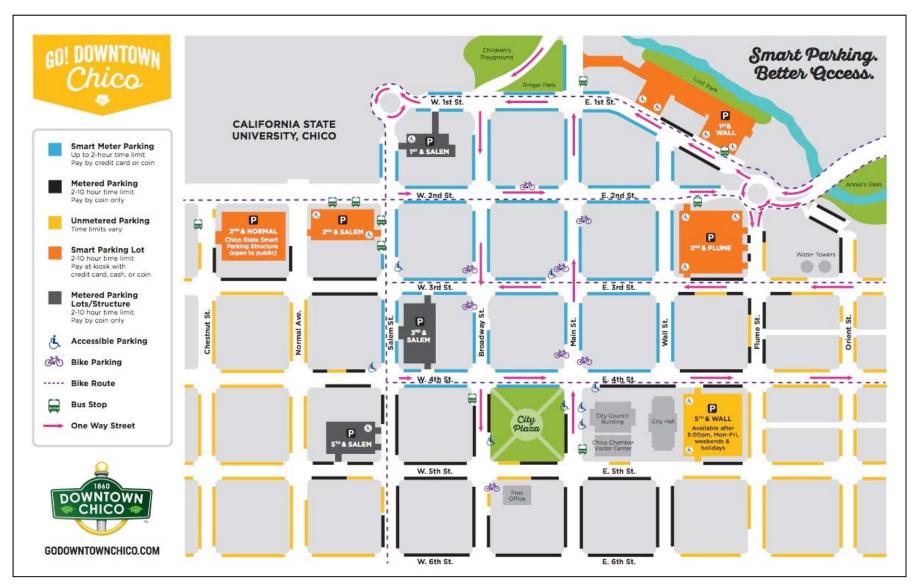


Figure 4. Go! Downtown Chico Parking Map

3.2. Paid Parking

The current rate for paid parking is \$0.50 in all metered locations. Additionally, the City passes the \$0.35 transaction fee for credit card use to the user, therefore increasing the rate to \$0.85 for the first hour and \$1.35 for 2 hours. The paid parking hours of operation are currently from 7:30 a.m. until 6:00 p.m., Monday through Friday.

3.2.1. Single-Space Meters

The City has approximately 900 single-space POM mechanical meters and 400 single-space IPS smart meters. Single-space meters are installed on-street and within the parking garage. The convenience and ease of use of single-space meters is what makes them effective for dense commercial areas. However, they are not recommended for the garage due to the lower rate of turnover that is typically sought for off-street facilities. The City should consider replacing the POM meters in the garage with multi-space meters. More information on multi-space meters (pay stations) is included below in Section 2.2.2.

The IPS smart single-space meters accept credit card payments and are enabled with back office tools and real-time access to information and data. As opposed to any customer-facing services, the back-office tools are the software or web applications that are utilized by



Image 2. IPS Single-Space Meter

municipal staff to access information like data, maintenance updates, reporting tools, transaction histories, payment processing, noticing, and more. This allows the City to monitor the meters and get notified of any maintenance issues.

These single-space meters currently meet the Payment Card Industry (PCI) security standards for credit card transactions, which ensures that only the last four digits of each card number is stored. Additionally, all payment information can be tracked and audited to ensure proper revenue reconciliation during collections.

If in the future the City decides to invest in additional smart parking meters, the single-space meters will likely range in price from around \$400 to \$600 per meter mechanism plus approximately \$250 to \$400 for the meter housing and pole (not including shipping).

The City pays ongoing data management fees to IPS at a rate of \$8 per meter per month, or based upon the level of transaction fees (whichever is lower). In many locations, the

parking meter revenue does not currently support the cost of the meter fee. This means that the existing rate structure is unsustainable for the City. The City should consider raising the hourly parking rates for this reason alone, in addition to the parking demand management benefits. Rate recommendations are included below in Section 2.4.

While the POM meters do not provide the above benefits described for smart meters, it is not recommended that the City replace them at this time. Instead, due to the software fees and credit card capabilities, the City should ensure that placement of smart meters is optimized. The existing locations of the IPS and POM meters may require adjustment to match demand patterns. Ideally, the City should be utilizing the smart meters in the highest demand locations. The older POM meters would be most effective in the lower demand areas to reduce the amount of time and resources spent on meter collections. Additionally, it is recommended that the City implement a mobile payment option, which will provide drivers the ability to pay with their credit card (through the mobile payment application) at the POM meters. More information on mobile payment is provided below in Section 2.3. The City can avoid a significant investment in smart meter hardware with these simple changes.

3.2.2. Pay Stations

The City currently has 5 IPS pay stations installed in offstreet parking lots with 1 located in each lot, except for the parking garage where the single-space POM meters are installed. In the parking lots with IPS pay stations. the City has a 2-hour minimum charge when paying with a credit card. It is recommended that the City utilize pay stations in all paid off-street facilities and in any onstreet locations with low turnover and/or occupancy. Pay stations are most effective in lower turnover locations because otherwise a line could form. Additionally, because they can serve a higher number of spaces, they are more cost effective compared to single-space meters. The City can expect savings in ongoing fees, maintenance, and collections. The City should consider using pay stations around CSUC - currently a large number of single-space meters sit empty when school is not in session. Pay stations will also help minimize the amount of street furniture and are more aesthetically fit for residential areas.

If the City decides to purchase additional pay stations, depending on their configuration, they will cost approximately \$8,500 per unit with monthly data management fees of approximately \$70 per pay station per month. This pay station rate estimate does not include installation and freight. The City should also



Image 3. IPS Pay Station

consider including the optional added features such as a motion-controlled light bar and a tilt board security feature with a siren. Additionally, following the first year, the City should budget approximately \$30 per month for the pay station warranties. While not required, the

warranties are recommended to safeguard the program and ensure equipment performance and system uptime. Pay stations normally support seven to 12 on-street parking spaces. A typical off-street surface lot requires one to four pay stations, depending upon the configuration and number of access points.

There are three main operational configurations for multi-space pay stations: pay and display, pay by space, and pay by plate:

- Pay and Display: The driver parks, purchases parking session time at the pay station, and then returns to the vehicle to display the dashboard receipt.
- Pay by Space: The driver parks in a numbered space, and then pays at the pay station using the parking space number. The driver is not required to return to the vehicle because payment is electronically tied to the space number. Parking enforcement is able to use a web application to verify payment status by parking space number.
- Pay by Plate: Similar to pay by space, but the driver enters the license plate number at the pay station to record payment. This method does not require drivers to return to their cars. Parking enforcement verifies payment status by license plate using a web application and/or license plate recognition (LPR) technology.

Currently, the City's pay stations utilize the Pay by Space configuration. The integration between the City's citation management vendor, Turbo Data Systems and IPS was recently completed. This improves enforcement efficiency by automating the process of verifying payment status by space number on the handhelds. However, based upon the recommendation to improve time limit enforcement, the City should consider purchasing License Plate Recognition (LPR) technology (see Section 3.6). With LPR, it is recommended that all pay stations be reconfigured to the Pay by Plate configuration. This will require the City to retrofit the IPS pay stations with a new keyboard to allow drivers to enter in their license plate number. The transition to the Pay by Plate configuration will improve enforcement efficiency by allowing the officers to verify payment status with the LPR cameras in real-time.

It is also recommended that pay stations be limited to primarily credit card only. While the State of California currently requires municipalities to offer either cash or coin as well, the payment method does not legally need to be applied across the operation consistently. The City could provide 1 pay station that accepts coin, and the rest could be credit card only. By basing the payment status off of the license plate number, this will easily allow drivers to pay for their parking at any of the pay stations, regardless of where they park. Machines that accept cash and coin require more maintenance and collections because of the added mechanical parts in bill note acceptors and coin slot jamming. The City can also encourage credit card payments through pricing. Rates higher than \$0.75 per hour make coin usage less convenient because of the amount of coins that would be required to pay for a parking session.

3.3. Mobile Payment

It is recommended that the City offer a mobile payment feature for customer convenience. A mobile payment solution allows drivers to pay for their parking session using their cellphone and can be integrating with the citation management system for ease of enforcement. Drivers

can either call a number to pay, or they can simply create an account on a mobile application to pay online. Users are able to complete one-time uses or establish accounts with the mobile payment provider that allow them to pay for parking and extend their stays without returning to their vehicles. The City can define the specific business rules as it relates to extending the parking session. It is recommended that the City apply the same time limit and no reparking rule to mobile payment users for consistency and effectiveness of time limits.

A mobile payment solution can be provided to the City by a vendor at no cost to the City. Instead, the vendor is fully funded by the convenience fees charged to the users.

Mobile payment zone numbers are assigned to each paid parking area for enforcement purposes, and the active paid parking sessions are tracked and verifiable by license plate number. Additionally, mobile payment vendors typically offer robust validation programs including resident discount programs, incentive programs, and retail validations. If the City decides to implement a validation program, the mobile payment vendor would manage this process for the City.

Utilization of mobile payment typically falls between 3% and 10% in most cities, and users pay a small transaction fee, usually between \$0.10 and \$0.35 depending on the size of the operation. While utilization may seem low, with the continued widespread use of smartphone technology, it is recommended that the City implement a mobile payment system for paid parking locations. Additionally, because CSUC already offers mobile payment (through the vendor Passport), the City could expect higher usage rates if the same vendor is used.

To prepare for implementation of mobile payment, the City will have to adjust the existing municipal codes to broader the language. Currently, Section 10.10.060 defines a "parking meter" as "any device which, when activated, indicates unexpired parking time for the vehicle parked adjacent thereto.". While mobile payment status can be integrated with the IPS meters, this will cause a significant drain on the meter batteries. This is because the meters will constantly need to be "awake" to receive notification of whether a mobile payment user has completed a payment. Currently, the meters only connect to the internet if someone touches a button to wake the meter. Due to battery drain impacts, it is not recommended that the City proceed with this integration. The City should also consider that the POM meters, because they are not smart meters, cannot reasonably indicate payment status through the use of mobile payment. Suggested language is included below for consideration with the additional language in red font:

10.10.060 Parking meter.

The term "parking meter" shall mean any device which accepts payment for a parking session., when activated, indicates unexpired parking time for the vehicle parked adjacent thereto.

Additionally, Section 10.25.030 must be updated because it currently requires parkers to immediately "deposit" payment into the parking meter. Suggested revisions are included below, which will allow for any allowable payment method as designated by the City:

10.25.030 Payment Required. Deposits required during hours of meter operation.

When any vehicle is parked in any space that requires payment within a paid parking zone, as indicated on posted signage and/or a parking meter, during the established payment hours, the operator of said vehicle upon so parking shall immediately initiate a paid parking session through a designated and City-approved payment method. During the hours specified for meter operation by action of the city council, no person shall park any vehicle in any parking space in a parking meter zone, except as otherwise permitted by this chapter, without immediately depositing in the parking meter adjacent to it the amount required to activate the meter and as designated by directions on it and, when required by the directions, set in operation the timing mechanism thereof in accordance with such directions, unless the parking meter indicates at the time such vehicle is parked that an unexpired portion remains of the period for which funds were previously deposited.

Verification of mobile payment status will require enforcement staff to use a web application to verify payment status. While this can be integrated with the citation management software, this will require an extra step for the enforcement officers when verifying payment status at the single-space meters. Because the integration with the single-space meters is not recommended (due to battery drain), when an officer identifies an unpaid meter, they will also need to verify whether the driver has paid through the mobile payment application. This can easily be checked on the handhelds by entering in the license plate number, or through an LPR system.

Knowing that CSCU already uses Passport for mobile payment, it is recommended that the City utilize Passport for consistency for their userbase. Chico is currently a member of the

National Cooperative Purchasing Alliance (NCPA), which provides the City with a simple procurement option along with discounted pricing. Or, the City could choose to piggyback off of Passport's existing contracts with CSCU or San Luis Obispo. It is estimated that the implementation of a mobile payment system would take 90 days from the contract acceptance. However, the City should ensure that the ordinances are properly updated prior to launching a mobile payment program.

Some vendors offer a white label service, which allows cities to utilize their own branding for the mobile payment service. A great example of this is Passport's Parking Kitty application in Portland, Oregon. This customized application turned paying for parking into a more positive and fun experience for drivers. Currently, Passport is the only mobile payment provider that offers a white labelled application. But, while white labeling would allow the promotion of the City's brand, it would take away from the ability to have a broader and unified parking experience region-wide. To encourage utilization.



Image 4. Passport's Parking Kitty Application for Portland

3.4. Rate Structures

Currently the City charges the same hourly rate of \$0.50 for both on and off-street parking locations. Typically, municipalities charge a higher on-street parking rate to encourage parking space turnover. Additionally, a higher hourly rate on-street will encourage the longer-term

parkers to store their vehicles in the less convenient off-street spaces. Not only is the \$0.50 per hour rate too low to cover the cost of the meter management fees, the rate is also lower than comparable municipalities (See Table 2). The City should consider adjusting the on and off-street rate models to be more consistent with the market parking rate and to improve the effectiveness of the operation.

There are several types of rate structures available to the City for consideration. Each structure has positive and negative externalities associated with the way that rates are applied. DIXON developed a Financial Modeling Workbook that will allow the City to estimate potential revenues based on a variety of different scenarios. The workbook lets the City adjust the paid parking variables such as rates, hours of operation, and compliance, to project how changes in rates and demand may influence revenue. The City should utilize this workbook to determine an ideal pricing that will meet the long-term goals of the City.

3.4.1. Comparative Rate Analysis

To understand the market rate for hourly parking, a comparative analysis of nearby municipalities was conducted. The City of Eugene was also considered in this analysis due to the similar size and proximity to a university. The results are outlined below in Table 1. The recommended hourly rates below are based upon this analysis. It is recommended that the City charge an hourly rate that is somewhat consistent with the market rate to ensure that the rate is affordable and conducive for business downtown. If the City charges a rate that is too low on the scale, then it is likely that the rate will not influence driver behavior. However, if the rate is too high, this could discourage visitors from coming to downtown Chico. Regardless of the rate model chosen, the City should be cognizant of current and future rate trends. Currently, the hourly rate in Chico is at least 50% lower than the rate in comparable cities.

Location	On-Street Hourly Rates	Off-Street Rates					
Davis	\$1.00	3 hours free, \$1.00 per hour after, \$5.00 maximum					
Fresno	\$1.00 - \$1.50	1 hour free, \$1.00 per hour after, \$9.00 maximum and \$3.00 for hour 1, \$1.00 per hour after, \$9.00 maximum					
Modesto	N/A	\$1.25 per hour					
Eugene	\$1.20	\$1.00 per hour, \$6.00 maximum					

3.4.2. Flat Hourly Rate

The City currently charges a flat hourly rate. This means that the same rate is charged for each hour of the parking session, regardless of location, time of day, day of week, or any other factor. This rate model is combined with a mix of time limits, as described above. If the City were to maintain a flat hourly rate model, it is recommended that the City charge either \$1.00 or \$1.50 per hour on-street to be consistent with the market rate. A higher rate will also make the use of coin less convenient which could reduce the frequency of collections. This higher rate for on-street parking will also help discourage employees from parking in metered locations, and could encourage participating in a discounted permit parking program.

Regardless of the rate chosen, it is important to ensure that employees have an affordable alternate option for parking. See Section 5 for more information on employee parking permits.

The benefit of a flat hourly rate is that it is simple to communicate and understand. However, without any tiered pricing structure or variations in price, it does little to influence behavior. Therefore, even with the rate increase, it is possible that the existing occupancy trends would remain fairly similar, with most drivers continuing to favor the prime parking locations.

If the City were to charge \$1.00 per hour for all proposed on and off-street paid parking locations, it is estimated that the Year 1 revenue would be \$1,036,000 from on-street parking and \$716,000 from the off-street parking lots. This estimate is based upon a 75% occupancy rate, 60% compliance rate, and 7:30 a.m. to 6:00 p.m. hours of operation on weekdays. The City can use the provided Financial Modeling Workbook to adjust the inputs and refine these revenue estimates based upon the aforementioned variables.

3.4.3. Zone-Based/Tiered

It is recommended that the City implement a zone-based or tiered parking rate model downtown, combined with peak and non-peak season rates. For ease of understanding, the peak season rate model can initially be established as a baseline, with the opportunity to offer a reduced rate during the summertime as an incentive to locals to visit downtown. In a zone-based model, rates are adjusted by zone, and zones are typically created based on parking demand. Rather than blanketing the downtown with the same rate model, as described above, this tiered rate model would give the City more flexibility to influence driver behavior. By offering a lower rate in the more fringe or remote locations, this rate model can encourage longer-term parkers to utilize the parking locations that are traditionally less desirable. Setting a higher rate in the prime parking locations can also help encourage more turnover and is more conducive for shorter visits. In the case of Chico, this rate model should be combined with existing time limits to ensure turnover.

The City should also consider that CSUC has an impact on parking demand. The City could choose to set higher rates during the school year and lower rates in the summer. This seasonal rate structure would allow the City to manage demand during the busier parts of the year, while incentivizing locals to visit downtown during the slower summer months.

The City of San Mateo is an example of a nearby agency with a tiered/zone-based rate structure. Parking is enforced in San Mateo Monday through Saturday from 8:00 a.m. to 6:00 p.m. There is no charge for parking after 6:00 p.m. There are two zones: the orange zone is the central area and the green zone includes the perimeter areas (Figure 4). The orange zone costs \$1.50 per hour with a 3-hour time limit, and the green zone costs \$1.00 per hour with the same time limit.



Figure 5. San Mateo Parking Zones

The City of Redwood City uses a similar zone-based rate model as well. In Redwood City, the on-street parking is divided into zones based upon their intended uses. The core downtown area (pink zone) is priced at \$1.00 per hour. This is intended for lunchtime and daytime visitors, and has a 2hour time limit. The perimeter areas (orange zone) are priced at a reduced rate of \$0.25 per hour, with the first 1.5 hours free in the garages. This parking, because it is less convenient, is intended for and commuter employee

parking. Figure 6 below is a map of the parking zones in Redwood City.

The City of San Jose also has a similar model. In San Jose, the on-street metered parking within the downtown core is priced at \$2.00 per hour, versus \$1.00 per hour outside of the core. Most metered parking in San Jose is limited to either 1 or 2 hours.

The key for this type of rate model to be effective is that the tiered rates must be clearly communicated and easy to understand. For this reason, it is recommended that the City implement a two-zone system for simplicity.

In Chico, it is recommended that Zone 1 be the downtown

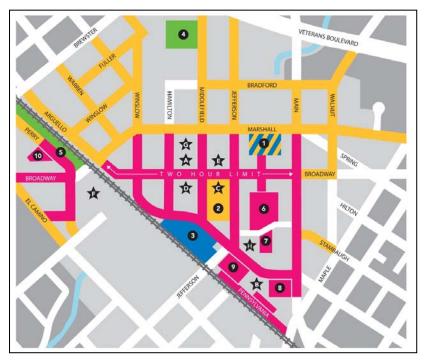


Figure 6. Redwood City Parking Zones

core which is approximately 1st Street to 4th Street, and Salem to Flume. The recommended Zone 1 hourly rate is \$1.50 per hour during the school year and \$1.00 per hour in the summer, with a two-hour time limit applied year-round. The rate adjustment can be scheduled through the IPS back end system to automatically update and display the appropriate rate on the meter screen. For this reason, the recommendation to include the IPS meters in the high



Figure 7. Potential Parking Zones

locations demand becomes important. Zone 1 would also be the ideal location for the City's IPS meters because of the added convenience of paying with a credit card. However, there may not enough IPS meters to cover the entire zone, so the city may need to utilize a small number of POM meters within Zone 1. The City should confirm that they have a handheld device to reprogram the POM meter rates. recommended that Zone 2 should be the remainder of downtown. A map of the proposed zones is included to the left in Figure 6. A \$0.75 rate of per hour is recommended for Zone 2 during the school year and \$0.50 per hour rate is recommended for the summer.

Because the City's off-street locations are primarily located within Zone 1, rates could be \$1.00 per hour during the school year and \$0.50 per hour in the summer with no-time limits. The recommended off-street pricing structure considers the convenient location of the parking lots while still offering an incentive for long-term vehicle storage off-street. This is the recommended rate structure that should be implemented by the City as it prioritizes on-street parking turnover in the premium locations while providing more affordable options for spaces that are not located in the core.

Table 3. Potential Zone-Based Rate Model with Peak and Non Peak Season Pricing

Season	Hourly Rates							
Season	On-Street	Off-Street						
Dook (August May)	Zone 1: \$1.50	¢4.00						
Peak (August – May)	Zone 2: \$0.75	\$1.00						
Non Pook (June July)	Zone 1: \$1.00	¢0.50						
Non-Peak (June – July)	Zone 2: \$0.50	\$0.50						

If the City were to charge the above recommended rates (see Table 3), it is estimated that the Year one revenue would be approximately \$1,300,000 from on- and off-street parking. This estimate is based upon a 70 percent occupancy rate, 60 percent compliance rate, 7:30 a.m. to 6:00 p.m. hours of operation on weekdays.

With a zone-based model, the City should update the municipal code to allow the Public Works Director to establish parking management zones. With Council Approval, a range of acceptable hourly rates and time limits could be established. Then, any rate and time limit

adjustments could be made (within the range) without having to go to the Council for every decision. Suggested municipal code language is provided below with the additional language displayed in red font:

10.25.010 Purpose.

The provisions of this chapter shall govern the parking of vehicles on any portion of a public street or parking lot in the city designated as a parking management zone. However, the provisions of this chapter shall not be construed to allow parking in a parking management metered zone in violation of any other provision of this title.

10.25.015 Authority to establish parking management zones.

- a) The City Council shall have the authority to establish parking management zones, including therein such streets or portions of streets or city-owned or city-leased land as it may deem necessary for traffic or parking control purposes, and in the event parking signage or meters are installed indicating a parking management zone, the provisions of this chapter shall govern parking in such spaces.
- b) All established parking management zone time limits, paid parking rates, and hours of operation heretofore shall be and remain in effect, unless otherwise set or adjusted by the Director or City Council.
- c) The City Council establishes a range of acceptable time limits between ten (10) minutes and ten (10) hours, a range of acceptable hourly rates from \$0.50 to \$5.00, and a range of acceptable hours of operation between the hours of 6:00AM and 10:00PM on designated days of the week.
- d) The Director, or their designee, shall set any time limit, rate structure, and/or hours of operation of each parking management zone, consistent with achieving the eighty-five percent (85%) target utilization rate, based upon parking occupancy data and community input.

3.4.4. Escalating/Pay-to-Stay

An escalating or pay-to-stay rate model provides drivers with the ability to park for as long as they desire, but at an escalated rate. For example, the rate charged during hours one and two could escalate to a higher hourly rate during the following hours. When utilized strategically, this type of rate model can encourage longer term parkers to store their cars in more affordable locations, such as off-street lots or remote locations. However, it still gives visitors the option to park on-street for a longer period of time if they are willing to pay a premium for it. By eliminating time limits, this provides more flexibility to visitors, but it does not ensure turnover. Without time limits, the City is risking that drivers will choose to pay to store their vehicles long-term on-street. This rate model, if not priced high enough, could result in an increase in occupancy rates.

While enforcement would be simpler without time limits, there would be an additional cost for sensor technology to properly manage this rate structure. Parking meter sensors can detect whether the vehicle has truly left the space or not. This ensures that the appropriate escalated rate is charged for long parking sessions. Otherwise, meter feeding would allow a driver to maintain a lower hourly rate. These sensors can cost up to \$300 per space and can be unreliable. Sensors occasionally get reset by larger vehicles passing by, such as semi and

dump trucks, as well as experience maintenance problems from weather exposure. The City could also instead choose to manage this rate model using LPR, however this would require the transition to a fully Pay by Plate system and extremely consistent enforcement to be feasible. It is not recommended that the City replace the single-space meters downtown with pay stations at this time.

Due to the risk of increased occupancy rates, lower turnover, and the costs associated with parking meter sensors, this rate model is not recommended for Chico at this time.

The City of Burlingame is an example of a Northern California municipality with an escalating rate structure. Most of the parking meters in Burlingame have either a 2-hour or 4-hour time limit, but the rates also escalate in some cases. On-street parking costs \$1.00 for the first hour and \$2.00 for the second hour along Burlingame Avenue. The other on-street metered locations have a flat rate of either \$1.00 per hour or \$0.25 per 50 minutes.

The City of Sacramento's parking program is another example of an escalating rate model. The SacPark program allows drivers to extend their time beyond the posted time limit for a premium escalated rate. This works by assigning a base meter rate for the initial time period, and any amount of time beyond that costs significantly more per hour (Figure 7). Sacramento also uses Parkmobile for mobile payment, which will automatically remind drivers if the paid time is nearing expiration. This allows users to remotely extend their time without returning to the meter.

Figure 8. SacPark Escalating Payment Guide



SacPark utilizes several automated technologies to improve efficiency and shrink the program's bottom line. The program operates more than 4,500 IPS single-space meters with attached sensors throughout the City. However, the sensors are not without challenges. The City struggled with sensors resetting, a problem recently resolved through firmware updates from IPS, and issues with large trucks resetting meters as they drove past. In addition to their single-space meters SacPark installed Parkeon pay-stations for nearly 1,700 on-street spaces and City-run parking lots.

If the City decides to implement this rate model it is recommended that during the school year a \$2.00 rate should be applied for the first two hours with each additional hour costing an additional \$2.00 per hour. The daily maximum in this case would be \$12.00. During the summer, the first two hours would cost \$1.00 with each additional hour costing \$2.00 per hour with a daily maximum of \$12.00. An escalating rate model should not be implemented

for the off-street locations in order to encourage long-term parking off-street. The recommended off-street rate for this model would \$1.00 per hour during the school year and \$0.50 per hour in the summer. The suggested rate model is summarized below in Table 4.

Table 4. Potential Escalating Rate Model

Peak Season (August – May)									
Hour 1	\$1.00								
Hour 2	\$1.00								
Hours 3+	\$2.00 per hour								
	Non Peak Season (June – July)								
Hour 1	\$0.50								
Hour 2	\$0.50								
Hours 3+	\$1.00 per hour								

If the City were to charge the suggested rates for this model, it is estimated that the Year 1 revenue would be \$2,400,000 from on- and off-street parking. This estimate is based upon a 70 percent occupancy rate, 60 percent compliance rate, 7:30 a.m. to 6:00 p.m. hours of operation on weekdays.

3.4.5. Hours of Operation

Regardless of the rate model chosen, it is recommended that the City consider adjusting the paid parking and time limit hours of operation. The existing 7:30 a.m. start time is earlier than the majority of businesses are open downtown. A number of stakeholders indicated that at this time, there are very few cars parked downtown. It is likely that the parking occupancy rate is not usually high enough at this time to warrant the need for paid parking. Additionally, some stakeholders are concerned that the early start time makes it challenging for students to retrieve their vehicles in time in the morning after a night out drinking, which may be contributing to drunk driving cases.

The City should consider shifting the hours of operation to provide improved enforcement coverage during the peak demand periods. If the City were to charge for parking starting at 9:00 a.m., the paid parking hours could extend later into the evening with the same amount of enforcement coverage. If the City shifted the start and end times to later, the hours of coverage could provide improved parking management during the dinner hours, when parking is typically more impacted than in the early mornings. The City should also consider charging for parking on the weekends to address weekend parking occupancy patterns. Based upon the adjusted operating hours and days, the City should reallocate enforcement resources. More information on parking enforcement and paid parking hours of operation is included in Section 3.

3.5. Electric Vehicles

The City is currently in the process of installing electric vehicle (EV) charging stations in Lot 1. Tesla donated a total of 4 charging stations to the City, 2 Tesla charging stations and 2 generic charging stations. Tesla is also paying for most of the installation costs for the new EV stations. Since the charging stations will be displacing four spaces out of the public parking supply that

can currently be used by all drivers, the City should implement an active charging policy and charge for parking in the spaces. An active charging policy ensures that EV spaces are being used to charge vehicles as opposed to providing reserved parking stalls to EV. Suggested municipal code language is included below as a reference:

Electric Vehicle Parking Regulations

A. Definitions.

- 1. "Electric vehicle" means either a battery electric vehicle or a plug-in hybrid electric vehicle.
- "Battery electric vehicle" means a vehicle fueled entirely by electricity stored in the onboard battery. This type of vehicle is often referred to as a zero emission vehicle.
- 3. "Plug-in hybrid electric vehicle" means a vehicle that is fueled by both a battery and another fuel source, such as a gasoline-powered internal combustion engine. This type of vehicle runs on electricity from the onboard battery until the battery is exhausted and then switches to an alternate power source.
- 4. "Charger" means an electrical component assembly or cluster of component assemblies designed specifically to charge batteries or other energy storage devices within *electric vehicles*.
- 5. "Actively charging" means the time during which the *connector* from the *charger* at a *charging station* is inserted into the *inlet* and electrical power is being transferred for the purpose of recharging the *electric vehicle*'s on-board batteries.
- 6. "Electric vehicle charging station" means a parking space that is served by a charger.
- 7. "Electric vehicle charging station zone" means a dedicated parking zone for electric vehicles to park and actively connect to chargers.
- 8. "Connector" means a device inserted into the inlet for an *electric vehicle* that establishes an electrical connection from the *charger* to the *electric vehicle* for the purpose of charging and exchanging information.
- 9. "Inlet" means the device on the *electric vehicle* into which the *connector* is inserted for *charging* and information exchange.
- B. Only plug-in electric vehicles that are actively charging, as indicated by the electric vehicle charging station monitor display, may be parked at electric vehicle charging stations or in electric vehicle charging station zones located on any street or any parking facility owned, leased, or operated by the City of Chico.
- C. No person shall park or cause to be parked or allow to remain standing any vehicle at an electric vehicle charging station or in an electric vehicle charging station zone located on any street or in any parking facility owned, leased, or operated by the City of Chico, unless the vehicle is an electric vehicle, is actively charging, and has not exceeded any applicable parking time limit. Each EV parking stall will be clearly marked with signage indicating the proper angle as to which the vehicle shall be parked.

Implementation Guide

Near-Term Steps

- A. Review and update the municipal code for the viability of mobile payment.
- B. Update the municipal code to allow the City to charge for EV charging stalls and limit use to active charging only.
- C. Develop a "No Re-Parking" ordinance.
 - i. If the City proceeds with a zone-based parking rate model, the City should consider adjusting the municipal code to allow the Director to establish parking management zones.
- D. Define the distribution schedule for paid parking revenue. This step should be incorporated into the planning of a Parking Benefit District as outlined in Section 8.
- E. Use the Revenue Modeling Workbook to determine the optimal rate model and forecast revenue for on-street and off-street parking in the City.
 - i. It is recommended that the City always utilize an on-street hourly rate that is higher than its off-street hourly rate. This will encourage longer-term parkers to store their cars off-street, and it will encourage increased turnover in more convenient on-street spaces.
 - ii. The tiered/zone-based rate model is recommended.
 - iii. Peak and non-peak season rates are also recommended.
- F. Consider adjusting the paid parking hours of operation by shifting to a later start and end time.
- G. Design and order any necessary signage and decals for the paid parking rate and time limit adjustments.
 - i. Signage should include information about the adopted no reparking ordinance. Develop a downtown employee permit parking program as described in Section 5.
- H. Begin education and outreach for the upcoming implementation of new rate structures in the City. Outreach should also include information about the residential and/or employee parking zones and their restrictions. Outreach should include both print and online materials. If the City implements a resident discount program, the education and outreach campaign should inform residents about the application process and requirements.
- I. Draft and release an RFP for pay stations to replace POM meters in the garage and onstreet in near CSUC near residential areas with pay stations.
 - i. The City should minimize the use of cash/coin by procuring primarily credit card only pay stations.
 - ii. Pay stations should be in the Pay by Plate configuration.
 - iii. Extra POM meters can be kept as spares, relocated to high demand streets in need of paid parking, or they can be sold.
- J. Relocate POM meters to lower demand locations and IPS meters in highest demand locations based upon historical occupancy data.
 - i. If the City proceeds with the zone-based rate model, the Zone 1 meters should primarily be IPS smart meters.

- K. Work with IPS to reconfigure existing pay stations to the Pay by Plate configuration.
- L. Begin implementation process for a mobile payment option. Ideally, the City should utilize Passport to be consistent with nearby CSUC.
 - i. The City can use the NCPA for procurement or piggyback off of an existing contract with CSUC or San Luis Obispo.

Mid-Term Steps:

- M. Conduct occupancy monitoring on a bi-annual basis to determine any necessary rate or program adjustments. Active monitoring can help ensure program efficiency by keeping the parking rate structure up to date with current occupancy statistics. It is recommended that the City evaluate parking occupancy on a weekday and a weekend day during the school and summer seasons.
- N. Adjust paid parking rates, time limits, and/or hours of operation based upon occupancy data, consistent with achieving the 85% occupancy target.
 - i. Ensure that enforcement is consistent to achieve compliance.

Long-Term Steps:

O. Ongoing occupancy monitoring and program adjustments as needed.

4. Enforcement

4.1. Staffing and Hours of Operation

Currently the City has 4 enforcement officers that enforce parking regulations in the City, typically between 7:30 a.m. and 6:00 p.m. The City currently staffs 1 full-time officer, 3 part-time officers, and 1 supervisor, a Police Sergeant. Parking enforcement currently resides within the Police Department. The part-time officers operate on a flexible schedule, meaning that they are able to choose their start and end times based upon personal preference each week, for a maximum of 25 hours per week, Monday - Friday. As a result, the hours of enforcement are inconsistent, and there is no formalized coordination in schedules between the part-time officers to maximize coverage. The full-time officer is currently staffed from 8:30 a.m. until 5:30 p.m. Monday - Friday.

Table 5. Potential Staffing Plan for Existing Hours of Operation and Staffing, Monday - Friday

	Мо	nday	- Fri	day
7:30 AM				
8:00 AM				
8:30 AM				
9:00 AM				
9:30 AM				
10:00 AM		PT 1		
10:30 AM		_		
11:00 AM				
11:30 AM				PT 3
12:00 PM				3
12:30 PM				
1:00 PM	FT			
1:30 PM				
2:00 PM				
2:30 PM				
3:00 PM				
3:30 PM			PT 2	
4:00 PM			2	
4:30 PM				
5:00 PM				
5:30 PM				
6:00 PM				

Table 5 outlines a potential staffing plan based upon the existing hours of operation and staffing levels. Ideally, the City should concentrate staffing around the peak mid-day hours, while still providing adequate coverage at the start and end of the day. A consistent schedule will ensure that coverage is optimized to meet demand.

Based upon the peak parking demand times occurring in the mid-day and evening hours, the City should consider shifting the hours of enforcement to begin and end later in the day. By shifting the start time to 9:00 a.m., the enforcement could end at 7:00 p.m. while providing sufficient enforcement coverage. This enforcement during the evening, when parking demand can be high due to the nightlife and restaurants downtown. Starting later in the morning was also suggested by some stakeholders, however, the City should be cautious not to provide free parking during the morning when CSUC classes are in session. Otherwise, students could park downtown for free to go to a morning class. One stakeholder pointed out that a 9:00 a.m. start time could encourage drivers to leave their car downtown after drinking, to pick it up in the morning, which may reduce drunk driving occurrences. Ending enforcement hours at 7:00p.m. will help create turnover and availability for visitors going to dinner later in the evening, especially during the school year which draws students to downtown well into the evening. The City should also consider expanding the time limits to Saturdays based upon need. Below, Table 6 outlines a potential staffing schedule for

the recommended hours and days of operation. Ideally, for this enforcement model, the City would hire 1 or 2 additional part-time enforcement officers.

Table 6. Potential Staffing Plan with Updated Hours of Operation and Additional PT Staff

	N	1onda	ıy		T	uesda	ıy			W	ednes	day			Tł	nursd	ay		Friday						Saturday		
9:00 AM																											
9:30 AM																											
10:00 AM																											
10:30 AM																											
11:00 AM		БТ			БТ			рт		рт			ь		οт			DT		БТ			БТ		БТ		
11:30 AM		PT 1			PT 1			PT 2		PT 1			PT 2		PT 1			PT 2		PT 1			PT 2		PT 2		
12:00 PM																											
12:30 PM																											
1:00 PM							ОΤ					ОТ					Р										
1:30 PM							PT 3					PT 3					Т										
2:00 PM																	3										
2:30 PM	FT			FT					FT					FT					FT			PT *				PT *	
3:00 PM																											
3:30 PM																											
4:00 PM			БТ			БТ					БТ					БТ					DT			БТ			
4:30 PM			PT 3			PT 4					PT 4					PT 4					PT 4			PT 4			
5:00 PM																								-			
5:30 PM																											
6:00 PM																											
6:30 PM																											
7:00 PM																											

^{*}One additional part-time roaming enforcement officer could be considered to increase coverage. The days and hours could be flexible based upon demand. Additionally, this part-time officer could assist with special event management, weekend enforcement, and staff coverage during sick and vacation times.

The addition of 1 or 2 part-time officers would help the department close schedule gaps and provide more consistent coverage throughout the days. Ideally, officers should have set routes that ensure consistent coverage within their enforcement areas. Cyclical routes should be established to allow for a minimum of three to four patrols per shift for each enforcement area. The consistent scheduling will also improve the City's ability to provide consistent time limit monitoring and enforcement, which is critical.

These staffing recommendations are based upon the recommendation for the City to utilize LPR. LPR will significantly improve officer efficiency. Without it, the City should consider hiring an additional full-time officer, in addition to those listed above. The additional staffing will allow the City to provide the manual time limit tracking that is required throughout downtown for effective time limits.

4.2. Compliance

The City should take a compliance-based Parking Ambassador approach to enforcement. Often times, parking enforcement staff may be the only interaction that visitors have with City employees, so they should always be a positive representation for the community. A compliance-based approach includes issuing warning notices before citations for first-time offenders, educating parkers on regulations, and answering customer questions. Compliance also requires consistency. Currently, officers are not chalking vehicles within the metered spaces of downtown despite having time limit restrictions in those spaces. This allows parkers to feed the meters to extend their stay, therefore avoiding the time limit.

The City should update any existing training materials or develop a training manual with detailed job guidelines, policies, and procedures for parking enforcement staff based upon the Parking Ambassador approach. This should cover all aspects of the enforcement, maintenance, and revenue collections work. A manual of policies and procedures is necessary for officer guidance and direction. A manual is not simply about personnel issues; it is also a "how to do the job" guideline, detailing enforcement policies, what to do when there is an ADA violation for example, so that every officer enforces in the same manner with the same compliance-based approach to enforcement. Documented job guidelines will help provide additional consistency between officers to ensure that each Parking Ambassador is implementing the same rules in a fair and consistent manor.

The City should also consider raising the amount for parking violations above the current \$29.00 rate. Currently, the cost to park all day on-street is \$5.25, however with the recommended rate change this could increase to around \$15.00. A low citation fee may not be enough of a deterrent to drivers, especially if there may be a relatively low chance of receiving a citation. The City could consider a \$35.00 or \$40.00 rate for certain parking violations to further encourage compliance. For reference, the City of Davis citation fine amounts are included below in Table 7. In Davis, the citation for an overtime violation is \$50.00.

Table 7. City of Davis Parking Citation Fine Amounts

Violation	Fine
Americans with Disabilities Act (ADA) violation	\$308
Blocking Access to Curb Ramp	\$258
Missing License Plate	\$117
Current Registration Tabs	\$117
Parked in Front of Driveway	\$55
Double Parking	\$50
Parking in Crosswalk	\$50
No Parking Anytime	\$50
Red Zone	\$50
White Zone	\$50
Green Zone	\$50
Parking Outside Markings	\$50
Two-Hour Parking	\$50
120-Hour Parking	\$50
Permit Parking	\$50
Failure to pay the meter	\$50

4.3. Management Structure

The City could retain parking enforcement as a portion of the Police Department, or consider moving it to the Public Works Department. Because the Public Works Department handles the maiority of ongoing parking management, having enforcement organized into the same department could streamline the communication from top to bottom, which would ultimately serve to improve enforcement consistency in the City. The top priority for the Police Department is, and should be, health and safety concerns. By separating parking enforcement from the Police Department, this may provide a more focused approach to parking management. Regardless of the department that oversees parking enforcement, the enforcement officers should report to a manager who provides ongoing

oversight and monitoring of enforcement data to ensure that the operation is being optimized. The enforcement technology provides the City with the ability to run reports and track officer productivity through Gap Management.

Gap management is the process of ensuring that officers are effectively using their time in the field. As enforcement effectiveness improves, the City can expect increased levels of compliance, resulting in a decrease in the number of issued citations. Gap management will allow the manager to understand whether a decrease in citations is due to ineffective enforcement or due to higher compliance. Any large gaps in time between citations should be accounted for whether the officer is chalking tires, providing warning notices, or conducting other job duties. LPR data can also be used to help manage parking enforcement activity for gap management. The GPS locations of plate reads map out daily enforcement routes. This will allow the City to track officer productivity without basing it on the number of citations issued.

The City could also consider outsourcing parking enforcement support services. This approach should be evaluated for feasibility and its degree of cost savings. Outsourcing requires the City to establish the number of labor hours, uniforms, equipment, vehicles, and any office space needed to support the City along with the specified enforcement services. Most vendors will offer an existing employee transition program, subject to minimum qualifications,

background checks, and specified hiring criteria. The City could specify this approach in any solicitation. Private parking operators offer both union and non-union labor, which the City can also specify as a requirement. The type of labor will impact the cost of the enforcement support services. The City Attorney should confirm the ability to outsource enforcement services.

Several California agencies have successfully outsourced parking enforcement operations for nearly two decades, including Palo Alto, West Hollywood, Pasadena, and Newport Beach. These outsourced programs have continually demonstrated not only a significant annual cost savings to the agency but also an increased level of service and consistent application of the parking regulations that had not been supported by their internal resources. With each outsourced program, the City provides oversight and audit control of the parking enforcement operation including frequent meetings with program managers and regularly scheduled audits to ensure the productivity, efficiency and service levels of the vendor.

Though the day-to-day parking enforcement operations is managed by a service provider, the level of transparency in the relationship is critical to the success of the overall program. These programs must be closely monitored by designated city staff and, in some case, vendors are even co-housed within existing city facilities. Contract performance requirements strictly regulate how to address customer complaints and the notification protocols for any community issues that may arise. Polices and operational procedures must be approved by the City and vendors must closely monitor their field staff to ensure compliance and customer satisfaction.

Typically, services are procured through a standard Request for Proposals (RFP) process identifying the type of parking enforcement support services needed. In some cases, cities have outsourced their entire enforcement operations, while others have solicited supplemental services to assist with specific enforcement policies like street sweeping, meter enforcement and overnight parking regulations. Contracts are structured based upon a flat monthly fee, an hourly rate by position with a specified number of annual service hours or a combination of both. Depending upon the agreement, some cities only provide the enforcement devices and, in others, the vendor is required to provide turnkey services, including vehicles, uniforms, office space and the enforcement devices. In either case, the City typically specifies the enforcement needs for the services requested and mutually establishes an enforcement schedule in coordination with the vendor's scope of contracted services.

Outsourced parking enforcement services have demonstrated an improvement in the efficiency of enforcement, including an increase in paid parking revenue (on and off street). After the first year of their outsourced parking operation, in 2012, the City of Newport Beach reported to the Finance Committee a 24% increase in parking meter revenue and salary savings of nearly \$500,000. Importantly, the vendors primary responsibility is to encourage customers to pay at the meter before issuing the citation, including trying to find customers in nearby stores and cafes. Even with this effort, the results also included an increase in parking meter citation revenues by 36%. The supplement parking enforcement program began with parking meter enforcement only and has since expanded to include time limits

and off-street parking lots. Chico could expect to see a higher level of compliance with posted time limits if the enforcement operation were to be outsourced.

For over 15 years, the City of Pasadena has been supplementing their parking enforcement operation with outsourced services. The most recent contract was approved in 2015 with an annual value of \$967,000. Turnkey parking enforcement services have been provided to the City of West Hollywood for over two decades and, the most recent 5-year contract extension was approved in 2015 with an estimated value of \$2.3M. The West Hollywood enforcement program has been recognized as a high-profile, customer centric model operation in a densely populated region of Los Angeles.

Prior to considering any outsourcing potential of parking enforcement services in Chico, it is recommended that the City solicit the City Attorney to confirm the legal viability of outsourcing parking enforcement support services. This has been an issue of concern for other California municipalities.

4.4. Citation Management

Parking enforcement staff are currently provided Samsung S2 handhelds that operate the Turbo Data Systems (Turbo) citation issuance software, connected via Bluetooth to O'Neil printers. In general, the officers have not had significant issues with the existing citation

issuance devices. One handheld had issues with the screen freezing, but has since been replaced. Turbo and IPS recently completed an integration to allow the handhelds to easily verify payment status in the Pay by Space pay station lots. Currently the system is configured to allow the officers to cite for the same violation multiple times.

The handhelds allow the officers to take up to 4 photos per citation. The officers typically take a photo of the violation, the vehicle, the meter, and the vehicle identification number (VIN). While 4 photos may be sufficient in most cases, having the ability to take additional photos could be useful to ensure that adequate documentation is collected to support the citations during the adjudication process. Some citation management vendors also provide the option for videos and voice recordings.

Officers are able to issue and track warning notices using their handhelds. This feature is important, especially with the recommended

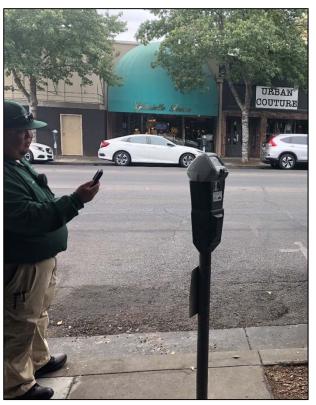


Image 5. Enforcement Officer using Handheld

Parking Ambassador compliance-based approach to enforcement. Warning notices can be treated as an opportunity to educate violators about the parking policies.

The enforcement officers use physical chalk for time limit monitoring currently. The Turbo system does have a digital chalking feature which would allow the officers to record the valve stem location with a date/time stamp in the application. This feature is somewhat time consuming however, which is the reason behind using the physical chalk. If the City implements LPR for enforcement, the LPR system can automatically track for time limit violations.

The handhelds also allow the officers to make phone calls and text, a feature that is useful for officer safety and communication with superiors. Officers also have radios that they have been trained to use, but mostly use to listen for locations to avoid during an event that requires the Police Department. Officers currently use their devices to text the maintenance crew when they see meters that need to be repaired or serviced.

Violators are able to access, appeal, and pay their citations online through Turbo's pticket portal. Turbo currently handles the contested hearing process for citations issued by the City.

While the Police Department has had a good experience with Turbo to date, the City is in the process of evaluating other citation management vendors to better understand product features. This includes an assessment of any new Turbo features that could be implemented. The City could also assess the opportunity of leveraging the existing Turbo contract for an automated permit management system. Automating permit management would allow officers integrate permit data with the enforcement technology. A permit managing solution would allow officers to validate existing permits more efficiently and in real-time. Because officers have to call the Finance Department to verify permits, when the City closes, officers are unable to effectively enforce permits in the City. More information on automated permit management is included in Section 5.

4.5. Meter Bagging

While the City has a meter bagging program for space reservations, these bags are not being tracked and monitored effectively. The Engineering team manages the meter bagging program but there is not an up to date log of current deployments, dates, and payments. Ideally, it should be tracked based upon the meter numbers and a date range to ensure compliance with the program. During an on-site assessment, expired meter bags were noticed still deployed on meters. The City is in the process of switching to the Track-It system. The meter bags could be administered by the City's maintenance staff, or the City could choose to have the applicants self-bag, along with a photograph for verification and record keeping purposes.

4.6. License Plate Recognition

License Plate Recognition (LPR) technology can significantly improve enforcement efficiency, especially for time limit



Image 6. Chico Meter Bag

management. Rather than solely relying on chalking vehicles through the Turbo application or with physical chalk, the LPR cameras can automatically track license plate reads based upon their GPS location and notify the officer when there has been a violation. Additionally, if parking permits become license plate-based, and if all pay stations are configured for Pay by Plate, then the LPR can efficiently verify valid payment status.

LPR also has the added benefit of providing occupancy and utilization data. Data can be exported to Excel for ongoing analysis and review. The City could develop a data collection plan with fixed routes, days, and hours. Collecting data with LPR would be a cost-effective way for the City to understand on and off-street occupancy and utilization trends, which would allow for data-driven decisions about potential time limit and rate adjustments.



Image 7. LPR Mounted on City of Davis Enforcement Vehicle

In order to more effectively and consistently enforce time limits throughout downtown, it is recommended that the City purchase 2 mobile LPR systems. The City currently has 1 Honda Civic Hybrid and are purchasing a Chevy Volt Hybrid soon as well. Each of these vehicles could be equipped with the LPR; The LPR system can be permanently mounted onto the vehicles, along with the inclusion of a laptop for the LPR software.

LPR technology has become a common and useful parking management tool. It is imperative to understand that LPR for parking utilizes cameras to process images to identify vehicles for

enforcement of permit policies and time limit regulations parking regulations. Public agencies must post LPR policies online that define the use of data. For the purposes of Chico, license plates would not be retained other than citations issued for adjudication purposes. Otherwise, information gathered is converted into data point for analysis and reporting.

LPR can be expanded to include scofflaw lists that will allow the City to identify delinquent vehicles with 5 or more unpaid parking citations. Additionally, the City can also consider expanding the technology for use by the Police Department to identify license plates connected to a crime or a person of interest. As an enforcement device, LPR cameras are attached to enforcement vehicles that patrol both streets and parking lots and can be used to manage parking violations, occupancy limits, scofflaw capture, and paid parking payment status.

There are several vendors that provide specialized parking LPR technology for enforcement. Many systems have developed their software to integrate with the citation and permit processing vendors in order to provide municipalities with a comprehensive program customized for their needs. LPR provides enforcement with visual (photo and/or video) evidence of a parking infraction to support adjudication. Some LPR systems have the ability to flag a violation and immediately 'push' or send citation information to an enforcement officer currently patrolling the streets. This process allows the parking enforcement officer on the street the ability to issue a parking citation at the time it was flagged. Additionally, many vendors offer 'digital chalking' which uses software technology to track how long vehicles are parked in a specific area and simultaneously compare that to the time limit posted in that area. This particular feature has helped several cities provide a more accountable and consistent timed zone enforcement program without the need to invest in additional labor.

From an employee morale standpoint, it also provides a direct benefit to the enforcement officer by removing the physical chalking requirement, managing the marked timed zones and alerting the officer of an enforcement ready zone. Additionally, LPR mitigates a chronic problem faced by a number of agencies when patrons physically 'remove' chalk marks from tires. The LPR solution provides a documented record of the vehicle location and time/date stamp when the vehicle was initially identified and the resulting violation confirmation time/date stamp that will support the adjudication process.

The Northern California Regional Intelligence Center (NCRIC) has become a resource for regional municipalities to safeguard the city by providing a data storage resource. Several local agencies have integrated their LPR systems with this program to ensure privacy and the security of the LPR system.

4.7. Booting

The City does not currently boot for scofflaw violations. The City should consider booting as a more efficient alternative to towing because it improves officer efficiency and safety. The traditional boot is being replaced with more innovative, automated, and customer-convenient options. Officer safety is always a concern during any boot release. If the City assumes booting responsibilities, there are two immobilization devices that the City should evaluate and consider that specifically address the issue of officer safety - Paylock SmartBoot and the Barnacle.

Each of these immobilization devices provide a self-release service feature that allows the customer to manage delinquent citation payments and do not require enforcement officer field presence to complete a transaction. This minimizes wait time and mitigates the often harsh exchange that can occur when the traditional boot is removed from the vehicle.

The Paylock SmartBoot looks just like a traditional boot, however, with embedded electronics that allow for programmed release. When a scofflaw is identified by a PEO, the SmartBoot is deployed by attaching it to the wheel. The violator can contact customer service immediately and pay the designated penalties due to the City. Prior to the payment process, the violator must acknowledge the financial responsibility to return the SmartBoot to a designated location. A credit hold is placed and if the equipment is not returned within the specified timeframe (typically 24 hours), the specified value is processed to the violator. The values range from \$500 to \$750 and equipment return compliance is high.



Image 8. Paylock SmartBoot

While also equipped with a violator release feature, the Barnacle is attached to the windshield rather than the tire. This is another enhanced opportunity for officer safety because, rather than bending down to attach the boot, the Barnacle can be attached to the windshield from the curbside. Industrial suction cups adhere the device to the windshield thereby obstructing the driver's view. The Barnacle is GPS-enabled and includes an anti-tamper alarm. Same as the SmartBoot, a violator must acknowledge financial responsibility for the device and, if not returned, they will be charged for the device at a price similar to the SmartBoot.

Both solutions are а tremendous innovation to the traditional booting process. It is recommended that if the City assumes booting responsibilities, either of these options should be considered to more efficiently manage the process. Each of these solutions provide a management system that will automatically send a notification if an immobilization time limit is defined in the system identifying when a vehicle should be towed. The City can determine if this notification should be sent directly to the tow company or if an officer should solicit the service.



Image 9. Barnacle Windshield Immobilizer

Near-Term Steps

- A. Budget for additional enforcement positions based upon the potential expansion of enforcement hours, OR consider moving parking enforcement into the Public Works Department, OR assess the viability of outsourcing the enforcement operation with the City Attorney.
- B. Work with Turbo to provide desired features or consider drafting and issuing an RFP for a new citation management vendor.
 - i. Consider expanding existing Turbo contract to implement an automated permit management solution.
 - ii. Involve the Police Department and parking enforcement staff in any enforcement technology vendor demonstrations, specification reviews, and the selection process. This includes any future solicitation for citation management software, handheld devices, boots, and license plate recognition technology.
 - iii. Involve the Finance Department in the citation and permit management vendor demonstrations and selection process.
- C. Consider adjusting the hours and days of enforcement.
 - i. Develop a staffing plan to ensure coverage during peak demand periods.
- D. Draft and issue an RFP for LPR technology.
 - i. Install LPR on enforcement vehicles.
 - ii. Install signage requiring "font in parking only" to ensure that license plates will be visible for enforcement.
- E. Consider utilizing boots or windshield immobilizing devices to enforce scofflaws.
- F. Continually monitor changes in enforcement handheld technology to identify the appropriate times for upgrading of devices. Handheld devices should, at a minimum, have the following features:
 - i. Real-time transmission.
 - ii. Ability to take, send, and view color photos.
 - iii. Ability to view prior citations, warnings, and valid permit information during the citation issuance process.
 - iv. Ability to use a chalking feature.
 - v. The use of a default citation.
 - vi. A simple and user-friendly user interface.
 - vii. A customizable public-facing web user interface to pay and appeal parking citations.
 - viii. A toll-free telephone number to accept citation payments over the phone.
- G. Develop a Parking Ambassador approach to parking enforcement. Adjust training information and procedures to align with a customer-service focused approach to achieving compliance.
 - i. Adjust job descriptions as required.

- ii. Assign officers, under general supervision, to patrol their assigned areas to enforce parking regulations and ordinances, maintain records, and issue citations.
- iii. Examples of duties include observing vehicles for parking violations, issuing citations, operating computer equipment and handhelds, filling out data fields related to code violations and VINs, acting as an ambassador to the public to answer questions, and notifying police when appropriate.
- iv. Cyclical enforcement beats, or routes, should be established to allow for a minimum of three to four patrols per shift for each enforcement area.
- H. Consider raising the parking citation fine amounts to encourage compliance with posted regulations.
- I. Utilize citation management vendor software to aid in Gap Management procedures.
- J. Utilize Track-It or other program to track the meter bagging program and ensure ongoing compliance.

Mid-Term Steps:

- K. Implement additional Turbo features or new citation management vendor.
 - i. The citation management system should be integrated with an automated permit management system.
- L. Hire additional enforcement officers based upon an optimized staffing plan.
- M. Utilize LPR for ongoing occupancy and turnover data collection.
 - ii. Establish a data collection plan with fixed routes.
- N. Ongoing training with any new or upcoming enforcement technology procured by the City.
- O. Ongoing Gap Management to monitor officer effectiveness.

Long-Term Steps:

- P. Consider purchasing additional LPR devices depending on enforcement coverage.
- Q. Consider any necessary adjustments to staffing and hours of operation to meet the City's parking occupancy goals.
- R. Continually monitor and evaluate citation data and enforcement demand to make any necessary adjustments to enforcement staffing, hours, or routes. Staffing requirements may change due to efficiencies provided by future investments in enforcement technology.

5. Commercial Loading

There are a number of commercial loading zones throughout downtown Chico. However, commercial trucks are frequently double parked, often blocking traffic and creating a safety hazard. Many stakeholders mentioned that these issues with commercial loading and unloading in downtown has been a consistent and ongoing problem for the City. The City should consider designating additional loading zones throughout downtown to alleviate congestion and minimize the need for double parking. Some locations that were recommended by stakeholders for consideration include 2nd Street in front of the El Ray Theatre, the intersections of 6th and 7th Streets and Salem Street, on 3rd Street between Salem Street and Normal Avenue, and along Main and Broadway Streets. Ideally, the City should have one or two loading zone spaces on each side per block throughout downtown.

The City also has the opportunity to create dual-purpose loading zone spaces by restricting the spaces for loading to before a certain time, such as 10:00 a.m. or 11:00 a.m. This would allow the City to charge for public parking within the loading zones after the loading zone period. This way, the City



Image 10. Double Parked Vehicles in Chico

can create additional loading zone locations without impacting public parking supply during peak public parking hours.



Image 11. Double Parked Box Truck in Chico

Additionally, the City may consider designating certain loading zone areas as designated locations. passenger drop-off/pick-up Encouraging the use of ridesharing applications such as Uber and Lyft can reduce the demand for the City's parking resources. By creating designated drop-off/pick-up zones. this can help reduce the amount of congestion that would otherwise be caused from the ridesharing vehicles blocking the road or stopping illegally for passengers, especially in the evening hours.

The City should also explicitly prohibit double parking within the municipal code and install signage throughout downtown. This will enable the City's enforcement team to better manage the issue of double parking. An escalated fine structure could also be considered to encourage compliance. The San Francisco

Transportation Code section on commercial double parking is included below for reference:

San Francisco Transportation Code: SEC. 7.2.85. COMMERCIAL VEHICLE DOUBLE PARKING.

Except when necessary in obedience to traffic regulations or police or Parking Control Officers, when loading or unloading merchandise or passengers it shall be a violation of Vehicle Code Section 22502(a) for a commercial vehicle to Park in a Street where signs prohibiting commercial vehicle double parking are posted.

Regardless of the loading zone requirements that are implemented, clear and consistent signage as well as curb markings will help ensure compliance and ease of enforcement. Signage should indicate active loading only to prevent queuing. Yellow heads on single-space meters can also be utilized within the loading zones spaces to help notify drivers of the parking restrictions. It is also important the City clearing designate the zones for active loading and unloading only to ensure that the spaces are not being used by rideshare and delivery vehicles as parking spaces.

Suggested revisions to the City's municipal code is included below with the additional language in red font.

10.20.070 Signs or Curb markings to indicate no stopping and parking regulations. - Red no parking zones.

The Director, or their designee, is hereby authorized, subject to the provisions and limitations of this division, to place and when required herein shall place, signs or the following curb markings to indicate parking or standing regulations, and such curb markings shall have the meanings as set forth herein:

- 1. Any portion of a public street which adjoins a curb that is painted red is designated as a no parking zone. No person shall park or stand a vehicle within any portion of a public street which has been designated as a no parking zone by the city council, traffic committee, the director or the fire chief in the manner hereinbefore authorized by this title and which has been identified as a no-parking zone by an adjoining red curb. RED shall mean no stopping, standing, or parking, at any time except as permitted by the Vehicle Code, and except that a bus may stop in a red zone marked or signed as a bus stop zone.
- 2. YELLOW shall mean no stopping, standing, or parking during any time in which parking is restricted or prohibited at that yellow zone, for any purpose other than the active loading or unloading of passengers or materials; provided that the loading or unloading of materials shall not consume more than twenty (20) minutes. Non-commercial vehicles shall not be parked in a yellow zone in excess of a period of three (3) minutes, during which the operator must be in attendance, under any circumstances during times when parking is restricted at a yellow zone.
- 3. WHITE shall mean no stopping, standing, or parking for any purpose other than the active loading or unloading of passengers or for the purpose of depositing mail in an adjacent box which shall not exceed three (3) minutes, and such restrictions shall apply

at all times unless limited to specified hours and/or days by posted signs.

- 4. GREEN shall mean no standing or parking for a period of time longer than the specified time limit and on the days indicated by posted signs.
- 5. BLUE indicates parking limited exclusively to the vehicles of physically handicapped persons, which vehicles display either a distinguishing license plate or a placard issued pursuant to California Vehicle Code Section 22511.5.

Near-Term Steps

- A. Update the municipal code to require active loading only.
- B. Update the municipal code to prohibit double parking.
- C. Define locations for additional loading zones.
 - i. Consider restricting commercial loading in the City before 10:00 or 11:00 a.m. The City can charge for public parking during non-loading zone hours.
 - ii. Loading zones can also be utilized for rideshare and passenger loading during non-commercial loading zone hours.
- D. Design loading zone signage. Signage should indicate "active loading only" and designate the hours of operation

Mid-Term Steps:

- E. Implement additional loading zones, along with required signage, meters and curb paint.
 - i. Loading zone signage should clearly describe the loading zone time of day restrictions.
- F. Proactively enforce double parking restrictions.

Long-Term Steps:

G. Ongoing monitoring of loading zone utilization and double parking violations to determine necessary adjustments to loading zone locations, enforcement, and hours of operation.

6. Employee Permit Parking

The City encourages downtown employees to purchase 10-hour quarterly parking passes through the City of Chico Finance Office. Each pass costs \$105.00 per quarter. The 10-hour parking pass allows employees to park in any 10-hour space in Downtown Chico. The City has identified four smart parking lots located immediately outside the downtown core that offer employees affordable places to park without requiring coin payment or frequent reparking (Image 12). All 4 of the parking lots are located within a short walk of downtown locations. In addition, the City encourages employees to utilize unmetered, on-street parking located to the west of Normal Street and to the east of Wall Street, thereby freeing more convenient downtown spaces for near-term customer parking. Employee parking recommendations are published on the City's website.



Image 12. City of Chico Employee Parking Recommendations

As part of its employee parking incentive program, the City offers free Butte Regional Transit (B-Line) to employees who work in downtown. In order to qualify, employees must present proof of employment to the City of Chico Finance Office.

The City recognizes that when employees park a few blocks from the downtown core, customers have better access to shops and restaurants, helping to improve the local economy. In order to encourage off-site parking, the recommended employee permit rate should cover the cost of added administrative requirements while still remaining affordable to incentivize participation. Currently, each pass costs \$105.00 per quarter. This cost is high enough to discourage spillover from nearby California State University, Chico, where students pay \$60.50 for quarterly permits.

6.1. Permit Rate Comparison

The below table includes the annual rate for downtown permits in a number of comparable cities, as well as CSUC.

Table 8. Pe	rmit Rate	Comparison
-------------	-----------	------------

Location	Downtown Permit Annual Rate	
Chico	\$420	
Davis	\$120	
Eugene	\$696	
Fresno	\$900 - \$1080	
CSU Chico Student Pass	\$242	

Based upon the above rate comparison table, the City of Chico charges a significantly higher rate than Davis, but lower than both Eugene and Fresno. Without a clear trend, it is challenging to gauge what an appropriate rate for Chico would be. Therefore, it is recommended that the City maintain the existing rate model and proceed with small incremental increases on an annual basis.

The City should also implement a low-income/service worker permit option. It is critical for the success of a downtown that low-income employees have an affordable option for parking. The City should establish an income threshold for qualification and with proof, employees could qualify for a reduced permit rate. Applications should also be required to submit proof of employment on at least an annual basis. It is recommended that the City charge more than the CSUC permit rate, but less than \$300 per year for qualifying users. Maintaining downtown employees at all pay scales is important to the success and vibrancy of downtown Chico.

As previously discussed, implementing a no reparking ordinance will encourage short-term parking by requiring drivers to move their cars within a defined period of time. However, the City should ensure that employees have enough accessible and affordable locations to park.

In some areas of downtown, residential curbsides go largely unused much of the day, including in areas where nearby employees struggle to find appropriate parking options. Many cities have successfully addressed this opportunity by creating permits for local employees to allow them to park on residential streets during the daytime. The number of employee permits issued should be limited to ensure that local curbsides can accommodate the demand without constraining resident parking access.

Should downtown parking supply in smart parking lots or nearby unmetered parking become constrained, the City may consider remote parking options. The City may consider negotiating shared parking agreements with private partners. If the City chooses to encourage remote employee parking, it will need to provide employees with reliable, convenient, and safe ways to get to and from downtown. The City may consider private partners located along accessible bus routes, such as Enloe Medical Center and Chico Nut Company, which are located immediately adjacent to the City's Esplanade.

It is recommended that the City transition to an automated permit management system for these downtown permits. The same permit management system could be utilized for both downtown and PPA permits. Regardless of the selected vendor, the City should offer an online portal. Applicants should be required to submit proof of employment to qualify for a permit. Proof of employment can include a recent paystub or a letter from an employer, for example. The supporting documentation should be reviewed by an administrator and approved prior to accepting payment from the applicant. A vendor system will also allow the City to ability to set a cap on the number of permits with a wait list capability. The vendor system administrator portal should also allow the City to view applications, run reports and track program utilization. There are a number of services offered by permit management vendors. During a solicitation process, the City should determine which services to keep in-house and which services to outsource to the vendor.

It is also recommended that the City transition to the use of digital permits. With digital permits, the license plate number becomes the permit identifier for enforcement, removing the need for physical hangtags or stickers. Digital permits will allow the City to efficiently enforce with the use of LPR technology. This will be more efficient than the visual verification process currently required with the physical permits.

When transitioning to an automated permit management system, the City should also be prepared to implement an education and outreach campaign. Ideally, employees should learn how to use the new system rather than relying upon ongoing administrative support. While this adjustment period can be challenging at the start, the vendor systems are typically designed with a user-friendly interface which should mitigate customer questions and complaints. In conjunction with the launch of the program, employees should be provided with information about the program, how to use the online portal, general information about LPR enforcement, and step by step instructions for purchasing a permit.

For reference, the City of Paso Robles recently launched their first employee permit parking program. The Paso Robles Employee Parking Permit Pilot (PREP⁴) included the following outreach materials along with the program launch. These outreach materials from PREP⁴ are examples of using positive wording to communicate a program. Additionally, they incorporate the City's parking brand color palette for consistency. The use of these instructions and information has helped to provide a smoother transition for the City. A similar outreach approach is recommended for the Chico.

Parking News!

Paso Robles Employee Parking Permit Program Pilot

The City of Paso Robles is launching the PREP⁴ program to create designated permit parking locations throughout downtown for permit holders. Permit holders will have the opportunity to park in any available permit stall.

Purpose: Convenient on-street parking should be available for customers. Without time limits or

paid parking, downtown employees are able to store their vehicles on-street in front of

businesses throughout the day.

Goal: Create a low-cost permit program and designated permit parking areas to encourage

employees to voluntarily store their cars away from businesses. Parking occupancy

and utilization data will be collected throughout the pilot.

When: Permit sales will begin on November 1, 2018 and the permit pilot program will officially

launch on December 1, 2018 through April 30, 2019.

Cost: \$5.00 per month.

How: A link to an online portal will be posted on the City's website on November 1. Business

owners and employees can create an account, select the permit type, upload proof of employment, and purchase the permits. Your license plate number will be your permit. Beginning December 1, permit-holders are eligible to park in any location designated

for permit parking by signage.

What: The following permit types will be available:

Daytime employee, valid 8:00AM-5:00PM, Monday-Friday (145 available)

Evening employee, valid 5:00PM-8:00PM, Monday-Friday (145 available)

Downtown resident, valid 8:00AM-8:00PM, Monday-Friday (5 available)

Where: Permits will be valid at the following locations, based upon posted signage:

- · Portion of City Hall Lot
- · Railroad Street Lot
- 12th Street Lot (next to Marv's Pizza)
- Portion of Spring Street Lot
- · Pine Street Lot
- · Portion of Train Station Lot

Image 13. Paso Robles Flyer (Front)



What do I do if the permits are sold out?

If permits are sold out you can join a wait list. If there is a wait list, the City will consider expanding the program to accommodate everyone.

What if I have multiple cars?

For the pilot, only one license plate number can be tied to each permit.

What do I do if all the permit spaces near my work are full?

If you are a permit holder, you are eligible to park in any permit parking stall. There will be enough permit parking stalls for every permit holder to find a space. If one location is full, please check the others.

Will someone get a parking citation if they park in a permit parking stall without a permit?

Yes. The City's Parking Ambassador will be enforcing the permit parking areas to ensure that permit holders have a place to park.

How is the City collecting data, and why?

The City will be utilizing License Plate Recognition (LPR) camera technology mounted on a vehicle to collect data throughout the pilot. Parking occupancy and utilization data will be useful for the City when assessing the effectiveness of the pilot. The City can also use this information to make important parking management decisions in the future. Progress updates will be shared on a monthly basis.

Why is there a cap on the number of permits being sold?

The City intends to start small and expand the program if successful. It is important to implement new parking programs incrementally and to make data-driven decisions. The City also wants to ensure that there is enough parking available to permit holders, so additional permits will not be sold beyond the permit parking capacity.

Where should I park if I choose not to get a permit?

Please park anywhere outside of the downtown prime parking core, which is currently 10th to 13th Street and Spring to Pine. Ideally, on-street parking should be made available for customers.

Why is the program only Monday through Friday?

This is a starting point for the City, but the program could be expanded to the weekends if successful. This will require additional enforcement resources.

For more information, please contact parking@prcity.com

Image 14. Paso Robles Flyer (Back)

Near-Term Steps

- A. Budget for and begin solicitation for an automated permit management system.
 - Transition to the use of digital permits.
- B. Continue to incentivize designated employee permit parking locations.
 - i. Monitor and adjust the cost of the employee parking permit as needed in order to: sustain the program; allow employees to park at a discount as compared with on-street parking in the downtown core; and incentivize alternative modes of transportation.
 - ii. Monitor and adjust the number of employee parking passes issued for residential areas to ensure that local curbsides can accommodate demand without constraining resident parking access.
 - iii. Allow for monthly and/or annual purchases to encourage flexibility.
- C. Implement the online permit application process through the City's selected permit management vendor.
 - i. Proof of employment should be required.
 - ii. The permitting system should be fully digital, based on license plates
 - iii. The City should allow for monthly, quarterly, or annual purchases
- D. Publish information online and send mailers to inform businesses and employees of the upcoming program adjustments.

Mid-Term Steps:

- E. Continue to educate local businesses by promoting designated employee permit parking locations.
 - i. Install appropriate signage to indicate employee parking areas.
 - ii. Send renewal notices by mail at least 30 days in advance of the permit expiration date.
- F. Identify and designate additional employee permit parking locations as needed. This should primarily include parking lots located on the edges of downtown and/or remote parking lots.

Long-Term Steps:

- G. Based upon parking occupancy rates, the City may consider more remote parking locations in the future.
 - i. These locations should be supported by a bus route or bike share program. The City may consider private partners located along currently accessible bus routes, such as Enloe Medical Center and Chico Nut Company, which are located immediately adjacent to the City's Esplanade.

7. Special Events

7.1. Paid Event Parking

The paid parking technology rates can be modified for special events that impact downtown parking in Chico. Special event rates may help motivate drivers to park farther away or seek alternative modes of transportation. A flat special event rate can easily be integrated and implemented for both on- and off-street parking utilizing the paid parking technology. The only exception is for the POM meters, which cannot be programmed for automatic rate adjustments. Ideally, the special event rate would apply in the areas with IPS meters only if possible – the recommendation to utilize the IPS meters within the high demand downtown core locations would allow the City to charge a special event rate for events in that area.



Image 15. Time limit signage for Thursday Night Market

Any flat rate should be commensurate with the value of the existing rates for on- and off-street parking locations. The City does not currently adjust rates for parking during special events. Instead, the IPS meters have an automated calendar that programs a

message to display on the meter informing drivers that they will not be able to park in the space after 5:00 p.m. in the locations that have street closures for the Thursday Night Market.

The City also has a Saturday Farmers Market in Lot 1. Only some of the parking spaces in the lot are restricted for the event and those spaces are appropriately signed. The City should consider painting the parking stalls in the lot that are for the farmers market a different color from the rest of the stalls and signage should be color coordinated. This would more clearly communicate the parking restrictions.

To apply a special event rate, the City will need to establish criteria for when the rate would apply, the amount and the advanced notification requirements. Based upon these criteria, the City will have the option to increase special event pricing for any downtown special events, depending upon the need. It is important to keep in mind that special event rates will require increased hours of enforcement for any extended paid parking hours.

7.2. Alternative Modes of Transportation

Promoting alternative transportation options should be encouraged throughout all levels of special event planning and promotions. For example, there are many cross-promotions occurring with services such as Lyft and Uber that both promote the City event and their services to encourage other transportation sources and reduce parking demand. Municipalities across the country are coordinating directly with these resources to encourage alternative transportation. Special event planning should ideally incorporate safe and accessible location(s) for the drop-off and pick-up of passengers.

For example, Lyft recently worked with the City of Las Vegas to develop a parking solution for the Life is Beautiful Festival. The festival was located in the heart of Downtown Las Vegas,

with approximately 150,000 attendees. Lyft worked with the City to establish drop-off/pick-up zones to service the festival, as well as appropriate queuing areas. Service features like in-app geofencing, signage, and marketing channels can sometimes be used to improve event planning and management. Drivers can also be incentivized to service certain areas of a city. The City should work with popular ridesharing companies like Lyft and Uber to request trip data for impacted destinations. This will allow the City to better understand the impact of ridesharing on congestion throughout the City.

The City can also consider promoting services such as bicycle valet for all major events. Chico Velo is a non-profit that offers bike valet at numerous events in the City. It provides service during events such as the Saturday Farmers Markets, Thursday Night Markets, and Chico Heat home games. The group hopes that by offering its services, more people will choose to ride bicycles to events rather than drive cars. The City should promote this service on informational flyers, social media and the City website. Ongoing collaboration with Chico Velo can help ensure that bike valet is offered at all major events.

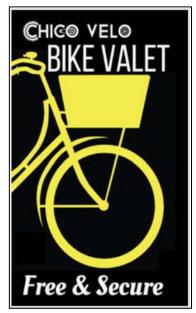


Image 16. Chico Velo Bike Valet

Near-Term Steps

- A. Perform ongoing outreach to ridesharing companies, Uber and Lyft, about the potential to implement ridesharing incentive programs and drop-off/pick-up zones for special events.
 - i. Define safe pick-up and drop-off locations and coordinate with ridesharing companies to geo-fence the locations as allowable loading areas.

Mid-Term Steps:

- B. Conduct ongoing promotion of alternative modes of transportation for special events.
- C. Collaborate with Chico Velo to provide bike valet during all major events.
- D. Define a special event rate and when/where it will apply.
- E. Program the IPS meters to automatically charge the flat special event rate when desired.
 - i. Ensure that the selected mobile payment vendor is also set up to charge the special event rates.

Long-Term Steps:

- F. Utilize any provided ridesharing data to adjust the program.
 - i. Monitor SharedStreets platform and any other future data sharing platforms to access traffic data.
- G. Conduct ongoing promotion of alternative modes of transportation for special events.
- H. Ongoing collaboration with ridesharing companies and Chico Velo.

8. Maintenance and Revenue Collections

The City currently has 5 staff that handle the maintenance and collection of parking meters and pay stations in the City. It is recommended that any paid parking technology be configured to minimize maintenance and revenue collections. Providing a mobile payment option is another added benefit to discourage the use of coin. Ideally, the City should minimize the number of pay stations with bill note acceptors (BNA), which will reduce the level of maintenance. The City should also consider how the hourly rate will influence coin usage.

8.1. Meter Collections

Coins are typically completed in the morning 4 days per week, Monday through Thursday. Coins are picked up on Friday by the armored transport service provider, Loomis. The majority of the meters are collected on a weekly basis, but some are collected bi-weekly. Collections around CSUC are less frequent in the summer because the meters around campus are utilized less. The meters in the core of downtown are typically collected the most frequently. While IPS does provide real-time data on how full the coin canisters are, the City is not currently referring to this to format the collections routes. It is possible that the City is collecting more frequently than necessary in certain areas. Canister space should proactively be monitored to determine whether collections routes can be adjusted.

The single-space meters currently have an open-can system, which means that the coin canisters are not secure. The coins can simply be dumped into a container. The City may consider switching to a closed-can system to provide enhanced security. A closed-canister (closed-can) system for meters is recommended. This means that the coin canister located inside the meters is retrieved by collection staff, inserted and emptied into a larger collection can without the monies ever being exposed. This is considered an industry best practice because it reduces opportunity for revenues to be siphoned away.

The IPS pay stations are collected using a box for box swap. This means that there is not open cash handling, and that the cash boxes are pulled from the machine and replaced with a separate cash box.

The City could consider installing electronic locks (e-locks) such as the Medeco NexGen locks for parking meters. E-locks are an electronic key system that are programmed for the daily collection routes. This adds another layer of security for the City. Typical key systems are less secure because there is no electronic record of use. Additionally, if there is any meter theft, this can result in the City needing to re-key the meters.



Image 17. Medeco Electronic Lock

The meter monies are counted by Accounting, who weigh the coin bags. The meters monies are not currently organized based on a route or tracible to the specific canisters. Instead, the coins are all dumped into one bucket. Smart meters have a back-end software system that will allow the City to compare the amount of money recorded by the meters versus the amount

of money collected and counted. Additionally, the amount counted by the City should always be verified against the amount recorded by the bank once submitted. Counted monies should be tracible back to specific pay stations, meter routes, and collectors. This may require that the City develop separate routes for the Smart IPS meters versus the POM meters. This will allow the City to compare revenue trends over time for both predictive purposes and for added security. Any abnormalities in trends should be investigated.

8.2. Meter Maintenance

Occasionally the collections crew will do basic maintenance on meters while on their collection route; However, this is situational and if the problem is not a simple fix, such as a jammed coin, they alert maintenance of the meter and its location. Level 1 maintenance includes basic preventative maintenance and responses to service calls, such as addressing jammed credit cards. Level 2 maintenance is typically managed by the parking technology vendor. The frequency of revenue collections will depend on utilization.

Maintenance of the meters and pay stations is done in the afternoons and on Fridays. Typically the meters are touched at least once per week, which is ideal. The Maintenance team if very responsive to maintenance requests. However, the Maintenance staff are only on duty until 3:00 p.m. This means that any major maintenance issues in the evenings cannot be resolved until the next day. The City can consider cross-training the enforcement staff so they may perform basic Level 1 maintenance when necessary.



Image 18. Broken IPS meter with note from driver

The POM meters that need maintenance are identified on collection routes, by enforcement, and from citizen reporting. The IPS meters have self-reporting maintenance features that alert the technicians when something is wrong with the meter. Maintenance technicians have two separate reporting programs that they have to use because of the two meter systems. The technicians prefer the POM system because it is user friendly despite being outdated. This is because the IPS Data Management System (DMS) provides very little flexibility for them to file reports. Due to the finite number of reporting options, technicians occasionally don't know how to file a report correctly with the IPS system. Some of those issues can be rectified by IPS in the backend system and the City should work with IPS to increase the reporting options available to the technicians.

The Public Works Director is currently responsible for all programming of the IPS meters through the DMS. This can be problematic for the Maintenance team, who may need to adjust the system. In the past, there have been delays as a result of the Maintenance team not being provided direct access to the DMS. Maintenance is currently keeping track of the meter inventory by memory because the back-end DMS programming isn't always completely up to date. Maintenance staff never received training from IPS, so the City should work with IPS to schedule a training session.

Near-Term Steps

- A. Consider budgeting for and purchasing e-locks and/or closed canisters for the single space meters.
- B. Maintenance staff should be trained by IPS to utilize the DMS.

Mid-Term Steps:

- C. Install e-locks and/or closed canisters if purchased.
- D. Update the protocol for paid parking collections and revenue reconciliation, including:
 - i. The smart meter technology will keep track of the deposited money. Therefore, the amount of cash and coin collected and counted should be cross-referenced with the meter management systems to ensure that all the monies are being reconciled. It is important that the paid parking collection process is securely managed.
 - ii. Ideally, monies should be collected and counted based upon the route.
 - iii. Credit card variance and verification.
- E. There are cases where the improper use of the paid parking technology may result in a minor variance. An acceptable variance threshold should be identified upon implementation and then re-evaluated 90 days after initiation.
- F. Ensure that any paid parking equipment is configured to minimize revenue collections and maintenance.

Long-Term Steps:

- G. Consider cross-training the enforcement officers for providing Level 1 meter maintenance as needed after 3:00 p.m. and on weekends.
- H. Adjust revenue collections schedule as needed based on demand patterns. Adjust revenue collections schedule as needed based on demand patterns.

9. Parking Benefit District

The City currently has an established Parking Revenue Fund (Fund 853) comprised of meter revenue, permit sales and parking lease payments. The fund requires that money be spent only on parking and downtown maintenance improvements. This includes major programs, buildings and facilities, major equipment, operating costs, and debt service. Therefore, this limits the City's ability to invest parking revenue into other mobility options.

Chico Municipal Code- 3R.68.020 Parking revenue fund created - Method of disbursement established.

- A. The payment of any obligations of the city arising out of any acquisitions, expansion, improvements or betterment relating to the facilities in such fiscal year;
- B. The payment of the costs and expenses of operating and maintaining the facilities in such fiscal year;
- C. The payment of any other costs and expenses incurred or accruing in such fiscal year in any way connected with the facilities or any lawful public parking purpose of the city or the authority. Revenues remaining after the foregoing purposes have been fully satisfied in such fiscal year shall be solely applied to and used for the foregoing purposes in the next fiscal year, in the manner provided herein

The City could examine the possibility of creating of a new Parking Benefit District (PBD) which would allow the City to using parking revenue to support the paid parking program and facilities, while also allowing for investments into alternative modes of transportation and pedestrian improvements. An oversight committee should be established to define goals and allocate funds. Predefined goals and objectives will create a level of transparency for the allocation of the funds. Below (Table 9) is a sample revenue distribution schedule for a PBD:

Table 9. Sample Revenue Distribution Schedule

Revenue Allocation	Percent
Operating Costs	35%
Parking Program Improvement	40%
Transit Alternative Programs/ Discretionary	25%

Near-Term Steps

- A. Evaluate feasibility of new PBD in Chico or adjusting the exiting fund to support the City's broader mobility and accessibility goals.
- B. Adopt necessary ordinances to support the program.
- C. Establish an authorized oversight committee.
- D. Define the revenue distribution schedules. A set of predefined allocation rates will ensure transparency for the community and will allow for a series of community and program improvements.

Mid-Term Steps:

E. Continue allocation of funds set by oversight committee goals and objectives.

Long-Term Steps:

F. Continue allocation of funds set by oversight committee goals and objectives.

10.Transportation Demand Management

Downtown Chico is the heart of its community and center of cultural activity. Easy, safe, convenient access and parking create a vibrant downtown where locals and visitors can enjoy the many shops, restaurants, services, and things to do. There is a clear link between parking and multimodal transportation options. Using paid parking to invest in Transportation Demand Management (TDM) strategies can improve downtown access in the most cost-effective way. The City recognizes that it is harder and more expensive to build in dense areas where there is already existing traffic, where measured level of service impacts may require expensive mitigations or reduced project size, and where higher density can make transit, walking, and bicycling more viable transportation choices. Additionally, during the 2006 Downtown Access Planning Charette, community members gave almost unanimous support to proposals to improve transit, bicycle facilities and create incentives for people to avoid driving.

The City's guiding documents, including the 2030 General Plan, reflect the community's commitment to meeting the challenge of creating and maintaining a sustainable community, which goes beyond offering premium parking locations in front of shops and restaurants with credit card-friendly smart meters or nearby smart lots with convenient pay stations. In order to influence parking demand in downtown, the City seeks to establish a park once and walk environment, supporting all modes of transportation in and around downtown while further enhancing the pedestrian environment. Accessible sidewalks, crosswalks, parking, shops, and restaurants makes walking a viable alternative to experience downtown. Furthermore, accessible parking spaces and public transportation are available at no charge to facilitate downtown access.

10.1. Public Transportation

Public transportation services in Chico are provided by the regional B-Line system, managed and operated by the Butte County Association of Governments (BCAG). The B-Line provides a range of services from commuter routes throughout the County to local service routes in and around the community. Park-and-ride locations, such as the Caltrans facility located at SR 99 and Highway 32, promote and support the B-Line system. The Downtown transit hub advances the City's goal of convenient bus transit service for all residents. Comprehensive transit services are critical to the success of Chico's transportation system, as they serve the needs of various segments of the population, including students, workers, shoppers, the elderly, youth, and the disabled community.

The B-Line offers both fixed-route and demand-responsive services to City residents through local, commuter, and rural bus routes. There are currently 13 local fixed-routes within Chico. In addition, CSU Chico and Butte College offer select routes to serve the specific needs of their students. B-Line Paratransit (Dial-A-Ride) is a complimentary paratransit service. Passengers with disabilities that prevent them from using the B-Line's fixed route bus system may apply to receive priority service on Dial-A-Ride. Other commercial transit services in Chico are provided by Greyhound and Amtrak which share a station near downtown. Greyhound and

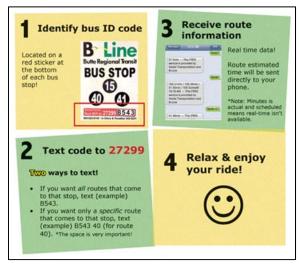


Image 19. Tracking B-Line Bus Arrival

Amtrak also provide connecting service to Sacramento and other areas, depending on the carrier and the season.

During the 2006 Downtown Access Planning Charette, there was almost unanimous public support for transit improvements. Given the limited resources at the time, the City's consultant did not recommend pursuing a shuttle despite public support for the concept. Instead, emphasis was given on enhancing B-Line frequencies where routes currently running every 30 to 60 minutes were not enough to attract most riders considering multimodal transportation. Since many routes run along Main Street and Broadway, more frequent

transit can begin to act as a shuttle, especially since downtown employees and CSUC students and faculty are eligible for free transit passes.

The City publishes readily available online information regarding B-Line transit, including tools that allow riders to track buses in real time, tools that allow riders to track bus arrival (Image 25), information for how to ride the bus, and information regarding bus schedules, fares, and route maps. Multiple destinations can be accessed from the Transportation Hub in Downtown Chico located on the corner of 2nd Street and Salem Street. Employee and other-abled B-Line benefits are described on the City website.

10.2. Bicycling

The City prides itself on being a premier bicycle-friendly city. The Chico Urban Area Bicycle Plan (Bike Plan), a comprehensive bicycle system plan originally created for the City in 1991, is updated regularly. With flat streets and a compact footprint, downtown Chico is ideal for commuting and shopping by bike, and therefore an essential part of the City's TDM opportunities.

The City is dedicated to providing a safe cycling experience for riders of all ages and skill levels. As such, the City has committed to improving bicycling facilities throughout the City and in downtown. The Access Plan and the 2030 General Plan both include recommendations to improve bicycling facilities in the City. Additionally, the City is working on an updated bike plan that will serve as the guideline for the City to improve and build a network of bikeways that will connect residents to the City and nature. Chico currently has 32 miles of shared bike paths, 33 miles of bike lanes, and 21 miles of signed bike routes with bike mode share at six percent. CSUC students regularly bike to and from campus, even with the banning of bicycles on campus.

The City of Chico's local zoning ordinance (Chapter 19, 19.70.080) requires bicycle parking for new development. For multi-family residential uses, bicycle parking must be equal to 20% of the number of off-street automobile parking spaces. For commercial or industrial development, bicycle parking must be equal to 10% of the number of off-street automobile

parking spaces. Specifications for the type of bicycle rack, locker, or other parking mechanism are not currently addressed. Shower and locker facilities are not currently available for bicyclists on a widespread basis. Those that are available are private.

Stakeholders are generally pleased with the facilities that currently exist in the City, however, the City should continue to improve safety and access to biking facilities. Secure bike parking remains a common problem. While the City has bike lockers available at City Hall for staff, storage facilities for the public are less secure and there is limited availability. The City should assess the feasibility of sharing bike lockers at City Hall with the public. Additionally, the City may consider assessing the feasibility of installing bike lockers in other downtown locations such as off-street parking facilities. While the Access Plan has suggested removing on-street bike parking, other studies have shown that bike parking turnover is often higher than vehicle parking turnover, therefore providing an increased level of access in the same amount of space. A study in New York found that, in a single hour, 200 bicycles arrived and left from a docking station while, directly across the street, only 11 vehicles turned over in three parking spaces¹. While New York demand is likely higher than Chico demand, the City should closely consider whether removing on-street bicycle parking will result in the best utilization of public space.

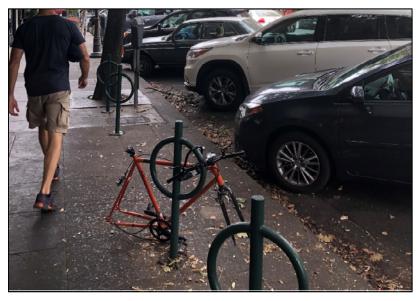


Image 20. Bike parking

The City should proactively prepare itself for dockless bike share programs in case they arrive in Chico. Dockless bikes can be difficult to manage and regulate, often limiting ADA accessibility to blocked sidewalks ramps. and Ordinances, such as those implemented in the City of Santa Monica, California, can be put into place to better manage bike sharing programs. The City of Santa Monica requires companies to educate riders about safety, make helmets more available, share data with the City and

respond to user and resident complaints. Additionally, Santa Monica has established a permit program that limits the number of bike/scooter share vendors and the number of mobility devices that may be deployed. A closely monitored dockless program is favorable compared to a traditional docked bike share program because it is more affordable to the City and more convenient to the users.

 $^{^{1}\}$ https://nyc.streetsblog.org/2017/06/26/video-proof-that-nyc-will-do-just-fine-without-all-this-parking/

While significantly more expensive, the City could instead consider partnering with a bike share company to start a docked bike share pilot program downtown. Docking stations located around downtown and next to more remote parking lots would make parking in remote lots more feasible for visitors that view the walks as too far. Additionally, the City should consider implementing electronic bikes (e-bikes) that would allow riders to move about more easily, making it more appealing on hot days. As mentioned in the Access Plan, conducting one-year pilot programs can be an extremely useful, fast, and cost-effective approach. Taking this approach allows citizens to see and try real designs, allows for quick adjustments to new designs to improve their function, and makes it possible to gather real-world data and informed feedback on new designs, rather than asking engineers and/or regular citizens to evaluate innovative designs based only on renderings, drawings, and traffic model outputs. For example, tests of features such as new docking zones can be tried, evaluated, and adjusted if need be to ensure that they work properly and achieve their intended goals.

Safety is another major concern according to Bike Plan. While the majority of community members stated they felt biking in Chico was moderately safe, their survey answers revealed an underlying belief that there is significant room for improvement. They highlighted motor vehicle speed and proximity, volume of traffic, dangerous intersection crossings and lack of bike lanes or other separated facilities as major obstacles to bike riding.

10.3. Shuttle Program

The City could consider implementing a shuttle program to improve accessibility throughout downtown. For example, The Free Ride is a free shuttle program that has been successfully implemented in several cities throughout the country. This shuttle program is free to the users because the staffing and operating costs are completely funded by advertisements. There are moving billboards, videos for passengers and even sample products that are given out during the rides. The vehicles are



Image 21. The Free Ride Shuttles

all electric and each fit up to five passengers. The benefit of utilizing smaller vehicles is that the insurance costs are significantly reduced. Additionally, a mobile application will allow users to request a ride within certain boundaries; users are prompted to select their pick up and drop of locations, and the application provides real time driver ETAs and notifications.

The Free Ride has been implemented in a number of locations including South Florida, San Diego, the Hamptons, and the Jersey Shore. In the City of San Diego, The Free Ride operates under a partnership between the City, Civic San Diego and the Downtown San Diego Partnership. In San Diego, the program is called "FRED," which stands for "Free Ride Everywhere Downtown." The initial funding of \$500,000 for the program came from downtown parking meter revenue. The City purchased a fleet of 15 vehicles for \$200,000, and the additional \$300,000 of funding went towards storage, charging stations and start-up

personnel costs. Up to \$2 million over 5 years was earmarked for the program. The shuttles operate between 7:00 a.m. and 9:00 p.m., Monday through Thursday, until Midnight on Friday and Saturday, and from 9:00 a.m. to 9:00 p.m. on Sunday. Drivers earn \$14.66 per hour. Staffing and operating costs are funded by advertisement revenue.



Image 22. San Diego FRED App

A program like FRED has the potential to be successful in Chico. The City could pursue a partnership with a free shuttle program such as FRED to improve access and mobility throughout downtown. The shuttles could be utilized for remote employee and visitor parking, and they would be a convenient service for any visitors who may have difficulty getting around the City by foot or bike. Extensive outreach will be necessary to inform visitors and employees about the shuttle service. Signage and flyers should encourage visitors to download the application. Typically, the FRED program is structured as an on-demand service, however the City could solicit the company about the potential for a fixed route program if desired which may be a necessity for lunch and dinner routes from surrounding tech campuses.

10.4. Carpooling

Carpooling is another TDM strategy to encourage commuters that have similar work schedules and routes to ride together. There are already several vendors and applications that provide carpooling services to commuters. Scoop and Waze are two of the more recognizable carpooling applications.

Commuters that carpool could be offered discounted parking permits, reduced hourly rate coupons for parking meters and dedicated carpool only parking spaces in employee parking areas. For example, Inugo², a Bluetooth parking technology provider, has parking beacons that can verify whether drivers are actually carpooling or not. These Bluetooth beacons could be installed in conjunction with any future carpool permit program.

10.5. Survey and Incentive Program

The City should consider implementing a transit incentive program similar to the "Just One Trip" program offered by King County Metro in Washington State³. King County Metro provides commuters with the opportunity to participate in a survey about what mode of transportation commuters typically use, commute times, and public transit ridership. Additionally, the program suggests that participants take a pledge to reduce their drive-alone trips by either:

² https://inugo.com/

³https://www.kingcounty.gov/depts/transportation/metro/programs-projects/transit-education-outreach/just-one-trip.aspx

- Sharing the ride in a carpool or vanpool
- Riding the bus, ferry or train
- Bicycling or walking
- Working from home

The program encourages the use of alternative modes of transportation for commuting to work by converting "Just One Trip" per week from driving alone to any of the above listed options. By taking the pledge, participants are awarded with a \$25 Orca card, which provides transit fare to the region's public transit options. Additionally, a \$100 Guaranteed Ride Home credit is provided towards one taxi ride for qualifying emergency rides home from work. Some commuters can be reluctant to take alternative modes of transportation out of fear that they will need to leave work in a hurry for an emergency situation. A Guaranteed Ride Home can help reduce anxiety for commuters that take a trip without their personal vehicle by providing an alternative.

This program not only promotes the benefits alternative modes of transportation, it also gives King County Metro a significant amount of data about commute trends. Each Orca card has a unique serial number which could allow King County Metro to track utilization and program success rates, reductions in single-occupancy vehicle (SOV) trips, and estimated Greenhouse Gas (GHG) emission reductions. Additionally, offering free transit passes to commuters who don't typically take public transit could be an effective way to introduce new riders to the public transit options in the region.

The City of Chico could consider implementing a similar incentive program to promote alternatives, whether it's the bus system, ridesharing, dockless bikes, or other regional options. This program could be funded directly or in part through paid parking revenue.

Mid-Term Steps:

- A. Make bike lockers at City Hall usable for the public.
- B. Add bike locker facilities at off-street parking lots.

Long-Term Steps:

- C. Use a designated portion of paid parking revenue to invest in TDM strategies that will ensure cost-effective downtown access by improving transit, bicycle facilities, and create incentives for people to avoid driving.
 - Manage B-Line frequencies to attract most riders considering public transit.
 More frequent transit can begin to act as a shuttle, especially since downtown employees and CSUC students and faculty are eligible for free transit passes.
 - ii. Consider opening up City Hall bike lockers to the public.
 - iii. Consider constructing bike locker facilities at off-street parking lots.
 - iv. Assess whether removing bike parking from on-street facilities is the best option for the City.
 - v. Update municipal ordinances to prepare the City for shared bike programs.
 - vi. Consider starting a bike share pilot program in downtown, ideally with docked e-bikes.
 - vii. Consider updating municipal code to offer mandatory bike valet for events over a certain size.
 - viii. Consider a shuttle program through a company such as The Free Ride.
 - ix. Consider implementing an online survey/incentive program to encourage alternative mode use.
- D. Assess the level of public transit ridership and wait-times and adjust incentives to meet TDM goals.
- E. Continue to update the Bike Plan to assess project prioritization based on bicyclists' inputs/needs. This will include expanding from 'bike facilities' to modern/complete bikeway networks.
 - i. If a bike share pilot is successful, proceed with the full implementation of a bike share program.

11. Shared Parking

The City could pursue shared parking agreements with businesses and land owners that may have parking availability. It is important to maximize existing parking resources in the area around downtown and consider all potential solutions. The Access Plan concluded that there were almost as many private parking spaces in the City as public spaces which means the City has large potential to increase available public parking supply without building more.

The City should consider offering a monetized shared parking option that would be mutually beneficial to the private lot owners and the City, to allow for a more comprehensive approach to parking management in Chico. A portion of the revenue from shared parking should be set aside to support the enforcement, maintenance and upkeep of shared parking locations. Additionally, funds could be used to guarantee certain parking lot enhancements as an additional value add from the shared parking program. The City would install the necessary meters or pay stations, help establish the appropriate parking rates, designate any necessary time limits, and provide enforcement and basic maintenance. The shared parking agreement would establish any potential revenue splits.

Any shared parking location available to the public should be clearly communicated using the City's public parking brand and signage. Signage can be swapped or digital signage can include updated messaging during private parking versus public parking hours.

Remote shared parking locations could also be utilized for employee parking. For example, there may be adequate space availability at the Enloe Medical Center or at the Chico Nut Company to store vehicles during the day. Remote parking locations can be supported by a bike share and/or shuttle program to ensure accessibility.

To prepare for shared parking opportunities, the City should amend the municipal code to ensure feasibility. Additionally, a framework should be established for a negotiation process for off-street shared/public parking agreements in areas with high parking demand. This process would occur between owners of privately-operated off-street parking facilities, property owners and applicants for new developments. Some considerations to have when pursuing shared parking agreements with business owners are:

- Term and extension: evaluate return on investment and ensure terms that allow for potential redevelopment.
- Use of Facilities: establish available hours, number of spaces, time limitations and ensure base user will retain use at the end of the sharing period.
- Maintenance: evaluate the added cost of maintenance and operation.
- Operations: consider revenue collection operations (when applicable) and needed signage.
- Utilities and Taxes: determine the responsible parties and any cost sharing agreements.
- Signage: consistency with City signage can improve the public experience.
- Enforcement/Security: determine who handles enforcement and towing.

- Insurance and Indemnification: consider litigation with any cost sharing.
- Termination

Mid-Term Steps:

- A. Establish a framework for a negotiation process for off-street shared/public parking agreements in areas with high parking demand.
- B. Explore the possibility of any shared parking agreements with any potential locations.
 - i. Consider using remote shared parking locations for employee parking.
 - ii. Ensure that existing paid parking vendor contract allows for the ordering of additional infrastructure and order the additional paid parking technology needed. Work with property owners to determine the appropriate hourly rates and time limits for each location. Ideally, the convenient parking outside of businesses should be time limited to ensure turnover and accessibility to the businesses.
 - iii. Determine the appropriate revenue split rates to sustain the program.
- C. Incorporate the City's parking brand and wayfinding program into the shared parking agreement contract. Each location should also be required to participate in the wayfinding program.
- D. Allocate the necessary parking ambassador resources to manage the participating locations. This may require additional staff.
- E. Install paid parking technology at participating shared parking locations. The actual amount of equipment depends on the unique geography and configuration of each location, and it is typically one pay station for every 30 parking spaces. Like on-street, the pay stations should be in the pay and display configuration for ease of enforcement until the implementation of LPR.
 - i. Install the appropriate signage to indicate paid parking and time limits.

Long-Term Steps:

F. Continue to evaluate for new opportunities between the City and private business/land owners.

12. Residential Preferential Parking

The existing Preferential Parking Permit areas in Chico were defined by the City Council. The City currently has three Preferential Parking Areas (PPAs), Esplanade-East Side Drive, Mansion Park Area and Brice Avenue Area. All three locations are located on the North side of CSUC. It is not recommended that adjustments be made to any existing PPAs unless otherwise requested by the residents. However, the City can develop updated guidelines for residents to establish new PPAs in the future if they become necessary as a result of increasing parking demand or the spillover impacts of new policies and programs. Currently, PPAs can be designated based upon the following municipal code section:

Chico Municipal Code-10.30.020 Designation of preferential parking areas - Required findings and considerations

A. The city council may, by resolution, designate an area of the city as a preferential parking area if the council finds that such area is zoned for and predominantly devoted to residential or residential/professional office uses; that the area contains streets which are congested with vehicles parked by persons who do not reside or who are not employed in the area; and that limiting the parking of vehicles along the streets in the area to those persons who do reside or who are employed in the area is necessary in order to enhance the quality of life of such persons.

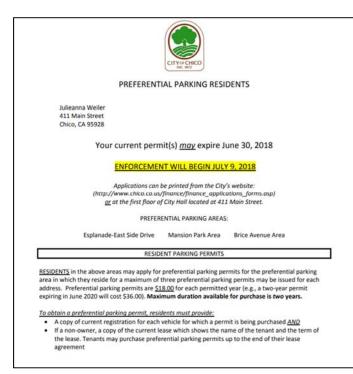


Image 23. Preferential Permit Flyer

Currently the permits cost \$12.50 per year, and a maximum of 3 years can be granted at a time. A maximum of 3 permits may be issued for each address in the PPA. Residents are required to provide a copy of the current vehicle registration and the current lease agreement if a non-property owner. Applications and payment must be provided to the City's Finance Office. Temporary guest permits are also available. Up to 2 guest permits can be issued per address. Guest permits also cost \$12.50 per year. A copy of the current lease or proof of residency is required for guest permits. Home owners are able to request with the City that their tenants cannot obtain guest permits.

The City should consider limiting the permit purchases to a maximum of 1

year at a time. This will allow the City to adjust the program each year if necessary, without having to wait multiple years to phase out permit types. Additionally, it may help reduce potential cases of fraud. For example, if a student resides within a PPA during a 1-year lease,

but purchases a 3-year permit, this vehicle could continue to be stored within the PPA after the student is no longer a resident.

The current 3 permit maximum per address should also be evaluated. It is unclear whether there is enough on-street availability for this number of permits to be issued. The City could consider reducing this permit cap to 2 per address if on-street occupancy is impacted. Or instead, an escalated pricing structure could also be considered. For example, the permit rate could increase based upon the number of permits purchased per address (Table 10). This type of rate structure could help discourage residents from storing additional vehicles on-street.

Table 10. Potential Escalating PPA Rate Structure

Permit #1	\$12.50
Permit #2	\$25.00
Permit #3	\$100.00

The City is also increasing the number of residential units above ground floor retail space in downtown. These residents should also have the opportunity to participate in a downtown residential permit parking program. The downtown residential permits could be valid in certain parking lots. Ideally, they should not be valid on-street where there is metered parking due to the expense and purpose of the meters. Permit applicants should be required to provide proof of residency to be eligible for a downtown resident permit.

It is also recommended that the City only offer short-term guest permits. Guest permits are typically meant for visiting friends and family, contractors, nannies, etc. Ideally, the City should require that residents manage their guest permits through an online portal using the license plate number of their guest. Guest permits should be valid for a short period of time only, such as a day pass or a weekly pass.

Finally, the City could update the ordinances to allow the residential neighborhoods to be permit eligible based upon a petitioning process. This means the program would be available and enacted only if desired by the residents. This will allow the residents to determine the impacts in their neighborhood and allow them the opportunity to consider an PPA program. For example, the City could require that 60% of residents within an area must sign the petition to qualify for consideration.

Implementation Guide

Near-Term Steps

- A. Consider updating the ordinances to make the residential neighborhoods and downtown residences permit eligible through a petitioning process.
 - i. A threshold should be set that requires a certain percentage of each neighborhood to sign the petition to implement a residential permit parking restriction.

Mid-Term Steps:

- B. Consider adopting an escalating rate schedule for permits.
- C. Consider limiting permit purchases to 1 year maximum.
- D. Consider adjusting the guest permit system for more accountability and short-term stays.
- E. Utilize the City's selected permit management vendor for the PPA program. An online web portal should request that users create an account and upload documents for proof of residency. This software solution should be included within the permit and citation management RFP solicitation.
 - i. Residents should also have the ability to sign up in person at a designated location in the City. Residents should be required to have the required documents with them when applying in person. City staff or an outsourced vendor should verify and enter the information into the software system. This will allow the information to be fully integrated with the enforcement handhelds for validation.
 - ii. Uploaded proof of residency documentation should be reviewed and verified by a designated administrator. Typically, acceptable proof of residency includes a utility bill, bank statement, or credit card bill from the last 30 days.
 - iii. This web portal should also be used for employee permit applications.

Long-Term Steps:

- F. Monitor program effectiveness and utilization to determine whether the rates or permit caps should be adjusted.
- G. Require that participants renew their permits on an annual basis. This will ensure that residency status is up to date. It is recommended that the City deny renewal to any residents with outstanding parking tickets.
 - i. Renewal notices should be sent by mail at least 30 days in advance of the permit expiration date.

13. Parking Garage

The City's parking garage, Lot 3, has a total of 216 spaces available for public parking. The garage has 3 levels with 2-hour time limits on the lower 2 levels and 10-hour limits on the top level. A number of the spaces in the garage are reserved for permit holders, including 50 spaces specifically for Hotel Diamond. 30 of the hotel spaces are exclusively reserved, and 20 of them can be shared for public parking from 6:00 p.m. to midnight.

It is recommended that the City replace the existing single-space POM meters within the garage with either pay stations or a Parking Access Revenue Control System (PARCS). The single-space meters, despite some being in a 10-hour zone, only accept coins. This is a significant amount of coins required to pay for long-term parking. This means that the City must frequently collect these meters. It is also likely that the City is experiencing revenue loss as a result of drivers not carrying enough coins to pay for the meters, combined with the difficulty of enforcing the garage. A pay station approach would be significantly easier to maintain and collect. However, while pay stations are more affordable option, PARCS is ultimately recommended for this garage.

Rather than installing pay stations, PARCS gate arms will create controlled ingress/egress. allowing the City to better manage facility access. This also automates the enforcement of time limits and/or paid parking by requiring drivers to pay at a machine before they exit. Currently, the enforcement officers must spend around 45-minutes in the garage enforcement; the enforcement officers have to check for permits, meters, and the reserved parking. PARCS are typically most effective in garages because of the controlled access points; In surface lots, there is no guarantee that drivers will not avoid the gates by driving over the curb. While PARCS do cost more, the added level of security and the ability to

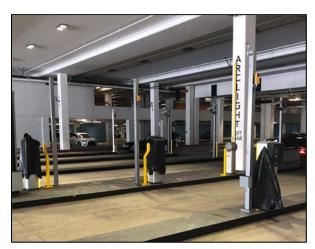


Image 24. SKIDATA PARCS gated entrance with LPR at UTC Garage in San Diego

allocate enforcement resources to other locations is ideal. Additionally, a PARCS will ensure that drivers pay for the amount of time used. This is particularly effective when combined with LPR technology.

LPR could be mounted at the garage ingress/egress points to record license plate numbers. This can expedite ingress and egress for patrons that have already paid for parking, therefore lifting the gate automatically.

In conjunction with the implementation of PARCS, the City should consider removing all reserved parking stalls. The City estimated that \$125,000 in paid parking revenue is being lost based on the Hotel Diamond agreement. However, the City also estimated that some or all of this cost would be offset by additional Transient Occupancy Tax (TOT) and sales tax revenue. It is unknown whether the Hotel Diamond would see a reduction in reservations

without the dedicated parking stalls. Additionally, it is a challenging precedent to uphold, especially if parking rates are increased over time. The City should consider this agreement is still worth maintaining. At a minimum, it is recommended that any reserved spaces be removed. Instead, the City could provide a validation option to the Hotel Diamond. Most PARCS and mobile payment vendors offer robust validation program options.

Many of the stakeholders also indicated a need for cleaning and painting of Lot 3. The garage has not been well maintained, and the wear and tear from over time has taken a toll on the appearance of the garage. While painting a garage can be expensive, a fresh coat of white paint throughout the facility would significantly improve the brightness and cleanliness of the garage.

The City should also consider restriping the parking stalls. The existing stalls are very narrow, and cars are often parked over the lines as a result. While it is estimated that restriping would reduce the overall space count by around 10 spaces, this will improve the overall parking experience within the garage.

Implementation Guide

Near-Term Steps

- A. The City should solicit quotes from contractors to clean and repaint the garage.
 - i. Light colors create a brighter space and a more welcoming environment which improves people's sense of safety within the garage.
 - ii. The garage should be restriped to widen the parking stalls.
- B. Replace single-space meters with pay stations
 - Removed single-space meters can be used for spare parts and/or installed in other on-street locations to expand on-street paid parking locations.

Mid-Term Steps:

C. The agreement with Hotel Diamond should be revisited to determine what changes need to be made that would be beneficial for the hotel and the City.

Long-Term Steps:

- D. Ongoing maintenance and upkeep of the garage.
- E. Consider installing a PARCS

14. Outdoor Cafés



Image 25. Chico Outdoor Cafe

Chapter 14 of the Chico Municipal Code permits outdoor cafés in the public right-ofway. The purpose of the policy is to spur activity in downtown by allowing outdoor dining along the sidewalks. The City currently has 20 active sidewalk café permits. Each permit is allowed to convert up to two parking spaces, adjacent to the business, into permanent sidewalk and dining spaces. A permit is \$653.00 annually. \$653.00 most likely doesn't cover the amount of revenue that is lost from conversion of a paid parking space. The intent was not to create revenue from permits but increase the downtown restaurant environment and increase pedestrian activity in the City. However, the City could re-examine the permit rate to make it more in line with the lost revenue from the parking space and should adjust the permit fees as parking rates increase or decrease. There are also two types of sidewalk cafes, one that is on the existing sidewalk within four feet of the building

frontage and the other that converts parking to sidewalk.

Ideally, in the cases of permanent improvements, this should be recorded on the property title. While the existing policy for removal requires the permit holder to pay for the removal, this is unlikely to occur. Tying the outdoor café area to the property will help protect the City in the case that the property owner stops paying. The City should further evaluate the feasibility of this recommendation and proceed with ordinance updates as required.

Some stakeholders were concerned about how effectively the program is being regulated and managed. Some permits have been given three spots instead of two, others have been able to convert more than two spaces because they have multiple business license operating out of one building. To avoid further inconsistencies, the City should consider updating the municipal code to further clarify the program policies and design guidelines.

For reference, the City of Mountain View offers a similar program for sidewalk cafes. To obtain a sidewalk café license, applicants must submit the following per **Section 36.42.15 of the Mountain View municipal code:**

- 1. A completed application;
- 2. A completed site plan showing the location of:

- a) Planters or wrought iron fencing, chairs, tables, umbrellas, signs and any other furnishings to be included in the café operation;
- b) The adjoining restaurant and proposed circulation to and from the outdoor café area, as well as pedestrian circulation through the flexible zone;
- c) A proposed sidewalk café area and the relationship between the café and adjacent businesses; and
- d) The location of any adjacent city planters, bus shelters, trash containers and kiosks:
- 3. Specifications for the design of wrought iron fencing, planters, tables and chairs, umbrellas and signs;
- 4. Maintenance and operations plans, including hours of operation;
- 5. A city hold-harmless and waiver executed by the applicant;
- 6. The applicant's city business license number;
- 7. The number of the applicant's resale license issued by the State Board of Equalization;
- 8. A statement signed by the applicant which provides that he/she will comply with all laws while conducting business in the city and will collect and remit sales tax on all sales made in the city;
- 9. The number of the applicant's permit to operate a food establishment obtained from the county health officer;
- 10. Insurance documents as required by this section; and
- 11.A copy of a written contract with a professional landscape maintenance company, contractor or gardener to maintain the landscaping within the sidewalk café area throughout the term of the license.

Mountain View established a limit of up to 32 spaces that may be converted to sidewalk cafes within the flexible zone along the entire length of Castro Street between Evelyn Avenue and El Camino Real. This means that multiple sidewalk cafes may be placed side by side. The City of Chico could consider establishing a similar approach, allowing a maximum number of outdoor café areas per block of within the entire downtown. It is recommended that within the downtown core, no more than 25% of on-street parallel parking stalls be converted to outdoor cafés. Over time, the City can adjust this cap based upon parking occupancy rates and parking supply. For example, if the City secures a shared parking opportunity in a remote location, additional on-street spaces could be converted to outdoor cafes without having a significant impact on the parking supply.

One alternative that was proposed by stakeholders was to widen the sidewalks, which was also recommendation of the Access Plan. If Main and Broadway Streets were narrowed, the widening of the sidewalk would be sufficient to allow for the larger sidewalk cafes without requiring additional widening on a case by case basis. This could streamline the process for property owners by allowing the cafés on the existing sidewalk space. The City should consider this option because it could calm traffic along the busiest streets in downtown and create an improved pedestrian environment.

The City of Seattle has two separate programs for outdoor dining: 1) a temporary program for a sidewalk café that will allow a food service establishment to set up outdoor dining on the sidewalk immediately adjacent to the business, and 2) a Parklet/Streatery Permit program

which allows for tables and chairs within a converted parking space. In areas in Chico with widened sidewalks, the City should promote a program similar to option 1 in Seattle. The Seattle Department of Transportation (SDOT) has extensive design guidelines for these sidewalk cafes, which addresses ADA compliance, pedestrian access, fencing, setbacks, and more.

The City should also consider streamlining the application and review process. Currently, the applications are reviewed by the Architectural Review Historic Preservation Board (ARHPB), which is a lengthy and costly process. Some stakeholders suggested shifting this program to an administrative review process, or that DCBA could be involved instead of ARHPB. Currently, the Public Works Director defines whether the outdoor café is allowed, and then there is a 15-day grace period where the public can appeal to the City Council. However, there is limited public engagement in this process and an overall lack of transparency. Ideally, a public meeting should be held at some point during the review process as well.

Implementation Guide

Near-Term Steps

- A. Consider reassessing the permit fee to better reflect the parking revenue lost from the conversion of on-street parking spaces.
- B. Evaluate the feasibility of attaching the outdoor café to the property titles.
- C. Comprehensive design guidelines should be established so that sidewalk cafes are consistent with the rest of downtown aesthetic.
- D. Consider streamlining the review process and adding a public meeting for improved transparency and engagement.
 - i. Applications could instead be reviewed by the DCBA.
- E. Consider establishing a cap on the number of outdoor cafes allowed per block or within the entire downtown core.
 - i. Up to 25% of parallel parking stalls may be an effective starting point.

Long-Term Steps:

- F. Proceed with the widening of sidewalks wherever applicable, based upon the 2006 Downtown Access Plan.
 - a. In locations with wider sidewalks, outdoor dining on the sidewalks should be encouraged, rather than within the parking spaces.
- G. Continue to assess parking occupancy and shared parking opportunities to determine whether additional outdoor cafes can be allowed.

15. Wayfinding and Parking Guidance

The signage and parking brand should be consistent throughout Chico, including sign format, symbols and fonts. The City currently has some public parking signs mounted at the parking lots throughout downtown that are effective (Image 26). Similar branding and design should be carried throughout all parking and wayfinding signage. Adopting a unified parking brand provides an improvement to the overall customer experience. The City should also be sure to expand the public branding to future shared parking parking agreement locations. For shared parking agreements, the parking brand/signage should be required in conjunction with the terms and conditions of the agreement. Signage is also important for conveying messages to drivers. Time limits, pricing and requirements such as back in parking should be clearly communicated to the drivers as they approach the parking spaces.



Image 26. Chico Public Parking Sign

In addition to static wayfinding signage, the City can deliver parking information through multiple outlets

including vehicle messaging systems, digital signage, and various websites, including the, Go! Downtown Chico site and other hotel, travel and parking sources. Wayfinding is an integral part of any parking operation. Drivers need to be informed of facility locations, space availability, time restrictions, and parking rates. Navigation from place to place within a parking facility is often overlooked and undervalued. Knowing where one is in a facility, where there are available spaces and knowing how to navigate to those spaces is one of the most fundamental aspects of a successful parking program. The addition of wayfinding signage may significantly improve the ability of a patron to enter, leave and return to a facility.

Vehicle counting systems coupled with automated wayfinding systems are helping to revolutionize how the public utilizes parking resources. Integrating these systems with everyday phone and mapping applications has provided drivers with the ability to plan their parking experiences before leaving their homes, enabling them to make more informed decisions about how to get to their destinations and evaluate alternative modes of transit. Dynamic signage allows the City to redirect patrons toward alternative, underutilized parking locations. The City should consider installing occupancy count technology in the surface lots and garages located throughout downtown.

Space indicators provide in-depth data with the ability to show parking occupancy by level and by row within each level. This type of system can mitigate congestion at the entrance of the garage and also throughout each level and row. However, instead of installing a sensor per space, a more cost effective approach would be to include a sensor at the entrances/exits of each location or at each level of the garage for a level count.

This information can be provided by technology such as in-ground or above ground loops, or by camera-based sensors. Ultimately, the simplest and most cost-efficient method to provide real-time occupancy is to show one aggregate count for available spaces throughout the entire garage. This communicates the most useful information to drivers at the lowest price. The City should consider starting with facility-wide occupancy counts to begin with, and later expand to level or row-based counts in the future if there is significant congestion within the garage. The exception to this would be for nesting any permit parking or reserved areas, as to not inflate the public parking availability on signage.

Automated Parking Guidance System (PGS) signs can promote parking availability and mitigate congestion in the vicinity of parking facilities. The PGS/wayfinding signage can indicate parking lot status (open/closed), space availability (Full/Available or the number of spaces available), event parking details, alternative parking areas, and targeted messaging. This methodology allows drivers to prepare their direction of travel upon approach, thereby reducing traffic flow impact, discouraging backups, and addressing maximum capacity concerns.



Image 27. San Jose Parking Guidance Signage

A useful example of clear directional wayfinding that has been successfully implemented is in the City of San Jose, CA, displayed in Image 36. The City's integrated approach highlights where parking is located and the number of available parking spaces at each location. In addition, positioning of the signage is equally important. Motorists exiting the major interstate highway are immediately met with clear wayfinding signage, signaling the locations of available parking opportunities prior to entering the downtown district.

Once the real-time occupancy information is collected, transmitting it to digital wayfinding signage located throughout the garage, the surrounding streets and/or a website/application is relatively simple. Most vendors that provide the counting hardware described above will be able to provide additional digital signage and an API that will allow the data to be used in websites and applications. In addition to basic signage, supplementary signage can typically be

purchased. The pricing on this signage depends on the sign and the application for it, hence the significant price range.

A critical component of any technology installation, especially a PGS solution, is maintenance and upkeep. If a PGS is installed, it is recommended that a responsible party (i.e., subcontractor) be designated and held accountable for system upkeep. If this support is to be a subcontracted service, performance standards should be defined and incorporated into the vendor service agreement with performance penalties for system support failures.

If the City prefers, a basic integrated independent mobile application (provided by the PGS system provider) can be developed. The overall cost of the mobile application development does vary depending on the type of information to be displayed, any specific branding or graphics requirements, and additional features such as find my car, directions, traffic information, parking reservations, or 3rd party integrations. If the City was to invest in an interactive City-developed website or application, the cost could be significant based upon the overall web design and features. However, there are several existing, free parking availability and guidance applications, such as Inrix (formerly ParkMe) and Parkopedia, that leverage available public parking information using an interactive parking application.

A growing number of parking vendors are delving into the mobile application space, many utilizing web applications that can feed from open source data platforms. Real-time data can be integrated with several existing parking applications. To stay competitive in today's market, most parking technology vendors recognize that an open platform is necessary.

Parking and transportation data can be directed to popular mapping applications such as Google Maps and Waze. Many municipalities understand that sharing data with any platform will allow the information to reach a broader audience, thus improving the overall operation

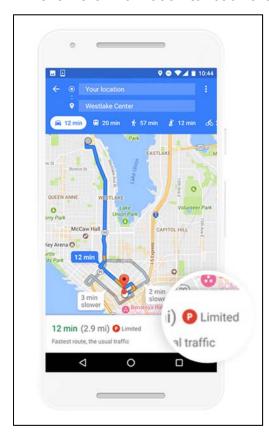


Image 28. Google Maps Parking Information

and user experience. Because applications like Google Maps and Waze have such a large user base, it may not be valuable for the City to compete by introducing a standalone Chico mobile application. Some municipalities aim to create their own mobility applications; however, this can be a significant undertaking and often requires a costly software development process that must be maintained and supported on an ongoing basis.

Implementing this solution on-street can challenging. A significant number of sensors and/or cameras would be required to manage guidance on a space by space basis, especially without parking meters. In the future if the City does implement paid parking, the City could attempt to predict occupancy based on meter payment data. However, not all drivers will pay for the meter - a portion of the drivers may not comply, and there are often a significant number of ADA placard holders that can skew the occupancy and payment data. This is why some parking technology companies attempt to use a predictive algorithm to estimate which areas are likely to have spaces available. Regardless of the approach, there are different issues with accuracy and users are guided based upon the probability of available parking and should not be directed to a specific parking space.

Implementation Guide

Short-Term Steps:

- A. Expand parking signage branding to all parking locations in Chico for consistency.
 - i. Could also be used as City parking brand which should be on all shared parking facilities and educational materials.
- B. Evaluate PGS and occupancy counting vendor technology options.
- C. Consider piloting occupancy counting technology in one or two of the parking lots or the garage.
 - i. Facility-wide space counts are recommended.

Mid-Term Steps:

- D. Upon completion of a successful pilot, the City should consider implementing occupancy counting and PGS technology at all off-street parking locations.
 - i. Loop systems and optical sensors can provide real-time occupancy counts. This is the simplest and most cost-effective method of aggregating the number of available spaces throughout a lot. The loop system would be installed at the ingress and egress points of the lots, and software algorithm uses a simple formula based on the total inventory of the lot to determine how many spaces are available at any time.
 - ii. Occupancy data can be displayed via the internet for real time parking availability information.
 - iii. The number of available spaces should be displayed on digital messaging monument signage.

Long-Term Steps:

E. Continue to integrate the City's occupancy data with publicly available sources such as Google Maps and Waze.

16. Education and Outreach

To successfully implement the recommendations throughout the DAAP such as parking zones, parking rate adjustments, and employee permits, the City should launch education and outreach programs to inform the public about upcoming program changes. The City should utilize all available community resources to help push information into the community. The DCBA, surrounding Neighborhood Associations, and the Parking/Access Resource Committee (P/ARC) can assist by coordinating stakeholder outreach and distributing parking information to business owners, employees, and residents.

The P/ARC is a volunteer citizens group formed in June 2014 to work with and assist city staff to implement existing recommendations for improving downtown parking and access. As of Summer 2015, the City is working with the P/ARC on a number of planned initiatives as prescribed by the Access Plan. The P/ARC offers a Go! Downtown Chico website with information about downtown driving, parking, walking, biking, and public transit in downtown Chico.

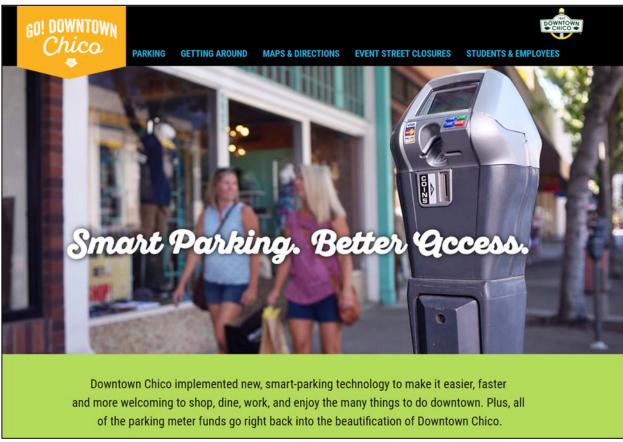


Figure 9. Go! Downtown Chico Parking Webpage

The parking page on the website includes a wealth of information about the City's smart parking meters, parking facilities, permits, and parking violations. Additionally, the website has a frequently asked question page that can be used to inform visitors and residents about why the City has made changes to the parking program. This website is an effective resource

for the City to broadcast important information about the parking program. The website also incorporates branding in a similar style to the existing parking lot signage. This style of font and branding should ideally be carried over into all City outreach materials for consistency. In the future, the City should consider working with the P/ARC to include additional details about parking meter rate adjustments, mobile payment information, and any future



Image 29. Park Smart Branding

occupancy data. If the City invests in any occupancy counting technology, real-time occupancy data can be displayed on this website for trip planning purposes. For example, the City of San Jose has an interactive parking map on their website along with real-time parking availability data (Image 30).

age_Name	Garage_Status	Available_Visitor_Spaces	Total_Visitor_Spaces	
rth Street Garage	Open	84	150	
Hall Garage	Open	103	302	
d Street Garage	Open	107	134	
ket San Pedro Square Garage	Open	305	445	
vention Center Garage	Open	443	510	
ond San Carlos Garage	Open	120	220	

Image 30. San Jose Parking Data

Additionally, due to California State University at Chico's (CSUC) close proximity to downtown, it will be important for the City to provide regular information to students. The Go! Downtown Chico website does have a page for students and employees, however the information is not tailored to either group. Each year when new students come to CSUC and Chico for the first time, the City should maintain active lines of communication with CSUC and include students in any outreach campaigns when changes to the parking program in the City will have an impact on student parking habits. It will be important to proactively promote information to students on a frequent basis to ensure that new students are fully informed of parking regulations and policies. Ideally, the City should create a pamphlet that can be distributed by CSUC to all incoming students. This would also give the City an opportunity to promote any student discount or incentive programs if desired.

Off-Campus Parking The City of Chico offers multiple parking locations throughout downtown. City of Chico Downtown Parking Lot Locations (Metered parking: cost estimated at \$.50 per hour. Cost may vary depending upon the type and location of a metered space) <u>City of Chico Parking Fees and Rates</u> (For parking cost information, please contact the City of Chico Finance Department at 530-879-7300)

Image 31. CSUC Off-Campus Parking Information

Currently, the CSUC website does not link students to the P/ARC's Go! Downtown Chico website for parking information. The off-campus parking information provided by CSUC is minimal. The website links students to the City's official website homepage, an outdated parking map, and to the 2008 Parking Fees and Rates fee schedule document (Image 31). These

documents are challenging to navigate and understand. Ideally, the Go! Downtown Chico website information should be incorporated. The City should work with CSUC on an ongoing basis to ensure that the parking information on their website is up to date.

Beyond using informational websites, there are a number of outreach strategies the City can use. Successful education and outreach campaigns in other municipalities have included social media pages, online video instructions, flyers, press releases, and field parking ambassadors to assist with education and demonstrations. A useful example is the City of Sacramento's online pricing sheet that explains its tiered pricing program using easy to

understand graphics (Image 32). This sheet includes instructions on how to understand signage. how to pay for parking, including mobile payment information, and how the pricing structure works for different tiered zones. The sheet is also branded with the "SacPark" brand that is included on all parking outreach materials and signage. The City of Sacramento even has an instructional video posted on its website to demonstrate how to use its smart meters.

When communicating to the residents and the public about the Image 32. SacPark Parking Information parking program, it will be



important for the City to explain the program purpose, goals, and benefits of any changes. The City should define and communicate its overall parking ethos.

The Seattle Department of Transportation (SDOT) has an effective example⁴ on their website about the importance of managing on-street parking:

> "Parking is a key piece of the transportation puzzle. As a limited resource that's often in high demand, SDOT manages on-street parking to: balance

⁴ https://www.seattle.gov/transportation/permits-and-services/permits/parking-permits

competing needs (transit, customers, residents, shared vehicles), move people and goods efficiently, support business district vitality, and create livable neighborhoods"

"The Seattle Department of Transportation (SDOT) manages street parking to support a vibrant city with connected people, places, and products. Curb space used for on-street parking (as well as transit, deliveries, and many other things) is a limited resource in high demand. So, we carefully balance competing needs in order to move people and goods efficiently, support business district vitality, and create livable neighborhoods. That's why we regulate curb space, install and maintain paid parking, loading, and short-term access in business districts as well as restricted parking zones in residential areas."



Image 33. Seattle DOT: Can I Park Here?" Brochure Excerpt

SDOT is also effective in using positive wording to communicate parking regulations. Seattle's "Can I Park Here?" brochure shifts the focus to what is allowed instead of what is prohibited (Image 33). It concisely identifies signage information, how to avoid parking tickets, and how to "Park Like a Pro." Additionally, it is a one-stop shop for parking information and resources with regard to paying parking tickets, digital tools, and contacts.

Seattle has also implemented the "Play Like a Parking Pro" program. Using Monopoly-style card signage, along with a series of funny informational videos, the City communicates new parking program changes and regulations. This campaign is meant to educate drivers about the parking system, so they can park smart, understand the rules, and use tools like mobile payment and online maps to improve their experience. By taking a fun approach to an educational campaign, the City improves the overall perception of parking while providing useful information. The City uses playful flags along with Monopoly signage at its meters (Images 34 and 35).



Image 35. Play like a Parking Pro Flyer



Image 34. Seattle Parking Flag

When the Portland Bureau of Transportation implemented their mobile payment application, called "Parking Kitty", a successful education and outreach campaign included the collaboration with iAmMoshow, the "Cat Rapper". The City released a humorous music video with the Cat Rapper

promoting the mobile payment application. The YouTube video has over 20,000 views and it was broadcast in the news as well. The parking zone map uses Parking Kitty logos, and the City even sells Parking Kitty branded T-shirts. The City of Chico could consider taking a creative approach to promoting parking information to make the parking experience fun and positive.



Image 36. Parking Kitty Music Video



Image <u>36</u>37. Parking Kitty Zone Map

Implementation Guide

Near-Term Steps

- A. The City should include the established parking brand on all outreach materials as well as any signage, parking meters, and equipment to maintain program cohesiveness.
- B. Flyers should be mailed out to residents, business owners, and employees with information about any upcoming parking program changes. Additionally, all information should be available on the City website and any business community webpages, including DCBA and P/ARC websites. For example, if the City implements parking rate changes, information should include what the rate increase is going to be, the date that the rate is scheduled to change and the intended purpose of the rate change. Any information about residential or employee permits should also be incorporated into the City's education and outreach campaign. Flyers should incorporate the City's parking brand, which will help to provide residents and employees with a familiar marker when visiting downtown.
 - i. The program purpose should focus on program benefits and improving the visitor experience in Chico through effective parking management. Parking should be simple, easy to find, and easy to purchase.
 - ii. The City should consider using positive language to communicate parking regulations.
- C. The City should host forums for public feedback and comments in preparation for the implementation of any program changes. This will allow the City to incorporate public feedback into any implementation actions.
- D. Reach out to CSUC to inform campus communities on parking program changes.
 - i. Consider developing informational pamphlets to be distributed to all incoming students.
 - ii. The City should proactively work with CSUC to ensure that the CSUC website is up to date with Chico parking information.

Long-Term Steps:

- E. Continue to use DCBA, PARC and Neighborhood Associations to provide information to stakeholders.
- F. Continue to collaborate with CSUC on parking and transportation solutions for accessing Downtown Chico.

17. Conclusion

Using the strategies and recommendations included throughout this DAAP, the City of Chico can introduce parking program efficiencies that will improve the operation and overall downtown parking and mobility experience. The recommendations were developed based upon recent site visits, stakeholder feedback, past data analysis, and industry best practices. The feasibility and prioritization of the strategies will ultimately be dependent on the City's ongoing review, public feedback, and estimated costs.

17.1. Near-Term Implementation Packages

Based upon staff and stakeholder priorities, initial recommendations are organized into three primary "implementation packages" for the near-term, along with a number of ongoing considerations that impact each package:

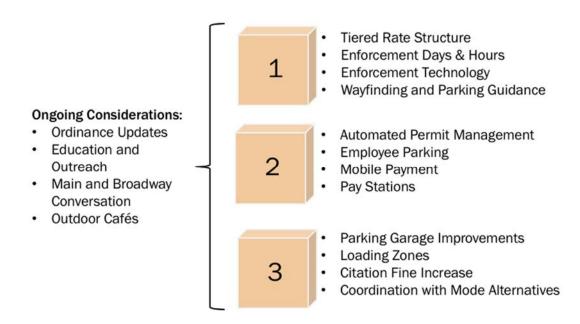


Figure 1010. Near-Term Implementation Packages

The purpose of the implementation packages is to provide the City a realistic starting point for implementation that will address the primary staff and stakeholder concerns and provide a solid foundation for future investments and adjustments.

17.2. Comprehensive Implementation Guide

The table below is a summary of all implementation steps included throughout the DAAP, organized by phase into a comprehensive implementation guide.

The prioritization of the implementation steps is based upon staff and stakeholder feedback. While this is not a definitive guide, it is meant to be used a helpful reference point for the City. Actual implementation timelines will ultimately be based upon ongoing analysis, stakeholder feedback, funding, and available resources.

Table 11. Comprehensive Implementation Guide

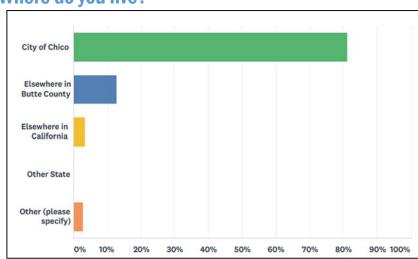
Near-Term Steps			
Section		Recommendation	
3	Α	Update Municipal Code to Allow for Mobile Payment	
14	Α	Consider Updating the Outdoor Café Permit Fee	
14	В	Evaluate the Feasibility of Attaching the Outdoor Cafes to Property Titles	
3	В	Update the Municipal Code to Address EV Charging	
3	С	Develop a "No Re-Parking" Ordinance	
5	Α	Update Municipal Code to Require Active Loading	
5	В	Update Municipal Code to Prohibit Double Parking	
12	Α	Update Municipal Code to Make Residential Areas Permit Eligible through a Petitioning Process	
10	Α	Evaluate Feasibility of a PBD or Adjustments to Existing Fund	
10	В	Adopt Necessary Ordinances for Parking Revenue Management	
3	D		
10	Ε	Define the Paid Parking Revenue Distribution Schedule	
10	С	Establish an Oversight Committee for Parking Revenue Allocations	
14	С	Establish Comprehensive Design Guidelines for Outdoor Cafés	
14	D	Streamline Outdoor Café Application Review Process	
14	Ε	Establish a Cap on the Number of Outdoor Cafés Allowed Downtown	
6	Α	Budget for and Solicit Automated Permit Management System	
4	Α	Budget for Additional Enforcement Positions/Move Enforcement under Public	
8	Λ	Works/Consider Outsourcing Pudget for Floatronia Looks and (or Closed Conisters for Motors	
13	A	Budget for Electronic Locks and/or Closed Canisters for Meters	
3	A	Solicit Quotes to Clean and Repaint Garage	
<u> </u>	E B	Use Revenue Modeling Workbook to Determine Rate Structure	
4		Update Turbo Data Systems Agreement/Consider Issuing an RFP for New Citation Management Vendor	
6	В	Continue to Incentivize Employee Parking Permit	
8	В	Maintenance Staff IPS DMS Training	
4	С	Consider Adjusting Enforcement Days and Hours	
3	F	Adjust Paid Parking Hours of Operation	
3	G	Design and Order Updated Signage or Decals	
16	Α	Include Parking Brand on all Outreach Materials	
3	Н	Education and Outreach Campaign about Upcoming Program Changes	
16	В	Ladeadon and Oddeadh Gampaigh about opcoming Frogram Ghanges	
15	Α	Expand Parking Signage Branding for Consistency	
15	В	Evaluate PGS and Occupancy Counting Technology Options	
15	С	Consider Piloting Occupancy Counting Technology Off-Street	
16	C	Host Public Feedback Forums	

16	D	Reach out to CSUC to Inform Campus Communities on Policy Changes
3	1	On and Off-Street Pay Station RFP
4	D	Mobile LPR RFP
3	J	Relocate POM Meters
3	K	Reconfigure Pay Stations to Pay by Plate
3	L	Implementation of Mobile Payment
13	В	Replace Meters in Garage with Pay Stations or PARCS
4	Е	Scofflaw Enforcement with Boots or Windshield Immobilizing Devices
4	F	Continually Monitor Enforcement Handheld Technology for Potential Upgrades
4	G	Develop Parking Ambassador Approach to Parking Enforcement
6	C	Implement Online Permit Management System
6	D	Public Information Online and Send Mailers about Employee Permit Program
4	<u> </u>	Raise Citation Fine Amounts
4	i	Ongoing Enforcement Gap Management
4	J	Utilize Track-It or another Program for Meter Bagging Program
5	C	Define Locations for Additional Loading Zones
5	D	Design Loading Zone Signage
7	A	Outreach to Ridesharing Companies
		n Steps
Sect		Recommendation
4	K	Implement updated Citation Management Features/Vendor
4	L	Expand Enforcement Staffing Consistent with Optimize Staffing Plan
15	D	Expand use of Occupancy Counting and Digital Signage if Pilot is Successful
8	C	Install E-locks and/or Closed Canisters if Purchased
8	D	Update Protocol for Paid Parking Collections and Revenue Reconciliation
8	E	Establish an Acceptable Revenue Reconciliation Variance
	F	Ensure Meters are Configured to Minimize Maintenance and Collections
8		Requirements
11	Α	Establish a Framework for Shared Parking Agreements
3	М	
4	М	Bi-Annual Occupancy Monitoring / Utilize LPR for Data Collection
4	Ν	Ongoing Enforcement Technology Training as needed
4	0	Ongoing Enforcement Gap Management
3	N	Adjust Paid Parking Rates, Time Limits, and/or Operating Hours as needed
5	Е	Implement Additional Loading Zones and Signage
5	F	Proactively Enforce Double Parking Restrictions
6	Е	Continue to Educate Businesses about Employee Permit Parking Program
11	В	Explore Possible Shared Parking Locations
6	F	Identify and Designate Additional Employee Parking Locations as needed
7	В	Ongoing Promotion of Transportation Alternatives for Special Events
7	С	Collaborate with Chico Velo for Bike Valet during Special Events
10	Α	Make Bike Lockers at City Hall Usable for the Public
10	В	Add Bike Locker Facilities at Off-Street Public Lots
7	D	Define a Special Event Rate
9	Ε	Continue Allocation of Parking Funds by Oversight Committee

11	С	Incorporate Parking Brand with any Shared Parking Locations		
11	D	Allocate Enforcement Staff as needed to Enforce Shared Parking Locations		
11		Install Paid Parking Equipment and Signage at Shared Parking Locations as		
	Ε	needed		
12	В	Consider Adopting an Escalating Rate Schedule for Residential Permits		
12	C	Limit Residential Permit Purchases to 1 Year Maximum		
12	D	Consider Adjusting the Guest Permit System		
12	E	Transition Residential Permits to the Automated Permit Management System		
13	C	Revisit Agreement with Hotel Diamond		
Long-Term Steps				
Section		Recommendation		
300		Continue to use DCBA, PARC, and Neighborhood Associations to Provide		
16	Ε	Information to Stakeholders		
4	Р	Purchase Additional LPR Equipment as needed		
4	Q	Consider Enforcement Staffing Adjustments as needed		
8	Ğ	Consider Cross-Training Enforcement Staff to Provide Level 1 Meter Maintenance		
3	0			
4	R	Ongoing Occupancy Monitoring and Program Adjustments as Needed		
5	G	Ongoing Monitoring of Loading Zones to Determine Adjustments as needed		
15	E	Integrate Occupancy Data with Publicly Available Sources		
6	G	Consider Remote Parking Locations for Employee Permit Parking		
7	F	Utilize Ridesharing Company Data (if obtained) to make Adjustments to Special		
7		Event Plans		
7	G	Ongoing Promotion of Transportation Alternatives during Events		
7	Н	Ongoing Collaboration with Ridesharing Companies and Chico Velo		
8	Н	Adjust Revenue Collections Schedule as needed		
9	F	Continue Allocation of Parking Funds by Oversight Committee		
10	С	Designate a Portion of Paid Parking Revenue to TDM Strategies		
10	D	Assess Public Transit Ridership and Establish Incentives		
10	Е	Continue to update Bike Plan		
11	F	Continue to Evaluate new Shared Parking Opportunities as needed		
12	F	Monitor Residential Permit Program Effectiveness and Consider Adjusting Caps		
12	G	Require that Residents Renew their Permits on an Annual Basis		
13	D	Ongoing Maintenance and Upkeep of the Garage		
13	Е	Consider Installing PARCS in the Garage		
1.1	F	Proceed with Sidewalk Widening along Main and Broadway and Encourage		
14		Outdoor Cafés in Widened Locations		
14	G	Ongoing Assessment of Downtown Occupancy to Determine whether to Expand		
		Number of Outdoor Cafés Allowed		
16	F	Continue to Collaborate with CSUC as needed		

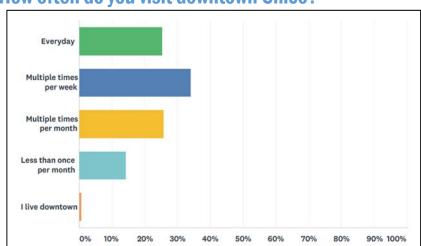
Appendix A. Online Survey Results

The City of Chico posted an online survey regarding parking in downtown Chico. The survey was intended to collect information about how people currently access and park in the downtown area and feedback about potential downtown parking policies. The City received a total of 183 responses. Overall, a majority of the respondents live in Chico and visit downtown Chico more than once per week. Most respondents visit downtown to eat and stay for one to two hours. The results of the survey are presented and discussed below.



Question 1: Where do you live?

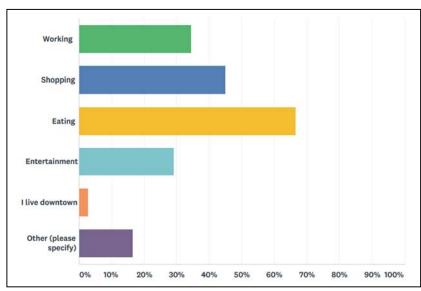
81.2% of respondents live in Chico. A combined 94% of respondents indicated that they live within Butte County.



Question 2: How often do you visit downtown Chico?

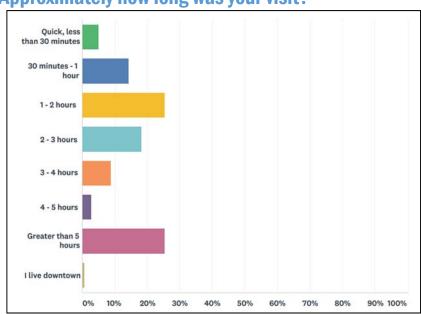
59.3% of respondents visit downtown Chico more than once per week and 25.8% visit multiple times per month. 14.3% of respondents visit downtown Chico less than once per month.

Question 3: What were the primary purposes of your most recent visit to downtown?

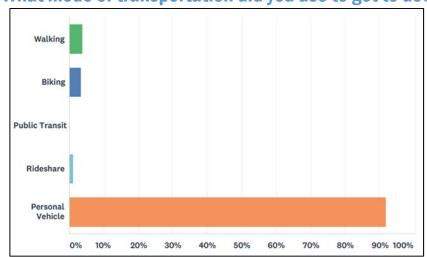


The majority (66%) of respondents indicated that eating was the primary purpose of their most recent visit to downtown Chico. 45% said their visit was primarily for shopping, and 34.6% said it was for working.

Question 4: Approximately how long was your visit?

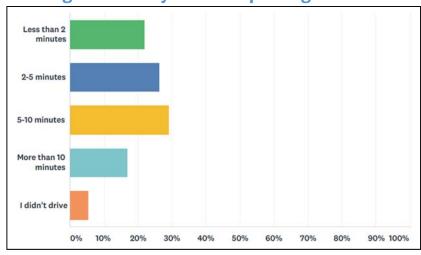


25.3% of respondents indicated that their last trip to downtown Chico was between 1 and 2 hours. A combined 43.4% of respondents' last trip was between 1 and 3 hours. 36.8% of respondents last trip was longer than 3 hours and 19% responded that their trip was less than 1 hour.



Question 5: What mode of transportation did you use to get to downtown?

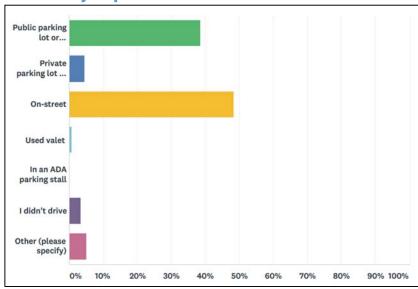
Respondents were most likely to travel using their personal vehicle with 91% indicating as such. The other 8.24% of respondents used modes of transportation such as walking (3.85%), biking (3.3%), and rideshare (1.1%). No respondents indicated that they used public transit to visit downtown.



Question 6: How long did it take you to find parking?

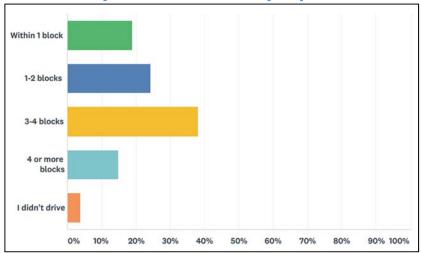
A combined 77.47% of respondents found parking in less than 10 minutes with 21.98% finding parking in less than two minutes, 26.37% finding parking in 2-5 minutes, and 29.12% finding parking in 5-10 minutes. 17.03% of respondents took more than 10 minutes to find parking. 5.49% of respondents did not drive.

Question 7: Where did you park?



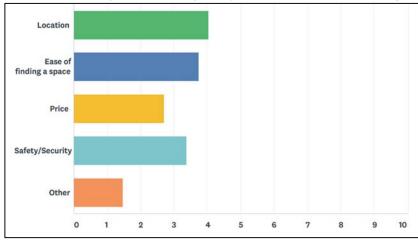
When traveling to downtown Chico, 48.35% of respondents parked on the street, 38.46% parked in public parking lots or structures, 4.4% parked in a private parking lot, and 0.55% used valet. 3.3% of respondents did not drive.

Question 8: How far from your destination did you park?



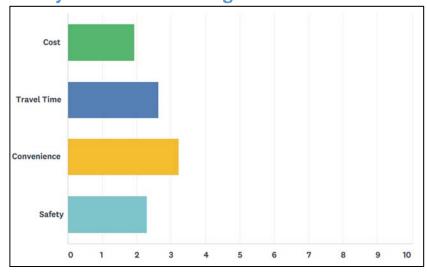
A combined 81.21% of respondents parked within 4 blocks of their destination with 18.78% parking within 1 block, 24.31% parking within 1-2 blocks, and 38.12% parking within 3-4 blocks of their destination. 14.92% of respondents parked 4 or more blocks from their destination. 3.87% of respondents did not drive.

Question 9: When deciding where to park, what is the most important factor?



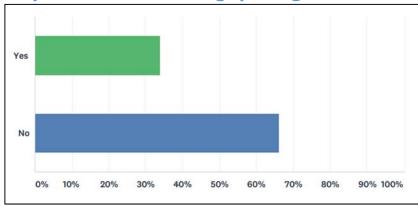
The average ranking of the most important factors for drivers when deciding where they want to park was location, ease of finding a space, safety/security, price, and other.

Question 10: When deciding what mode of transportation to use to reach downtown, how do you rank the following?



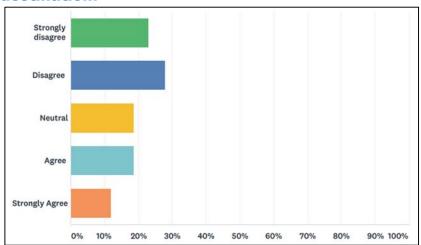
The average ranking for respondents when deciding what transit mode they use to get to downtown was convenience, travel time, safety, and cost.

Question 11: Do you think there is enough parking in downtown Chico?



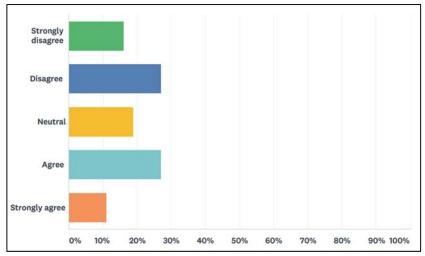
66.12% of respondents do not think there is enough parking in downtown Chico.

Question 12: I am willing to pay more for parking if it means I will find a space closer to my destination.



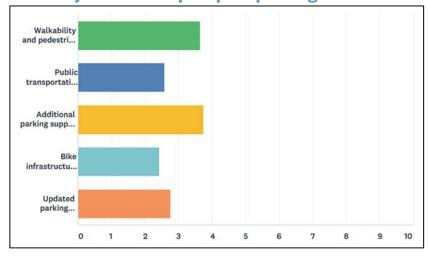
A combined 50.82% of respondents disagreed or strongly disagreed with the statement, "I am willing to pay more for parking if it means I will find a space closer to my destination." 30.6% of respondents agreed or strongly agreed with the statement. 18.58% were neutral towards their willingness to pay more to park closer to their destination.

Question 13: I am willing to park further away from my destination if it means parking is more affordable.



43.09% of respondents disagreed or strongly disagreed with the statement, "I am willing to park further way from my destination if it means parking is more affordable." A combined 38.12% of respondents agreed or strongly agreed with the statement while 18.78% were neutral towards paid parking and the ease of finding a parking space.

Question 14: How do you think surplus paid parking revenue should be spent?



The average ranking for respondents for where excess parking revenue should be allocated was additional parking supply (new garage, lots, etc.), walkability and pedestrian safety improvements, updated parking technology and signage, public transportation improvements, and bike infrastructure improvements.