

MISSOULA PARKING COMMISSION EXPANSION AND OPTIMIZATION IMPLEMENTATION AND ACTION PLAN

The Missoula Parking Commission (MPC), established in 1971, operates as a component unit of the City of Missoula, and is chiefly responsible for providing and managing parking and parking alternatives for the Missoula community. Missoula has evolved and grown in the years since the MPC has comprehensively evaluated its existing jurisdiction and management practices. As such, the MPC has commissioned an Expansion and Optimization study with the following objectives:

- Assess data-driven and responsive expansion opportunities for the existing MPC jurisdiction to address parking management challenges and changing parking needs.
- Optimize the existing management and operational practices of the MPC given existing conditions, changing needs and realities, and best practices.

This Implementation and Action Plan is the result of that study. The actions recommended by this Plan are expected to better support the people that live, work, and play all around Missoula with best-in-class, contextual parking programs and options. This Plan was developed in keeping with extensive analysis of supportive and relevant planning context, existing operations and parking facility performance, community engagement, and an assessment of best practices from communities experiencing similar challenges and pursuing similar goals.

This Plan is informed by the many active community, transportation, neighborhood, and other plans and documents that have been adopted by Missoula's governing bodies, including Our Missoula and the City's growth policy update. Policy initiatives that influence the Citywide Parking Plan generally include:

- **Regional Transportation and Transit:** The Missoula Urban Transportation District Strategic Plan, Missoula Connect, and the Transportation Options Action Plan advance expansion and increased service for Missoula's transit system and support a more holistic approach to access beyond just driving and parking.
- **Active Transportation:** The Bicycle Facilities and Pedestrian Facilities master plans provide goals for the percentage of trips completed on foot or by bicycle and create overarching frameworks for providing better active mobility infrastructure. Various corridor planning and design efforts Downtown seek to implement some of these broader goals and policies through actual infrastructure changes.
- **Land Use, Development and Housing:** Place-specific plans like the Downtown Master Plan and Midtown Master Plan set broad visions for sense of place, economic vitality, community character, sustainability and more in some of the city's key neighborhoods. Broader initiatives like Our Missoula work to set forth policy strategies for contextual growth and inform direction around prioritizing investment and reforming regulations to meet goals like housing availability and affordability, fiscal strength, and environmental readiness.

The following vision and guiding principles, developed in concert with the MPC Board and staff, technical and stakeholder committees, and the public, served as a guide and a filter for the ideas this Plan advances.

VISION STATEMENT

Enact a proactive, flexible parking management program that responds to our growing and evolving community, advances our most important policy goals, remains financially sustainable, and respects Missoula's unique and varied sense of place.

We sought ideas and actions that:

1. Are responsive to changes in parking and access demand patterns.
2. Offer opportunities for consistency and collaboration among the many City departments and external institutional partners that work to make Missoula an even better place.
3. Prioritize a multimodal environment that maximizes mobility choice and safety for all Missoulians.
4. Leverage revenue generation to maximize cost recovery and reinvest in ways that demonstrably and tangibly benefit the Missoula community.
5. Equitably accommodate all users in need of a parking option, including long-term (8+ hours), mid-term (2-8 hours) and short-term (2 hours or fewer) parkers.
6. Enable contextual approaches to Missoula's different neighborhoods and communities.
7. Encourage efficient land use practices to maximize available land's utility to the Missoula community.

HOW TO USE THIS PLAN

This Plan includes five sections that focus on a particular area of the parking system, including:

- Proactive and Intentional System Expansion
- Neighborhood Parking Management
- Short-Term Paid Parking
- Commercial/Employee Permits
- Parking Fines

Each section includes a brief overview of the existing conditions and critical weaknesses for that area of the parking system, the overall goal for recommended changes, and an evaluation of how recommended changes will affect community commitments related to transportation demand management, equity, and financial health and wellness. Each section then includes a series of recommended strategies and related action steps.

Recommended strategies and action steps are categorized by topic area and shown below.

MISSOULA PARKING COMMISSION EXPANSION AND OPTIMIZATION
IMPLEMENTATION AND ACTION PLAN

	Action Step	Timeline
A: Proactive and Intentional System Expansion	A1.1: Draft new ordinance language to establish time-to-time expansion of managed parking areas based on established KPIs published in an annual report.	6 months
	A1.2: Conduct ordinance readings in accordance with City requirements.	12-18 months
	A1.3: Complete and publicize annual reports on parking management priority areas.	Annually following first year of ordinance adoption
	A2.1: Finalize Key Performance Indicators.	6 months
	A2.2: Finalize internal roles for Proactive Response Program implementation and management.	6 months
	A2.3: Finalize and execute data collection plan.	First within 6 months, then quarterly
	A2.4: Review data and prioritize/classify zones.	12 months
	A3.1: Use a decision matrix for all new structured parking investment decisions.	6 months
B: Neighborhood Parking Management	B1.1: Amend City ordinance to streamline permit program processes.	6 months
	B1.2: Broaden the permit program to allow for more users to benefit.	12 months
	B2.1: Amend permit pricing with strong but gradual increases to achieve cost recovery.	12 months
	B2.2: Consider premium pricing in areas that demonstrate high KPIs given increased value of the right-of-way in high-demand areas.	1-2 years
	B2.3: Consider investing in other benefits for the community as part of the permit program.	3-5 years
C: Short-Term Paid Parking	C1.1: Procure new multi-space meter technology for existing paid on-street parking and Hip Strip.	12 months
	C1.2: Update rates to improve user experience and demand distribution, reduce excessive vehicular circulation, and improve utilization in off-street facilities.	12 months

MISSOULA PARKING COMMISSION EXPANSION AND OPTIMIZATION

IMPLEMENTATION AND ACTION PLAN

D: Commercial/Employee Permits	C1.3: Consider extending charging hours to 8 p.m. at minimum to account for typical peak demand.	18 months
	C2.1: Consider implementing a premium rate on streets where typical peak demand regularly exceeds 90%.	2-3 years
	C3.1: Extend paid parking into Hip Strip and accommodate with necessary procurement and staff changes.	1-2 years
	D1.1: Procure a Virtual Permit Management System.	12 months
	D1.2: Increase pricing and oversell in all facilities and seek to reduce reserved parking allocations.	12 months
E: Parking Violation Fines	D2.1: Consider tiered permit options in all permit-eligible facilities.	2-3 years
	D2.2: Consider percentage-based permit subsidies for certain groups.	2-3 years
	E1.1: Update fine schedule, expanding graduated rates to all standard violations and including premiums for safety violations.	12 months

Note that all revenue and expense figures provided are high-level and based on information from previous years provided by MPC staff. A robust and timely financial analysis is recommended prior to implementation of any change expected to impact revenues and/or expenses.

**MISSOULA PARKING COMMISSION EXPANSION AND
OPTIMIZATION IMPLEMENTATION AND ACTION PLAN M
TABLE OF CONTENTS**

SECTIONS

A: Proactive and Intentional System Expansion.....6
B: Neighborhood Parking Management.....14
C: Short-Term Paid Parking.....20
D: Commercial/Employee Permits.....25
E: Parking Violation Fines.....29
Conclusion.....33
Appendices.....34
 Appendix A: Recommended Near-Term Expansion and Supporting Data and Findings
 Appendix B: On-Street Short-Term Parking Pricing Comparison Table
 Appendix C: Existing Conditions Executive Summary
 Appendix D: Example Practices

FIGURES AND TABLES

A1: Recommended Near-Term Expansion of MPC Jurisdiction.....11
A2: Expanded Paid Area Recommended Rates and Projected Impacts.....12
A2: Sample Decision Matrix for Potential P3 Structure13
B1: Recommended New Permit Types.....16
B2: Recommended Permit Program Price Changes with Basic Rates Only (Expansion Assumed).....17
B3: Recommended Permit Program Price Changes with Basic Rates Only (No Expansion).....18
B4: Recommended Permit Program Price Changes with Premium Rates.....18
C1: Recommended Base Rates and Projected Impacts.....22
C2: Aggregated Occupancy Levels in Downtown Core, March 2023.....23
C3: Recommended Base and Premium Rates and Projected Impacts.....24
D1: Projected Commercial/Employee Permit Revenue Increases.....26
D2: Sample Tiered Permit Rate Schedule.....27
D3: Recommended Facility Categorization based on Existing Facility Pricing.....28
E1: Recommended New Fine Schedule and Projected Impacts.....30

A: EXPANSION OF JURISDICTION

Existing Conditions: The MPC has a long-standing existing jurisdiction and a strong foundational organizational structure, with staff, a board of directors, operational protocols, and a healthy budget capable of funding expansion.

Critical Weaknesses: Expansion requires amendments to City ordinance and a robust public hearing process, which is a political and potentially unpredictable endeavor. Further, the MPC does not currently have clear key performance indicators (KPIs) to guide expansion decisions.

The Goal: Develop and initiate a new Proactive Response Program to enable thoughtful, intentional, and adaptable expansion of the Missoula Parking Commission’s jurisdiction and deployment of resources.

Projected Impacts on TDM

The new Proactive Response Program will encourage a safer multimodal environment by applying parking management approaches where there are known or projected increases in single-occupancy vehicle trips. Parking management is a critical step in directing parkers to appropriate options, reducing vehicle—vehicle, vehicle—pedestrian, and vehicle—cyclist conflict, and encouraging other transportation choices.

Projected Impacts on Equity

Implementation of the Program will result in better access and parking management to many Missoula neighborhoods—not just a select few. Thoughtful, data-driven parking management will support more organized and equitable access for customers and visitors, residents, and employees by directing them to appropriate options and making sure that no individual or organization takes up more than its fair share of public resources.

Projected Impacts on Financial Health

The Program encourages effective, planned use of City resources to manage parking demand. Further, some elements of the program—such as expanded paid parking in Hip Strip—are expected to result in net increases in revenue. These revenues can be reinvested into community benefits, like expanded transportation options, better technology, and even new parking inventory.

Community Engagement and Communication Needs

The new Program will require support by and approval from City Council—particularly ordinance changes. As such, extensive community engagement is required to advance it. Specific tactics may include open houses in each community where expansion is recommended to discuss upcoming changes and gather actionable feedback on things like technology needs and mitigating unforeseen impacts.

Strategy and Action Quick Summary

Action	Timeline
A1.1: Draft new ordinance language to establish time-to-time expansion of managed parking areas based on established KPIs published in an annual report.	6 months
A1.2: Conduct ordinance readings in accordance with City requirements.	12-18 months

MISSOULA PARKING COMMISSION EXPANSION AND OPTIMIZATION

IMPLEMENTATION AND ACTION PLAN

A1.3: Complete and publicize annual reports on parking management priority areas.	Annually following first year of ordinance adoption
A2.1: Finalize Key Performance Indicators.	6 months
A2.2: Finalize internal roles for Proactive Response Program implementation and management.	6 months
A2.3: Finalize and execute data collection plan.	First within 6 months, then quarterly
A2.4: Review data and prioritize/classify zones.	12 months
A3.1: Use a decision matrix for all new structured parking investment decisions.	6 months

STRATEGY A1: AMEND CITY ORDINANCE TO FACILITATE EXPANSION OF MPC'S JURISDICTION AND ESTABLISHMENT OF MANAGED PARKING AREAS BASED ON ESTABLISHED KEY PERFORMANCE INDICATORS.

ACTION A1.1: DRAFT NEW ORDINANCE LANGUAGE.

The following are recommended changes to **Section 10.22.230** of the Missoula Municipal Code (MMC). Specific language would need to be written and/or reviewed by the City Attorney in accordance with State of Montana and other local laws.

- **Section A:** Add managing use of the public right-of-way through parking permit programs.
- **New Section 1:** Add new section stating that the Parking Commission may collect data in areas throughout the City that have a demonstrated need for parking management intervention due to changing development patterns, new uses, changing demographics, or other circumstances. Data collected will be focused on Key Performance Indicators¹. The Parking Commission shall publish and present annual reports to City Council summarizing these data collection efforts, to include a map showing prioritization of areas deemed eligible for expansion pursuant to Key Performance Indicators, and that the City Council can/shall adopt these maps by resolution. If no new areas are deemed eligible in any given year, no resolution is needed. Note that this new section could potentially fit as a subsection under Section 10.22.240 of the MMC.
- **New Section 2:** Add new section stating that the Parking Commission may expand its jurisdiction to the prioritized areas shown in the published map when adopted by resolution. Note that this new section could potentially fit as a subsection under Section 10.22.240 of the MMC.

ACTION A1.2: CONDUCT ORDINANCE HEARINGS/READINGS IN ACCORDANCE WITH CITY REQUIREMENTS.

ACTION A1.3 COMPLETE AND PUBLICIZE ANNUAL REPORTS ON PARKING MANAGEMENT PRIORITY AREAS.

Following adoption of the new ordinance language, develop and publish annual reports for City Council resolution, to include where data was collected, results based on KPIs, and a prioritization map showing high-priority, mid-priority, and low/no-priority areas based on KPIs.

STRATEGY A2: COLLECT DATA IN EXISTING MANAGED, HIGH-PRIORITY, AND NEWLY DEVELOPING AREAS IN ACCORDANCE WITH KEY PERFORMANCE INDICATORS.

¹ See Action A2.1

ACTION A2.1: FINALIZE KEY PERFORMANCE INDICATORS.

Establish Key **Performance Indicators (KPIs)** for the primary metric to determine parking management eligibility and type of management that may be warranted or appropriate. The following are recommended:

- **Typical Peak Hour Parking Occupancy:** 70% is an appropriate base parking occupancy to begin managing parking in an area before adequacy issues arise. However, this must cover a reasonable geographic area that supports allocation of public parking resources, including staff time and investments in infrastructure for administration and enforcement.
- **New Development and Trip Generation:** Planned new developments within a zone boundary or within 3 blocks or 1500' linear feet of a zone that may impact on-street parking supplies during typical peak conditions should also be considered. New developments projected to generate 201 or more new trips to the area at the peak hour without sufficient off-street parking supply to accommodate those trips and has received approval for the parking supply may be considered for eligibility². Existing condition KPIs should be monitored in the year following the new development's completion to ensure they are met.
- **Classify Areas:** Classify each area or neighborhood based on determined KPI(s). Publish a publicly available, online map showing each zone's classification, with an option for address look-up.
- **Apply KPI-Based Management and Subsidies:** Establish parking management options and available subsidies based on KPI(s).
 - Average duration of stay exceeding posted time limits in a currently managed but unpaid zone should be considered for paid parking to further encourage the desired level of turnover.
 - Managed areas experiencing localized occupancies of 85% or greater, even if the average length of stay is below posted time limits, should be considered for demand-based pricing to distribute parking demands more effectively.
 - Managed areas with overall parking demands exceeding 75% for at least 6 hours or more per day, that are not attributable to a single land use or otherwise eligible for a neighborhood parking permit zone, should be considered for additional public parking supplies. Additional public parking supplies are discussed more in its section below.
 - Offer percentage-based subsidies on parking and transportation fees for areas with access scores indicating the need for a car for all or most local trips. Additionally, offer percentage-based subsidies for qualifying low-income households. Based on score ranges as provided by the Walk Score platform, areas where locations score at or below 50 should be considered for these subsidies, with percentage subsidies potentially varying based on how low the aggregate Walk Score is for a given area.

ACTION A2.2: FINALIZE INTERNAL ROLES FOR OFFICIAL PROACTIVE RESPONSE PROGRAM IMPLEMENTATION AND MANAGEMENT.

Looking beyond 2023 and toward proactive evaluation of expansion opportunities, it will be important to finalize internal staff roles and responsibilities for 2024 and beyond. This will include determining which administrative staff members will be responsible for the various components of the program, including developing and

² Sufficiency of off-street parking supply should be determined in concert with the Planning, Zoning and Land Use Department as part of the Parking Code changes.

managing the data collection plan, creating, publishing and presenting annual reports, and conducting community engagement. Approximately 0.15 administrative FTE and 0.15 enforcement FTE will be needed to administer and execute the data collection plan.

ACTION A2.3: FINALIZE AND EXECUTE DATA COLLECTION PLAN.

Whether data collection is conducted by existing staff, contracted through a vendor, or some combination of the options, a detailed data collection plan should be developed to guide this intensive effort. A data collection plan should specify:

- Who is collecting data
- When will data be collected
- What method of collection is to be used
- Where data collection will occur
- How results will be analyzed and presented

Where data collection should occur may be informed by existing MPC boundaries, official or recognized neighborhood boundaries, planning area boundaries, or areas of common land use and multimodal connectivity characteristics. To support efficient use of city resources, data collection should be concentrated on areas known to have parking pressures or land use conditions that are known to contribute to parking and transportation pressures. It is assumed that there will be areas within city limits that are not included in the initial data collection effort because they do not have managed public parking facilities and do not typically experience parking pressures. While these efforts do not need to be coordinated with collection efforts related to parking pricing in the paid parking districts, it is recommended that these efforts occur concurrently, as many existing MPC zones are located adjacent to these districts. Coordinated efforts are also designed to maximize city resources and represent a consistent snapshot of the city's parking supply and behaviors.

Based on available parking occupancy data, the city might consider a data collection push in the summer months for the commercial areas, and early fall for residential areas, particularly those abutting educational facilities like the University. Staff should select areas to cover each week over a 6- to 8-week period, with data collected on weekday afternoons (12pm—2pm) and late evenings (after 10pm). This is factored into current FTE budgeting, although certain staff will have to work outside of regular hours to perform this task.

Alternatively, MPC also has the option to contract out the data collection—a projected cost of approximately \$55,000 - \$75,000 per year, in 2023 dollars. MPC may also augment its own staff with a contracted staff during these data collection periods, thereby reducing necessary contractor costs while minimizing impacts to regular staff. This method would necessitate a projected cost of approximately \$25,000 - \$30,000 per year, in 2023 dollars.

ACTION A2.4: REVIEW DATA AND PRIORITIZE/CLASSIFY ZONES.

Upon completion of the data collection and analysis efforts, review of the results against the KPIs identified in Action A2.1 will inform the eligibility and prioritization of zones. Along with collected data, the city should consider the land use context of each zone or neighborhood and its access scores³. Zones would be prioritized based on the level to which metrics are met and exceeded, so that zones experiencing the greatest need are given priority in consideration of available funding for jurisdictional expansion. Recommended classifications include:

³ This would entail a review of area Walk Score, Bike Score, and Transit Score.

- **Time Limited Parking:** Areas that experience relatively longer dwell times than is optimal to support land uses within the zone may benefit from time limits, such as in low to moderate density commercial zones. Key determining metrics for this classification include a typical peak overall occupancy of 60-80% and average dwell time greater than four hours.
- **Paid Parking:** Areas managed only by paid parking should be considered for commercial areas where parking occupancies are relatively high and parking turnover is needed to support businesses and promote accessibility. Key determining metrics for this classification include a land use mix that is approximately 90% or more commercial or non-residential, have a typical peak overall occupancy that exceeds 85%, and an average dwell time greater than three hours.
- **Parking Permits with Time Limits:** Residential or mixed-use areas that experience spillover parking demand or local parking demand from specific destinations within the zone may benefit from participation in the MPC program with time limited parking for non-permitted vehicles. Key determining metrics for this classification include a land use mix that is approximately 90% residential or mixed use and include residential units, have a typical peak overall occupancy that exceeds 80%, and an average dwell time greater than four hours.
- **Parking Permits with Paid Parking:** Residential or mixed-used areas similar to those described above that experience extreme parking pressures, such as higher turnover necessary to support area land uses or high violation rates of time limits, may be appropriate for neighborhood parking permits with paid parking. Key determining metrics for this classification include a land use mix that is approximately 90% residential or mixed use and include residential units, with a typical peak overall occupancy that exceeds 90%, and an average dwell time greater than four hours. In areas with existing time limits, additional consideration should be made of the violation rates of posted time limits.
- **No Management/Low-Priority:** Not every corner of the city generates parking demand that requires active management. These areas are generally low-density and lack significant parking demand generators or provide off-street parking supplies to accommodate the land uses' parking demands.

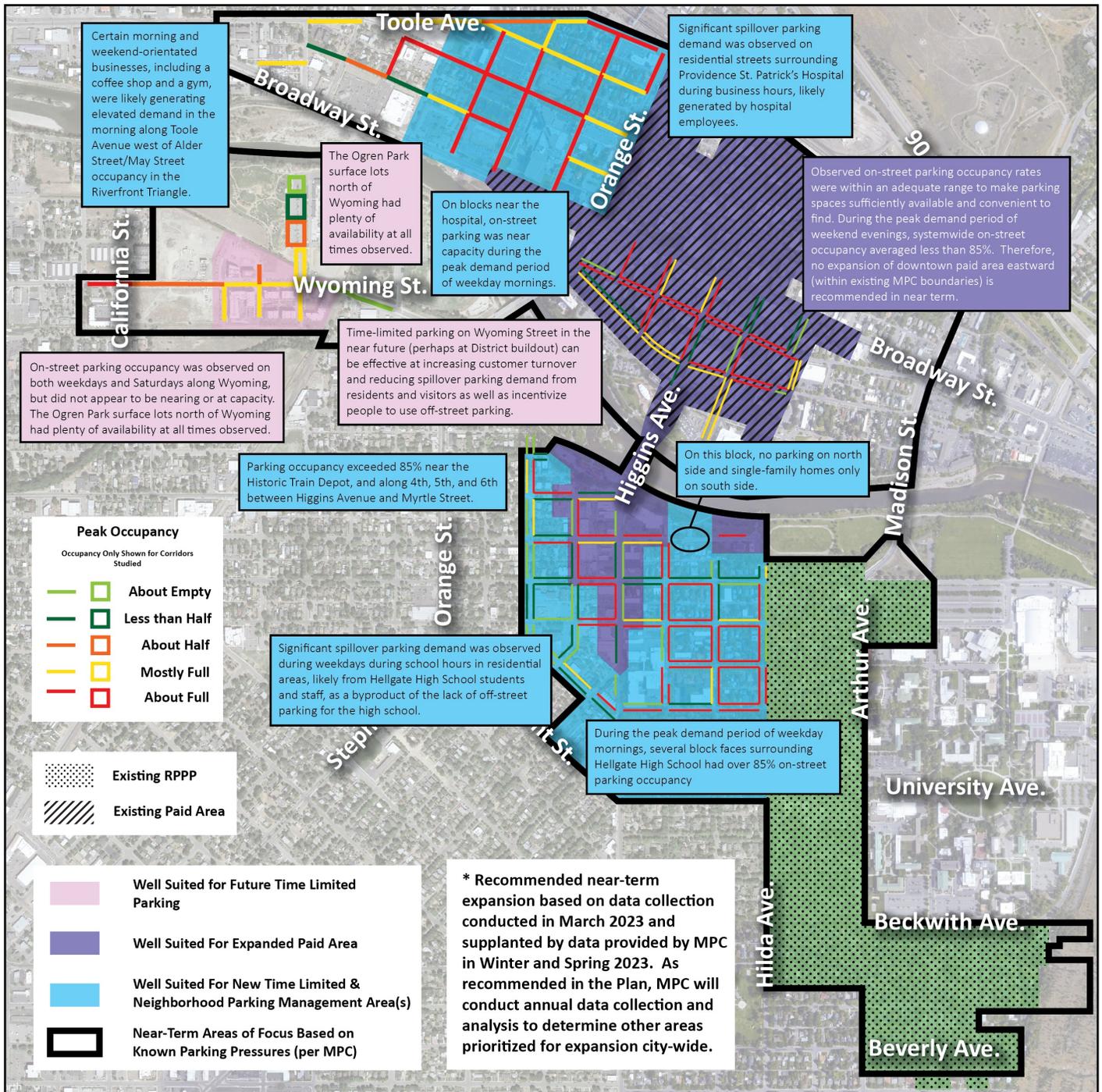
Areas under current management that do not meet required KPIs for a period of three years could be considered for a change in management intervention or sunseting.

Recommended near-term expansion plans, including an overview of the data that supports these recommendations, are shown in **Figure A.1**. Data collection and analysis included on-the-ground inventory, occupancy, turnover, and visual observations captured in March 2023. A full-size version of the figure and additional detail is provided in **Appendix A**.

As data collection conducted in support of this expansion recommendation was limited, additional targeted data should be collected in these areas pursuant to KPIs to further refine and validate the recommendation. These recommendations for expansion are incorporated into and discussed in sections relating to **On-Street Permit Management** and **Short-Term Paid Parking Pricing**.

**MISSOULA PARKING COMMISSION EXPANSION AND OPTIMIZATION
IMPLEMENTATION AND ACTION PLAN**

Figure A1: Recommended Near-Term Expansion of MPC Jurisdiction



MISSOULA MANAGED PARKING EXPANSION & OPTIMIZATION STUDY



WALKER
CONSULTANTS

PROPOSED NEAR-TERM AREAS OF FOCUS

WITH HEAT MAP DATA OVERLAY (PEAK OBSERVED)*



MISSOULA PARKING COMMISSION EXPANSION AND OPTIMIZATION
IMPLEMENTATION AND ACTION PLAN

Expansion plans for most neighborhoods shown in **Figure A1** centers time-limited, enforced parking with permit options for residents and commuters. However, the expansion plans also recommend extension of paid parking across Higgins Avenue into the area commonly known as “Hip Strip”, and some of its surrounding streets (shown in purple). In this case, additional revenue is projected. Projections associated with this extension of the paid parking area, including gross revenues, enforcement expenses, and net revenues, are shown in **Figure A2**.

Figure A2: Expanded Paid Area Recommended Rates and Projected Impacts

Duration	# Current Transactions	Percentage	Proposed Rates	Proj. Revenues	Proj. Expenses	Proj. Net Revenues
<30m	4,873	3.26%	\$ 0.50	\$ 2,436.26		
30m - 1 hr	28,201	18.87%	\$ 1.00	\$ 28,200.52		
1 hr	48,764	32.63%	\$ 1.50	\$ 73,146.52		
1.5 hrs	12,526	8.38%	\$ 2.50	\$ 31,314.13		
2 hrs	29,060	19.45%	\$ 2.50	\$ 72,648.91		
2.5 hrs	4,290	2.87%	\$ 4.00	\$ 17,161.04		
3 hrs	9,239	6.18%	\$ 4.00	\$ 36,956.87		
3.5 hrs	1,820	1.22%	\$ 6.00	\$ 10,922.09		
4 hrs	3,283	2.20%	\$ 6.00	\$ 19,696.70		
4.5 hrs	958	0.64%	\$ 8.50	\$ 8,144.48		
5 hrs	1,675	1.12%	\$ 8.50	\$ 14,237.87		
5.5 hrs	539	0.36%	\$ 12.00	\$ 6,473.74		
6 hrs	845	0.57%	\$ 12.00	\$ 10,142.61		
6.5 hrs	407	0.27%	\$ 15.50	\$ 6,307.83		
7 hrs	617	0.41%	\$ 15.50	\$ 9,570.91		
7.5 hrs	321	0.21%	\$ 20.00	\$ 6,422.61		
8 hrs	1,432	0.96%	\$ 20.00	\$ 28,638.26		
8.5 hrs	224	0.15%	\$ 20.00	\$ 4,476.52		
9 hrs	207	0.14%	\$ 20.00	\$ 4,147.83		
9.5 hrs	75	0.05%	\$ 20.00	\$ 1,497.39		
10 hrs	78	0.05%	\$ 20.00	\$ 1,554.78		
10.5 hrs	3	0.00%	\$ 20.00	\$ 62.61		
11 hrs	1	0.00%	\$ 20.00	\$ 10.43		
				\$ 394,170.91	\$ 120,000.00	\$ 274,170.91

This change would constitute a roughly **\$270,000 increase** in net revenues.

Assumptions include:

- Proportional volume and distribution of transactions per block face based on transaction numbers based on 2022 data (latest full year) provided by MPC.
- One FTE for dedicated enforcement plus 10% additional administrative resources.

STRATEGY A3: ESTABLISH APPROACH FOR ADDITIONS TO MPC’S STRUCTURED PARKING INVENTORY.

ACTION A3.1: USE A DECISION MATRIX FOR ALL NEW STRUCTURED PARKING INVESTMENT DECISIONS.

The MPC Board should establish and adopt a decision matrix for all new structured parking investment decisions representing the scope and weight of key tenets, like location, size of publicly available inventory, revenue generation potential, and incorporation of other community benefits. **Figure A3** shows a sample matrix for a potential new P3 structure, using the example of the U.S. Bank Lot site, which is a viable option for new-build two-bay structured facility. Note that assumptions have been made for the Public Inventory Size and Community Benefits categories for the purpose of this exercise.

Figure A3: Sample Decision Matrix for Potential New P3 Structure

Criteria	Weight	Score	Weighted Score
Structure General Location	3	3	9
Public Inventory Size	2	2	4
Revenue Generation	2	3	6
Community Benefits	1	1	1
			20

Weight levels include:

- 1: Nice to have, but not important or essential
- 2: Important to the success of the parking structure from MPC’s perspective
- 3: Critical to the success of the parking structure from MPC’s perspective

Scores for each criteria category include:

- Structure General Location:
 - 1: Low/no priority per latest annual report
 - 2: Mid-priority per latest annual report
 - 3: High-priority per latest annual report
- Size of Publicly Available Inventory
 - 1: Under 100 spaces
 - 2: 101-300 spaces
 - 3: 300+ spaces
- Ability to Generate Revenue
 - 1: Not in an area with paid parking; incapable of near-mid-term revenue generation
 - 2: In an area with existing paid parking, but not located in a prime location
 - 3: In an area with existing paid parking and in a prime location
- Ability to Accommodate Other Community Benefits
 - 1: Unable to accommodate other community benefits to a meaningful level
 - 2: Can accommodate smaller-scale community benefits capable of serving some people—examples might include extensive bike parking or pick-up/drop-off locations for Uber/Lyft
 - 3: Can accommodate larger-scale community benefits capable of serving many people—examples might include housing a large bikeshare or carshare program, a ground floor retail location or a rooftop garden

Potential scoring levels include:

- **8-15:** No-Go
- **16-20:** Consider investment cautiously and work for concessions with private developer
- **21-24:** Consider investment strongly

B: NEIGHBORHOOD PARKING MANAGEMENT

Existing Conditions: The University Area RPP offers parking support for residents without an off-street option in an area with considerable and well-documented spillover from the nearby University of Montana. While the fee is relatively nominal (\$25/year), residents still pay for the privilege of holding an on-street parking permit and contribute in part to the operational expenses to run the program—in many other jurisdictions, this privilege is offered for free, making it much **more** difficult to start covering costs. Further, the number of permits per household is at least initially capped at 2 resident permits and 2 visitor permits per year.

Critical Weaknesses: Permit fees and fine revenues from the RPP cover roughly 50% of expenses associated with administering the program. Excluding fine revenues, cost recovery drops to 25%. The program is only available in a small and unscalable area that has not been reviewed from a quantitative or qualitative perspective in a long time—it is artificially limited, resulting in public complaints and perceptions of inequity or “unfairness” among people living in neighborhoods with similar parking conditions. Further, the two-per-household cap is exceeded at a rate of about 6%.

The Goal: Modernize the program so it can serve the needs of a more robust and diverse group of Missoula community members, while recovering costs and eventually supporting even more benefits for the community.

Projected Impacts on Equity

Compared to the current program, which significantly subsidizes reserved parking for a select group of residents, these changes will offer equitable solutions for a wide range of users, including residents, but also including commuters and short-term parkers. Further, these changes will allow the program to fund itself completely through payments from the people who directly benefit from it.

Projected Impacts on TDM

Changes to on-street permit management include significant increases to permit pricing—encouraging other travel choices for commuters now included in the program, and potentially supporting reduced car ownership among residents. Pricing changes—particularly those shown in **Figure B2**—are expected to generate some revenues above cost recovery that can be used for investment into other transportation options and programs.

Projected Impacts on Financial Health

While these changes constitute moderate increases to expenses, they will also result in improved cost recovery for the on-street permit management program. Some of the changes may even result in revenue generation above cost recovery, meaning more investment in community benefits like carshare programs, bikeshare programs, or expanded transit access.

Community Engagement and Communication Needs

These changes will directly impact people who use the permit program and will also expand the program into other neighborhoods. Specific tactics may include open houses in the existing RPP area and in neighborhoods where expansion is recommended to discuss upcoming changes and gather actionable feedback on things like reinvestment opportunities, year-over-year increases, and ways to support people who have more than two vehicles in their home.

Strategy and Action Quick Summary

Action	Timeline
B1.1: Amend City ordinance to streamline permit program processes.	6 months
B1.2: Broaden the permit program to allow for more users to benefit.	12 months
B2.1: Amend permit pricing with strong but gradual increases to achieve cost recovery.	12 months
B2.2: Consider premium pricing in areas that demonstrate high KPIs given increased value of the right-of-way in high-demand areas.	1-2 years
B2.3: Consider investing in other benefits for the community as part of the permit program.	3-5 years

STRATEGY B1: MAKE KEY FOUNDATIONAL CHANGES TO CONVERT THE RESIDENT PARKING PERMIT PROGRAM INTO A MORE INCLUSIVE ON-STREET PERMIT MANAGEMENT PROGRAM.

ACTION B1.1: AMEND CITY ORDINANCE TO STREAMLINE PERMIT PROGRAM PROCESSES.

Existing City ordinance allows for the City to itself enact and enforce RPP zones on a petition basis with less stringent and granular requirements for quantitative data analysis than industry standards would encourage and no action from the MPC. As **Section 10.22.230** of the Missoula Municipal Code already allows and will continue to allow MPC to enact and enforce permit zones, MPC should consider working with the City to strike or significantly amend **sections 10.22.250, 10.22.260, 10.22.270, 10.22.280 and 10.22.300**, which are, in cases, too specific on location and nature of the permit programs and dilute the MPC’s ability to make data-driven parking permit management decisions. Specific language would need to be written and/or reviewed by the City Attorney in accordance with State of Montana and other local laws.

ACTION B1.2: BROADEN THE PERMIT PROGRAM TO ALLOW FOR MORE USERS TO BENEFIT.

Enable commuters to zones to apply for permits as well and broaden the program title to “Neighborhood Parking Management Program” or “Neighborhood Parking Program to increase inclusivity and support more users.

Allow for short-term parking in all permit zones with a time limit at first, and active enforcement to maximize utility of in-demand on-street inventory. The time limit would apply to all parking within a zone, rather than for a particular space—as an example, a parker would only be permitted to park for two hours in the entire zone before having to depart. It is recommended that MPC initiate this change with free, enforced time-limited parking as described initially, and consider a move to paid parking pursuant to the KPIs detailed in under **Action 2.4** (see “Parking Permits with Paid Parking”). Key determining metrics for this classification include a land use mix that is approximately 90% residential or mixed use and include residential units, with a typical peak overall occupancy that exceeds 90%, and an average dwell time greater than four hours.

This action also constitutes the creation of additional permit types. **Figure B1** provides an overview of each new permit type, with additional considerations related to pricing. Note that for the purpose of the model and revenue projections, it was assumed that the Commuter and Mobile Vendor permit types would be priced equally to resident parking permits; Temporary Contractor permit types were not modeled, and usage would likely be highly variable.

MISSOULA PARKING COMMISSION EXPANSION AND OPTIMIZATION

IMPLEMENTATION AND ACTION PLAN

Figure B1: Recommended New Permit Types

New Permit Type	Description	Eligibility	Pricing Considerations
Commuter	A permit for employees commuting to a single business address located in a permitted zone, like a coffee shop, nail salon or healthcare facility, with an option to renew annually.	Business name and address, employment verification from registered business owner, license plate number(s).	Recommend similar pricing to Resident parking permits given similar right-of-way usage.
Mobile Vendor	A permit for people working for businesses that service multiple addresses within different permitted zones, with an option to renew annually.	Business name and address (should be within Missoula City limits), description of services provided, employment verification from registered business owner, license plate number(s). Services allowed should be limited to cleaning services, childcare/education, in-home medical/veterinary care, electricians, plumbers and HVAC technicians, insect and pest control, and landscaping.	Recommend a 15% to 20% reduction in permit price compared to Resident and Commuter parking permits given the lessened impact on the right-of-way (shorter average length of stay) in each zone
Temporary Contractor	A temporary permit for contractors working at a single address located in a permitted zone, allowing for unrestricted parking within the zone for a maximum consecutive period of 10 days. Requires reapplication for each instance.	Business name and address, description of services provided, number of days needed, address of service site, license plate number(s)	Parity with similar allowances in Downtown Core should be considered (charge of \$10/day for a maximum of \$100).

MPC could consider further discounting for certain permit applicants in the Resident, Commuter and Mobile Vendor categories. As administration of such discounts is difficult, some agencies, such as the City of Boulder, tie discount eligibility (in their case, a 50% discount) to enrollment in existing City or County income-based programs, such as food tax rebate programs, childcare assistance programs, or other subsidy programs. This allows for the applicant to receive a permit discount without requiring parking staff to conduct income verifications and other labor-intensive and sensitive tasks.

MISSOULA PARKING COMMISSION EXPANSION AND OPTIMIZATION
IMPLEMENTATION AND ACTION PLAN

STRATEGY B2: MAKE CRITICAL PRICING CHANGES TO ACHIEVE COST RECOVERY AND BUILD POTENTIAL FOR COMMUNITY REINVESTMENT USING PROGRAM DOLLARS.

ACTION B2.1: AMEND PERMIT PRICING WITH STRONG BUT GRADUAL INCREASES TO ACHIEVE COST RECOVERY.

Figure B2 shows recommended pricing increases over the next five years with one uniform permit price, assuming the program is expanded.

Figure B2: Recommended Permit Program Price Changes with Basic Rates Only (Expansion Assumed)								
	2023	2025	2026	2027	2028	2029	2030	
NPP Expenses	\$ 82,718.55	\$ 123,691.81	\$ 127,402.56	\$ 131,224.64	\$ 135,161.38	\$ 139,216.22	\$ 143,392.71	
# Permits Sold (Projected for later years)	880	1930	1930	1930	1930	1930	1930	
Cost Per Permit All In	\$ 94.00	\$ 64.09	\$ 66.01	\$ 67.99	\$ 70.03	\$ 72.13	\$ 74.30	
User Cost	\$ 25.00	\$ 50.00	\$ 60.00	\$ 70.00	\$ 73.00	\$ 76.00	\$ 78.00	
Revenues	\$ 22,000.00	\$ 96,500.00	\$ 115,800.00	\$ 135,100.00	\$ 140,890.00	\$ 146,680.00	\$ 150,540.00	
Delta	\$ (60,718.55)	\$ (27,191.81)	\$ (11,602.56)	\$ 3,875.36	\$ 5,728.62	\$ 7,463.78	\$ 7,147.29	
Cost Recovery	27%	78%	91%	103%	104%	105%	105%	

Assumptions include:

- Changes starting in 2025
- Increased number of permits sold based on expansion recommendations shown in **Figure A1**, including a proportional increase in resident permits sold based on current number of resident permits per block, and a new suite of commuter permits. The number of commuter permits was estimated based on proportional numbers sold in communities with programs similar to that recommended (Boulder and Golden, Colorado). No intentional growth in permit numbers shown.
- 0.5 FTE for additional enforcement plus some administrative resources, with a 3% increase in expenses year over year after initial staff/administrative additions
- A strong but digestible year-over-year increase in permit rates, showing a 60% or \$15 increase in year 1, a 25% or \$10 increase in year 2, a 20% or \$10 increase in year 3, a 17% or \$10 increase in year 4, and a 3% increase rounded to the nearest whole dollar in subsequent years to keep up with costs.

Figure B3 shows recommended permit price increases over the next five years with one uniform permit price, assuming the program is not expanded. Note that in this case, much more substantive increases are required to achieve cost recovery.

MISSOULA PARKING COMMISSION EXPANSION AND OPTIMIZATION
IMPLEMENTATION AND ACTION PLAN

Figure B3: Recommended Permit Program Price Changes with Basic Rates Only (No Expansion)

	2023	2024	2025	2026	2027	2028
NPP Expenses	\$ 82,718.55	\$ 85,200.10	\$ 87,756.11	\$ 90,388.79	\$ 93,100.45	\$ 95,893.47
# Permits Sold (Projected for later years)	880	880	880	880	880	880
Cost Per Permit All In	\$ 94.00	\$ 96.82	\$ 99.72	\$ 102.71	\$ 105.80	\$ 108.97
User Cost	\$ 25.00	\$ 45.00	\$ 65.00	\$ 85.00	\$ 105.00	\$ 109.00
Revenues	\$ 22,000.00	\$ 39,600.00	\$ 57,200.00	\$ 74,800.00	\$ 92,400.00	\$ 95,920.00
Delta	\$ (60,718.55)	\$ (45,600.10)	\$ (30,556.11)	\$ (15,588.79)	\$ (700.45)	\$ 26.53
Cost Recovery	27%	46%	65%	83%	99%	100%

While this was not modeled, MPC should also consider a substantial premium (50% or more per permit) for permits exceeding the two vehicle per household cap.

ACTION B2.2: CONSIDER PREMIUM PRICING IN AREAS THAT DEMONSTRATE HIGH KPIS GIVEN INCREASED VALUE OF THE RIGHT-OF-WAY IN HIGH-DEMAND AREAS.

Figure B4 shows recommended pricing increases over the next five years with a variable permit price.

Figure B4: Recommended Permit Program Price Changes with Premium Rates

	2023	2025	2026	2027	2028	2029	2030
NPP Expenses	\$ 82,718.55	\$ 123,691.81	\$ 127,402.56	\$ 131,224.64	\$ 135,161.38	\$ 139,216.22	\$ 143,392.71
# Permits Sold (Projected for later years)	880	1930	1930	1930	1930	1930	1930
# Permits Sold_Base		1448	1448	1448	1448	1448	1448
# Permits Sold_Premium		483	483	483	483	483	483
Cost Per Permit All In	\$ 94.00	\$ 64.09	\$ 66.01	\$ 67.99	\$ 70.03	\$ 72.13	\$ 74.30
User Cost_Basic	\$ 25.00	\$ 50.00	\$ 60.00	\$ 70.00	\$ 73.00	\$ 76.00	\$ 78.00
User Cost_Premium		\$ 60.00	\$ 80.00	\$ 100.00	\$ 103.00	\$ 107.00	\$ 110.00
Revenues_Basic	\$ 22,000.00	\$ 72,375.00	\$ 86,850.00	\$ 101,325.00	\$ 105,667.50	\$ 110,010.00	\$ 112,905.00
Revenues_Premium		\$ 28,950.00	\$ 38,600.00	\$ 48,250.00	\$ 49,697.50	\$ 51,627.50	\$ 53,075.00
Revenues_Total		\$ 101,325.00	\$ 125,450.00	\$ 149,575.00	\$ 155,365.00	\$ 161,637.50	\$ 165,980.00
Delta	\$ (60,718.55)	\$ (22,366.81)	\$ (1,952.56)	\$ 18,350.36	\$ 20,203.62	\$ 22,421.28	\$ 22,587.29
Cost Recovery	27%	82%	98%	114%	115%	116%	116%

Assumptions include:

- Changes starting in 2025
- Increased number of permits sold based on expansion recommendations shown in **Figure A1**, including a proportional increase in resident permits sold based on current number of resident permits per block, and a new suite of commuter permits. The number of commuter permits was estimated based on proportional numbers sold in communities with programs similar to that recommended (Boulder and Golden, Colorado). No intentional growth in permit numbers shown.
- 0.5 FTE for additional enforcement plus some administrative resources, with a 3% increase in expenses year over year after initial staff/administrative additions. This assumes the fourth enforcement officer currently budgeted is hired and started.
- Premium pricing for an estimated 25% of the permitted area.
- For base pricing, a strong but digestible year-over-year increase in permit rates, showing a 60% or \$15 increase in year 1, a 25% or \$10 increase in year 2, a 20% or \$10 increase in year 3, a 17% or \$10 increase in year 4, and a 3% increase in subsequent years to keep up with costs.
- For premium pricing, a strong but digestible year-over-year increase in permit rates, showing a 20% or \$10 increase in year 2, a 33% or \$20 increase in year 3, a 25% or \$20 increase in year 4, and a 3% or \$3 increase in subsequent years to keep up with costs.

ACTION B2.3: CONSIDER INVESTING IN OTHER BENEFITS FOR THE COMMUNITY AS PART OF THE PERMIT PROGRAM.

The permit program offers access to many habitual transportation users in Missoula, including residents and commuters. To broaden the tangible benefits of the permit program and justify higher pricing, the MPC should

MISSOULA PARKING COMMISSION EXPANSION AND OPTIMIZATION

IMPLEMENTATION AND ACTION PLAN

consider partnering with Missoula in Motion, Mountain Line Transit, and other partners to identify and invest in other transportation benefits for permit holders. These could include improved transit service in permit areas, carshare and bikeshare programs, resources for owning fewer vehicles, and more.

C: SHORT-TERM PAID PARKING

Existing Conditions: Parking within MPC’s main jurisdictional boundary, comprising Downtown Missoula, is paid, which substantially contributes to encouraging space turnover, improving the conditions and attractiveness of other modes of travel, and supporting strong cost recovery for the Commission. The paid hourly on-street rate structure already includes graduated rates for longer stays—a market-based solution to strong turnover. Finally, the system already employs modern multi-space meters to facilitate paid parking, with multiple payment options including coins, credit card and app-based payments.

Critical Weaknesses: The multi-space meter system is approaching the end of its service life. There is an insufficient differential between on-street and off-street, particularly for the first two hours, which reduces the system’s ability to encourage turnover on-street and leverage off-street options for longer-term parking. Further, there is no differential in pricing on very high-demand streets, like Main between Woody and Higgins, exacerbating inter-zone demand distribution challenges. Lastly, currently unpaid and unmanaged areas, like the Hip Strip, are generating parking demand at levels where intervention in the form of paid, managed parking is needed to encourage turnover and balance demand.

The Goal: Optimize pricing and technology to improve user experience.

Projected Impacts on TDM

Recommended changes encourage other modes of travel by strengthening pricing and acknowledging the varying value of the city’s curb space. Pricing increases will result in additional revenues for the public parking system that could fund transportation demand management and other mobility initiatives. In addition, the pricing changes are expected to result in a reduction in Vehicle Miles Travelled (VMT), derived from both price elasticity impacts (people opting for a different transportation option, rather than a personal vehicle) and reduced circulation to locate an on-street parking space.

Projected Impacts on Equity

Recommended changes enhance equity by acknowledging the higher value of different parking facilities based on typical demand, and adjusting end user payments in proportion to the direct benefit they receive from the system.

Projected Impacts on Financial Health

When implemented, pricing changes are expected to increase revenues by roughly \$165,000 at the low end and \$345,000 at the high end in existing managed areas. Replacing meter technology—a necessary investment—will incur a one-time capital cost of roughly \$1.4 million at the low end and \$2.8 million at the high end.

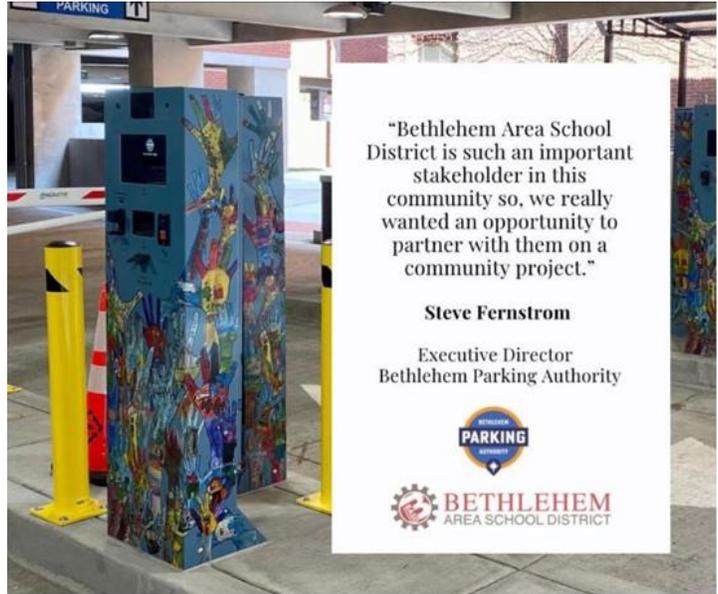
Community Engagement and Communication Needs

While MPC can raise or change rates at any time, substantive community engagement is recommended to support smooth implementation and identify unforeseen consequences from recommended changes. Specific tactics may include a technology “test run” for new multi-space meters after they are procured and before full

installation, an open house or online engagement to discuss and gather feedback on new rates, their rationale and benefits, and a published updated parking map showing new rates. To further harmonize the relationship between MPC and the community it serves, MPC should consider committing to a strategy for reinvesting revenues that exceed operating expenses and capital budget needs into tangible benefits for the neighborhood from which revenues were exacted.

Public art competitions or solicitations for meter appearance can also add to the community’s buy-in and sense of participation when procuring and installing new meters. While such a measure may necessitate an upcharge, most multi-space meter vendors can provide custom wraps. As an

example, the Bethlehem Parking Authority in Bethlehem, Pennsylvania recently [partnered with the city’s school district](#) to create a custom wrap created by students and installed on the city’s new parking meters.



Strategy and Action Quick Summary

Action	Timeline
C1.1: Procure new multi-space meter technology for existing paid on-street parking.	12 months
C1.2: Update rates to improve user experience and demand distribution, reduce excessive vehicular circulation, and improve utilization in off-street facilities.	12 months
C1.3: Consider extending charging hours to 8 p.m.at minimum to account for typical peak demand.	18 months
C2.1: Consider implementing a premium rate on streets where typical peak demand regularly exceeds 90%.	2-3 years

STRATEGY C1: MAKE KEY FOUNDATIONAL CHANGES TO OPTIMIZE THE EXISTING PAYMENT SYSTEM.

ACTION C1.1: PROCURE NEW MULTI-SPACE METER TECHNOLOGY FOR EXISTING AND PROPOSED NEW PAID PARKING AREAS.

The existing multi-space meters Downtown have reached the end of their service life and require replacement. This procurement, which should include a vendor Request for Proposal (RFP) process, can occur simultaneously with procurement of new multi-space meters for new meter areas. Replacing meter technology and purchasing the new meters the recommended expanded jurisdiction as shown in **Figure A1** will incur a one-time capital cost of roughly \$1.4 million at the low end and \$2.8 million at the high end, assuming a current multi-space meter price of approximately \$6,000--\$12,000 per meter.

The procurement specification should include provision of all material, labor, equipment, services, and training necessary to furnish and install a fully functioning and integrated, online, real-time, multi-space parking meter system, to include the meter itself, payment system and functionality, LPR system integration, citation

MISSOULA PARKING COMMISSION EXPANSION AND OPTIMIZATION

IMPLEMENTATION AND ACTION PLAN

management system integration, and all necessary components and functions for turnkey usage. Proposals should show a price inclusive of provision of all material, labor, equipment, and services necessary to furnish and install fully integrated MSM system, and discussing any potential constraints or conflicts that could impact price. Further, proposals should separately show annual pricing for any maintenance, service and parts not included in the warranty period over five years.

ACTION C1.2: UPDATE RATES TO IMPROVE USER EXPERIENCE AND DEMAND DISTRIBUTION, REDUCE EXCESSIVE VEHICULAR CIRCULATION, AND IMPROVE UTILIZATION IN OFF-STREET FACILITIES.

Figure C1 shows recommended rate increases for on-street parking meters and projected impacts to revenue. An overview of comparison community rates is provided in **Appendix B**.

Figure C1: Recommended Base Rates and Projected Impacts

Duration	# Current Transactions	Current Rates	Proposed Base Rates	Proj. Revenues
<30m	18,678	\$ 0.50	\$ 0.50	\$ 9,339.00
30m - 1 hr	108,102	\$ 0.50	\$ 1.00	\$ 108,102.00
1 hr	186,930	\$ 1.00	\$ 1.50	\$ 252,355.50
1.5 hrs	48,015	\$ 2.00	\$ 2.50	\$ 114,035.63
2 hrs	111,395	\$ 2.00	\$ 2.50	\$ 264,563.13
2.5 hrs	16,446	\$ 3.50	\$ 4.00	\$ 63,904.46
3 hrs	35,417	\$ 3.50	\$ 4.00	\$ 137,620.34
3.5 hrs	6,978	\$ 5.50	\$ 6.00	\$ 41,106.76
4 hrs	12,584	\$ 5.50	\$ 6.00	\$ 74,131.20
4.5 hrs	3,673	\$ 8.00	\$ 8.50	\$ 30,830.24
5 hrs	6,421	\$ 8.00	\$ 8.50	\$ 53,896.27
5.5 hrs	2,068	\$ 11.00	\$ 12.00	\$ 24,364.80
6 hrs	3,240	\$ 11.00	\$ 12.00	\$ 38,173.09
6.5 hrs	1,560	\$ 14.50	\$ 15.50	\$ 23,846.48
7 hrs	2,367	\$ 14.50	\$ 15.50	\$ 36,182.45
7.5 hrs	1,231	\$ 18.50	\$ 20.00	\$ 24,220.76
8 hrs	5,489	\$ 18.50	\$ 20.00	\$ 107,999.78
8.5 hrs	858	\$ 18.50	\$ 20.00	\$ 16,881.73
9 hrs	795	\$ 18.50	\$ 20.00	\$ 15,642.16
9.5 hrs	287	\$ 18.50	\$ 20.00	\$ 5,646.92
10 hrs	298	\$ 18.50	\$ 20.00	\$ 5,863.35
10.5 hrs	12	\$ 18.50	\$ 20.00	\$ 236.11
11 hrs	2	\$ 18.50	\$ 20.00	\$ 39.35
				\$ 1,448,981.51

This change would constitute a roughly **\$230,000 increase** from last full year available (2022), assuming no growth in transactions. The change would constitute a roughly **\$300,000 increase** from last full year available (2022), assuming average growth rate of 5% in transactions.

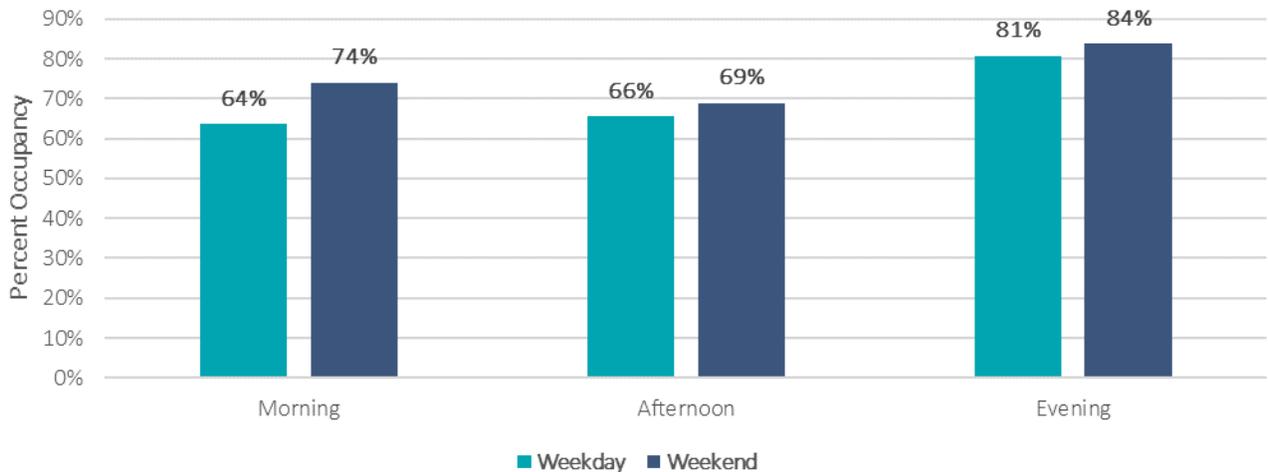
Assumptions include:

- Transaction numbers based on 2022 data (latest full year) provided by MPC.
- 2% demand elasticity for every 10% increase in price.

ACTION C1.3: CONSIDER EXTENDING CHARGING HOURS TO 8 P.M. AT MINIMUM TO ACCOUNT FOR TYPICAL PEAK DEMAND.

Parking occupancy data collected Downtown in March 2023 peaked during the evening, between 7:00 p.m. and 9:00 p.m. **Figure C2** below depicts the rising occupancy levels during both the weekday counts and the weekend counts. This data suggests that the parking system experiences the highest occupancy levels and the most critical demand distribution challenges—where parkers are most likely to struggle with finding a space, and when management is most needed—after paid parking and enforcement hours are already over (5:00 p.m.). This finding is consistent with the land uses Downtown and in Hip Strip, which feature lively and active restaurant, bar and other activity spaces that offer entertainment well into the evening and support a robust nighttime economy. Extending the charging hours would align with this data and support improved parking management, reduced vehicular circulation, and better customer service for Missoula’s nighttime patrons and visitors.

Figure C2: Aggregated Occupancy Levels in Downtown Core, March 2023



Note that this change was not modeled to support a conservative estimate, given the lack of data around transactions during the new charging period.

STRATEGY C2: CONSIDER CHARGING HIGHER RATES ON THE HIGHEST-DEMAND STREETS TO IMPROVE DEMAND DISTRIBUTION AND USER EXPERIENCE.

ACTION C2.1: CONSIDER IMPLEMENTING A PREMIUM RATE ON STREETS WHERE TYPICAL PEAK DEMAND REGULARLY EXCEEDS 90%.

Figure C3 shows recommended rate increases and projected impacts to revenue assuming this tiered rate schedule. Base rates are recommended for areas where typical peak demand, as assessed annually by MPC, is below or at 85%; premium rates are recommended for areas where typical peak demand, as assessed annually by MPC, is above 85%.

It is recommended that MPC consider this tiered rate schedule following one full operational year of the increased rates recommended in **Figure C1**.

**MISSOULA PARKING COMMISSION EXPANSION AND OPTIMIZATION
IMPLEMENTATION AND ACTION PLAN**

Figure C3: Recommended Base and Premium Rates and Projected Impacts

Duration	# Current Transactions	Current Rates	Proposed Base Rates	Proj. Base Revenues	Proposed High Tier Rates	Proj. High Tier Revenues	Proj. Total Revenues
<30m	18678	\$ 0.50	\$ 0.50	\$ 6,257.13	\$ 0.50	\$ 3,081.87	\$ 9,339.00
30m - 1 hr	108102	\$ 0.50	\$ 1.00	\$ 72,428.34	\$ 1.00	\$ 35,673.66	\$ 108,102.00
1 hr	186930	\$ 1.00	\$ 1.50	\$ 166,554.63	\$ 2.00	\$ 111,036.42	\$ 277,591.05
1.5 hrs	48015	\$ 2.00	\$ 2.50	\$ 75,263.51	\$ 3.50	\$ 52,684.46	\$ 127,947.97
2 hrs	111395	\$ 2.00	\$ 2.50	\$ 174,611.66	\$ 3.50	\$ 122,228.16	\$ 296,839.83
2.5 hrs	16446	\$ 3.50	\$ 4.00	\$ 42,176.94	\$ 5.00	\$ 26,360.59	\$ 68,537.53
3 hrs	35417	\$ 3.50	\$ 4.00	\$ 90,829.43	\$ 5.00	\$ 56,768.39	\$ 147,597.82
3.5 hrs	6978	\$ 5.50	\$ 6.00	\$ 27,130.46	\$ 7.00	\$ 15,826.10	\$ 42,956.57
4 hrs	12584	\$ 5.50	\$ 6.00	\$ 48,926.59	\$ 7.00	\$ 28,540.51	\$ 77,467.10
4.5 hrs	3673	\$ 8.00	\$ 8.50	\$ 20,347.96	\$ 10.00	\$ 11,969.39	\$ 32,317.35
5 hrs	6421	\$ 8.00	\$ 8.50	\$ 35,571.54	\$ 10.00	\$ 20,924.43	\$ 56,495.97
5.5 hrs	2068	\$ 11.00	\$ 12.00	\$ 16,080.77	\$ 13.50	\$ 9,045.43	\$ 25,126.20
6 hrs	3240	\$ 11.00	\$ 12.00	\$ 25,194.24	\$ 13.50	\$ 14,171.76	\$ 39,366.00
6.5 hrs	1560	\$ 14.50	\$ 15.50	\$ 15,738.68	\$ 17.00	\$ 8,630.89	\$ 24,369.57
7 hrs	2367	\$ 14.50	\$ 15.50	\$ 23,880.42	\$ 17.00	\$ 13,095.71	\$ 36,976.13
7.5 hrs	1231	\$ 18.50	\$ 20.00	\$ 15,985.70	\$ 22.00	\$ 8,792.13	\$ 24,777.83
8 hrs	5489	\$ 18.50	\$ 20.00	\$ 71,279.86	\$ 22.00	\$ 39,203.92	\$ 110,483.78
8.5 hrs	858	\$ 18.50	\$ 20.00	\$ 11,141.94	\$ 22.00	\$ 6,128.07	\$ 17,270.01
9 hrs	795	\$ 18.50	\$ 20.00	\$ 10,323.83	\$ 22.00	\$ 5,678.10	\$ 16,001.93
9.5 hrs	287	\$ 18.50	\$ 20.00	\$ 3,726.97	\$ 22.00	\$ 2,049.83	\$ 5,776.80
10 hrs	298	\$ 18.50	\$ 20.00	\$ 3,869.81	\$ 22.00	\$ 2,128.40	\$ 5,998.21
10.5 hrs	12	\$ 18.50	\$ 20.00	\$ 155.83	\$ 22.00	\$ 85.71	\$ 241.54
11 hrs	2	\$ 18.50	\$ 20.00	\$ 25.97	\$ 22.00	\$ 14.28	\$ 40.26
				\$ 957,502.21		\$ 594,118.23	\$ 1,551,620.44

This change would constitute a roughly **\$330,000 increase** from last full year available (2022), assuming no growth in transactions. The change would constitute a roughly **\$410,000 increase** from last full year available (2022), assuming average growth rate of 5% in transactions.

Assumptions include:

- Transaction numbers based on 2022 data (latest full year) provided by MPC.
- 2% demand elasticity for every 10% increase in price.
- Premium rates applying to approximately one-third of transactions based on occupancy data collected in existing paid parking area in March 2023.

D: COMMERCIAL/EMPLOYEE PERMITS

Existing Conditions: The parking permit system offers permits in 25 different off-street facilities and some on-street locations, and benefits many. Rates differ based on location and the location’s particular desirability and centrality, demonstrating differences in value among parking facilities. The permit program is a predictable and reliable source of monthly revenue for MPC, with minimal variability compared to short-term transactions.

Critical Weaknesses: Parking is seen as a “sunk cost” for monthly permit holders, which encourages driving and parking as a daily choice and discourages variability in commute patterns. The pricing—especially for some facilities—is likely too low for the market, leading to pass hoarding among many employers. Some parking facilities are chronically underutilized, even when there are long waitlists for permits in that facility. Off-street employee parking permits are offered as a reserved monthly option, which does not align with many people’s needs. Limited equitable options for service workers and other price-sensitive parkers—particularly if on-street paid parking hours are extended. On-street parking long-term/lease parking is offered at very low daily rates (\$2.00 for up to 10 hours of parking) for certain Downtown locations; however, as parking utilization increases, these long-term parking options could conflict with turnover and other management goals.

The Goal: Leverage smart technology and data analysis to improve the permit system’s ability to serve more people in different ways.

Projected Impacts on TDM

Reducing reserved parking allocations for permit parkers and introducing alternatives to monthly permits will encourage commuters to see driving and parking as only one of many travel choices, rather than the obvious one.

Projected Impacts on Equity

These changes will increase and diversify long-term parking options for all kinds of parkers, and price them accordingly, especially with the support of a virtual permit management system, as discussed in Action D1.1.

Projected Impacts on Financial Health

Basic changes recommended, such as increases to pricing and oversell, are projected to increase revenues by roughly \$250,000 in Year 1, with revenue increasing in subsequent years assuming pricing continues to rise at recommended levels. Offering tiered permits may have varying impacts on revenue and should be closely tracked and monitored. An ongoing annual investment of \$150,000 to \$350,000 will be required to improve customer experience and implement more flexibility through a Virtual Permit Management System.

Community Engagement and Communication Needs

While these action steps will impact a smaller group of people, some changes—like reducing reserved parking allocations—will necessitate one-on-one or focus group engagement with those individuals and organizations who currently hold reserved parking to discuss alternative. Further, implementation of these changes will in fact benefit from ongoing community engagement, like surveying of existing permit holders to ascertain preferred tiered permit/pass options.

Strategy and Action Quick Summary

Action	Timeline
D1.1: Procure a Virtual Permit Management System.	12 months

MISSOULA PARKING COMMISSION EXPANSION AND OPTIMIZATION

IMPLEMENTATION AND ACTION PLAN

D1.2: Increase pricing and oversell in all facilities and seek to reduce reserved parking allocations.	12 months
D2.1: Consider tiered permit options in all permit-eligible facilities.	2-3 years
D2.2: Consider percentage-based permit subsidies for certain groups.	2-3 years

STRATEGY D1: MAKE KEY FOUNDATIONAL CHANGES TO OPTIMIZE THE PERMIT SYSTEM BY IMPROVING UTILIZATION AND SERVING MORE PEOPLE.

ACTION D1.1: PROCUREMENT OF A VIRTUAL PERMIT MANAGEMENT SYSTEM.

A virtual permit management system (VPMS) can integrate with the existing parking access and revenue control systems (PARCS) in facilities, or with a newly acquired PARCS. This system would allow for improved data tracking and retention, multiple permit/pass types, and would enable a user interface where people could purchase permits, look at their usage, and get information about parking availability. Procurement of this system would enable future implementation of tiered permit options once other action steps are achieved.

VPMS are typically sold as software, requiring an annual cost in the range of \$150,000 to \$350,000, with high variability depending on the vendor and required features. The following key features are recommended:

- Ability to manage eligibility, restrictions, sales, billing, tracking, holds and suspensions, renewal and expiration of multiple permit types.
- Provision of a customer-facing, digital portal with full access to products, services and information.
- Ability for customers to modify parking options in real-time based on eligibility.
- Ability to provide text, e-mail, or app notifications on parking options, expirations, and other key information to customers.
- Ability for allow MPC staff to make real-time changes to rates or availability by facility.

ACTION D1.2: INCREASE PRICING AND OVERSELL IN ALL FACILITIES AND SEEK TO REDUCE RESERVED PARKING ALLOCATIONS.

The following initial changes are recommended:

- Implement a minimum 10% increase in prices across the board annually for next three years to encourage elasticity.
- Implement an initial 10% increase in oversell with monitoring using existing PARCS and new VPMS.
- Set a goal of maximum 5% reserved parking allocation in any given facility to improve utilization and support latent demand represented by long waitlists.

These changes are projected to increase revenues by roughly \$255,000 in Year 1, \$400,000 in Year 2, and \$560,000 in Year 3. **Figure D1** below depicts these increases based on FY 2022 commercial/employee permit revenue and pricing as a baseline, assuming a 10% across the board increase in monthly pricing implemented each year starting in 2025, and a 10% oversell increase in each facility occurring in 2025.

Figure D1: Projected Commercial/Employee Permit Revenue Increases

	2025	2026	2027
Average Permit Price	\$ 57	\$ 63	\$ 69
Projected Revenues	\$ 1,469,747	\$ 1,616,722	\$ 1,778,394
Increase from FY 2022	\$ 255,080.07	\$ 402,054.78	\$ 563,726.95

STRATEGY D2: CONSIDER ADDITIONAL CHANGES TO FURTHER IMPROVE UTILIZATION, ACCOMMODATE A BROADER RANGE OF USER NEEDS, AND ADVANCE TDM GOALS.

ACTION D2.1: CONSIDER TIERED PERMIT OPTIONS IN ALL PERMIT-ELIGIBLE FACILITIES.

Figure D2 shows a sample rate schedule for tiered permit options, with base and premium rates depending on the location of the facility. Note that this includes a substantial premium (30%) for reserved parking as a disincentive, given the impact of reserved parking on system utilization and ability to serve multiple users.

Figure D2: Sample Tiered Permit Rate Schedule

	Base	Premium
Daily	\$3	\$6
5-Day	\$12	\$30
10-Day	\$25	\$60
15-Day	\$36	\$90
Monthly Unreserved	\$80	\$160
Monthly Reserved	\$105	\$210

Figure D3 shows a categorization of current facilities under base or premium rates, based on existing permit pricing. Facilities with pricing set below \$60 were categorized as base, and facilities with pricing at or above \$60 were categorized as premium.

**MISSOULA PARKING COMMISSION EXPANSION AND OPTIMIZATION
IMPLEMENTATION AND ACTION PLAN**

Figure D3: Recommended Facility Categorization based on Existing Facility Pricing

Bank Street Structure	Premium
Caras Lot	Premium
Central Park Structure	Premium
Clay Street	Base
East Alder Street	Base
East Front Lot	Premium
East Main Street	Premium
East Spruce Street	Base
Engine Lot	Base
Greyhound Lot	Premium
Kiwanis Park Lot	Base
Midtown Lot	Premium
North Ryman Street	Base
Owen Street	Base
Park Place Structure	Premium
Railroad Street	Base
Riverside Lot	Premium
Roam Structure	Premium
Smith Hotel Lot	Base
West Alder Street	Base
West Broadway Street	Base
West Front Lot	Base
West Front Street	Base
Woody Lot	Premium
Woody Street	Base

E: PARKING VIOLATION FINES

Existing Conditions: Enforcement is robust, and Missoulians have an existing understanding of parking violations and generally pay attention to rules and regulations. Rates increase with recurring offenses for some violations, including overstays and non-payment. First-time violators for overstays and non-payments are given a waiver—a more friendly approach for people unfamiliar with the system who made a mistake.

Critical Weaknesses: Even when graduated, fines are too low to discourage repeat offenders. There are no graduated rates for the most impactful violation types, like parking in a bike lane or crosswalk. Somewhat ironically, the low fines are in effect creating a more punitive environment, where violations are more frequent than they would be if fines were set higher and the strategy focused more on penalizing habitual or particularly disruptive violators.

The Goal: Use higher fines as a tool to shift the enforcement focus to habitual violators and build a safer, friendlier environment for everyone.

Projected Impacts on TDM

Recommended changes support other modes of travel by applying a substantial premium to violations that impede other travel choices, like parking in a bus zone, bike lane or crosswalk.

Projected Impacts on Equity

Changes are expected to reduce over-usage or abuse of public resources by certain individuals—especially those who habitually violate rules that protect everyone.

Projected Impacts on Financial Health

Despite the higher fines, this change is projected to constitute a significant **decrease** in revenues generated by fines written due to the significant decrease in violations with fines set high, particularly among frequent violators. However, these changes are very likely to result in increases to paid transactions, and overall improvement of system efficiency as more and more people follow the rules in place. Especially given a collection rate of only 65-70% compared to fines written, revenue generated by paid parking, where fees are paid right away, is preferable.

Community Engagement and Communication Needs

The new fine rates and approach will require support by and approval from City Council. As such, extensive community engagement is required to advance it. Strategies might include emphasizing the new approach’s focus on habitual violators, maintenance of the fine waiver for low-level first-time violations, and the projected reduction in fine revenues expected upon implementation.

Strategy and Action Quick Summary

Action	Timeline
E1.1: Update rate schedule, expanding graduated rates to all standard violations and including premiums for safety violations.	12 months

MISSOULA PARKING COMMISSION EXPANSION AND OPTIMIZATION

IMPLEMENTATION AND ACTION PLAN

STRATEGY E1: UPDATE FINE SCHEDULE TO IMPROVE PARKING SYSTEM EFFICIENCY, COMPLIANCE, AND SAFETY.

ACTION E1.1: UPDATE FINE SCHEDULE, EXPANDING GRADUATED FINES TO ALL STANDARD VIOLATIONS AND INCLUDING PREMIUMS FOR SAFETY VIOLATIONS.

Figure E1 shows recommended new fines for each violation type. The new fine schedule includes:

- Reset within one calendar year (instead of 6 months, as is the current policy)
- First-time violation waiver extended to all violation types except for ADA Parking and Safety Violations, which include parking in a , crosswalk, sidewalk or bike lane.
- Graduated rates applied to all violation types.
- Substantial graduated premiums, including:
 - For safety violations, a 50% increase for the second violation, a 75% increase for the third, a 100% increase for the fourth, and a 50% increase for the fifth.
 - For all other violations, a 50% increase for the third violation, a 75% increase for the fourth, and a 100% increase for the fifth.

Figure E1: Recommended New Fine Schedule and Projected Impacts

Fine Type	Current Fine	New Fine	Proj. Violations	Proj. Revenue	Proj. Collected
Unpaid Parking- First	\$ -	\$ -	14855	\$ -	
Unpaid Parking- Second	\$ 5.00	\$ 30.00	0	\$ -	
Unpaid Parking- Third	\$ 10.00	\$ 45.00	772	\$ 34,749	
Unpaid Parking- Fourth	\$ 15.00	\$ 80.00	207	\$ 16,576	
Unpaid Parking- Fifth	\$ 20.00	\$160.00	0	\$ -	
Overtime Parking- First	\$ -	\$ -	2514	\$ -	
Overtime Parking- Second	\$ 5.00	\$ 30.00	349	\$ 10,475	
Overtime Parking- Third	\$ 10.00	\$ 45.00	244	\$ 10,999	
Overtime Parking- Fourth	\$ 15.00	\$ 80.00	70	\$ 5,587	
Overtime Parking- Fifth	\$ 20.00	\$160.00	0	\$ -	
ADA Parking- No Placard	\$ 100.00	\$100.00	430	\$ 43,000	
Safety Violation- First	\$ 20.00	\$ 45.00	248	\$ 11,138	
Safety Violation- Second	\$ 20.00	\$ 66.00	40	\$ 2,614	
Safety Violation- Third	\$ 20.00	\$ 95.00	20	\$ 1,862	
Safety Violation- Fourth	\$ 20.00	\$190.00	13	\$ 2,508	
Safety Violation- Fifth	\$ 20.00	\$285.00	0	\$ -	
Other Violatons- First	\$ 20.00	\$ -	10494	\$ -	
Other Violations- Second	\$ 20.00	\$ 30.00	1399	\$ 41,976	
Other Violations- Third	\$ 20.00	\$ 45.00	816	\$ 36,729	
Other Violations- Fourth	\$ 20.00	\$ 80.00	466	\$ 37,312	
Other Violations- Fifth	\$ 20.00	\$160.00	0	\$ -	
				\$ 255,523	\$ 166,090

Assumptions include:

- Base violation numbers based on 2022 data (latest full year) provided by MPC.
- 2% violation elasticity for every 10% increase in fine level.

MISSOULA PARKING COMMISSION EXPANSION AND OPTIMIZATION
IMPLEMENTATION AND ACTION PLAN

- No consideration for ADA violations given lack of analysis of State of Montana laws. MPC staff should examine and determine whether premiums and/or graduated fines for this violation type are permitted.

**MISSOULA PARKING COMMISSION EXPANSION AND
OPTIMIZATION IMPLEMENTATION AND ACTION PLAN
CONCLUSION**

This Implementation and Action Plan will result in a more supportive, responsive, and future-forward parking system for the entire Missoula community. Developed in keeping with extensive analysis and rooted in past planning efforts, this Plan recommends changes to expansion protocols, on-street permit management, short-term and long-term parking options, and enforcement approach.

The action steps included in this plan can be implemented over a period of five years in total, although many steps can be completed within 6 months to 1 year. Success will require active participation from the MPC Board and the MPC staff, and ongoing coordination with relevant City departments and institutional partners.

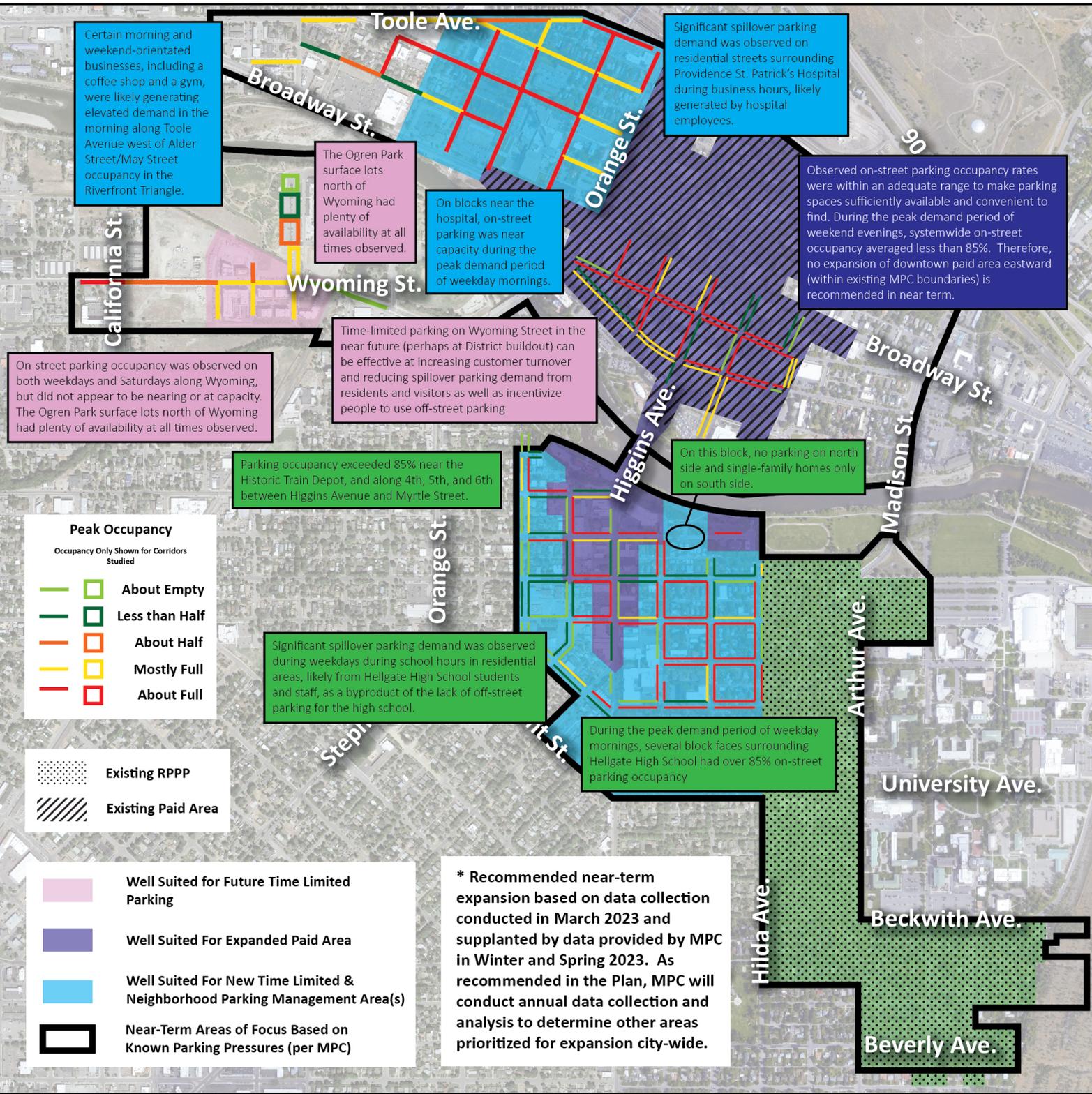
The community must also play a role in advancing the Plan's recommendations. Maintaining an active community presence online through Engage Missoula and in-person through targeted outreach events will enable effective, context-sensitive roll-out of critical items, such as paid parking expansion, permit changes, and updated enforcement practices.

MISSOULA PARKING COMMISSION EXPANSION AND OPTIMIZATION IMPLEMENTATION AND ACTION PLAN

APPENDICES

- Appendix A: Recommended Near-Term Expansion and Supporting Data and Findings
- Appendix B: On-Street Short-Term Parking Pricing Comparison Table
- Appendix C: Existing Conditions Executive Summary
- Appendix D: Example Practices

**APPENDIX A: RECOMMENDED NEAR-TERM EXPANSION AND
SUPPORTING DATA AND FINDINGS**



MISSOULA MANAGED PARKING EXPANSION & OPTIMIZATION STUDY



WALKER
CONSULTANTS

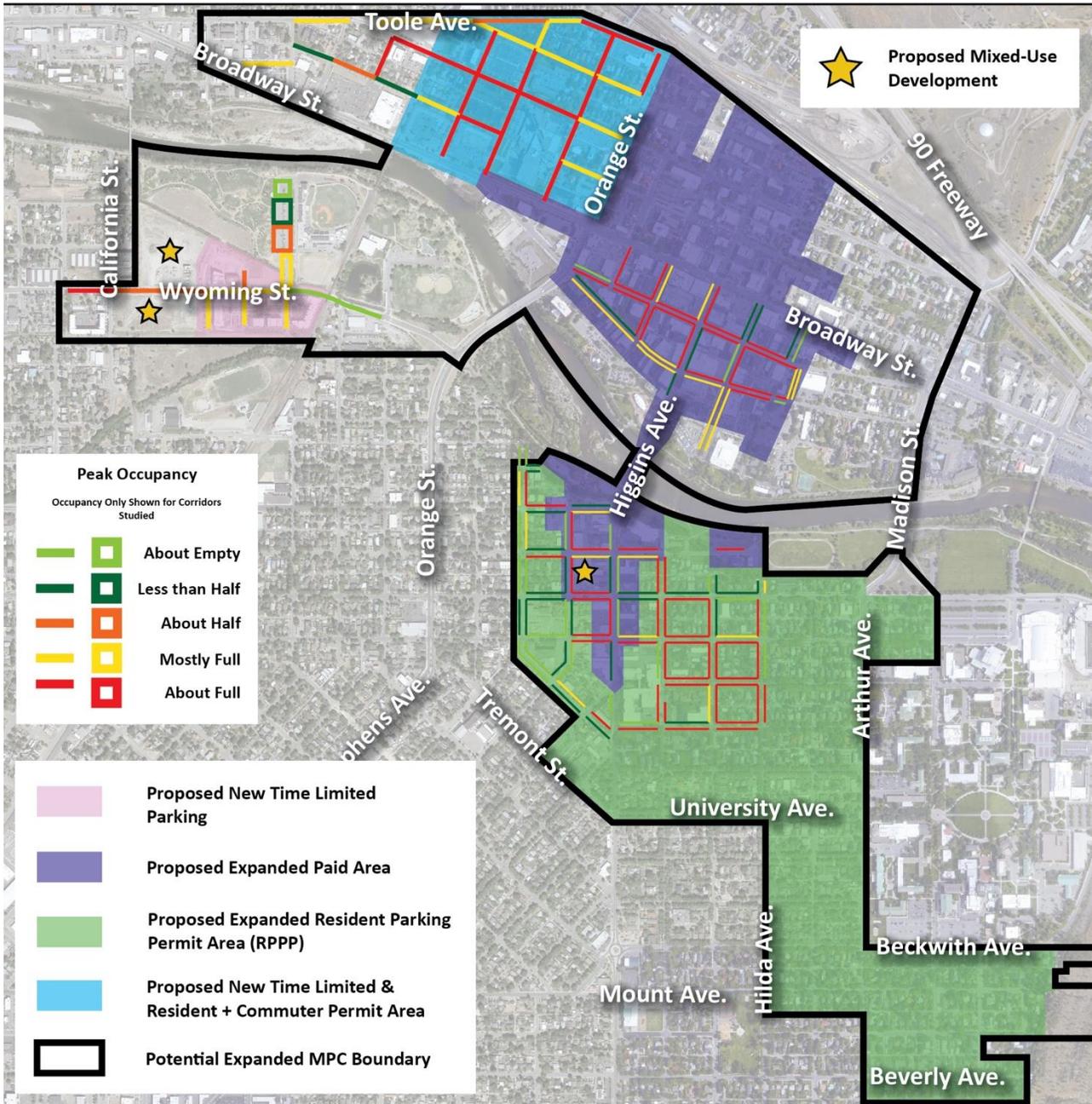
PROPOSED NEAR-TERM AREAS OF FOCUS

WITH HEAT MAP DATA OVERLAY (PEAK OBSERVED)*



Summary of Findings

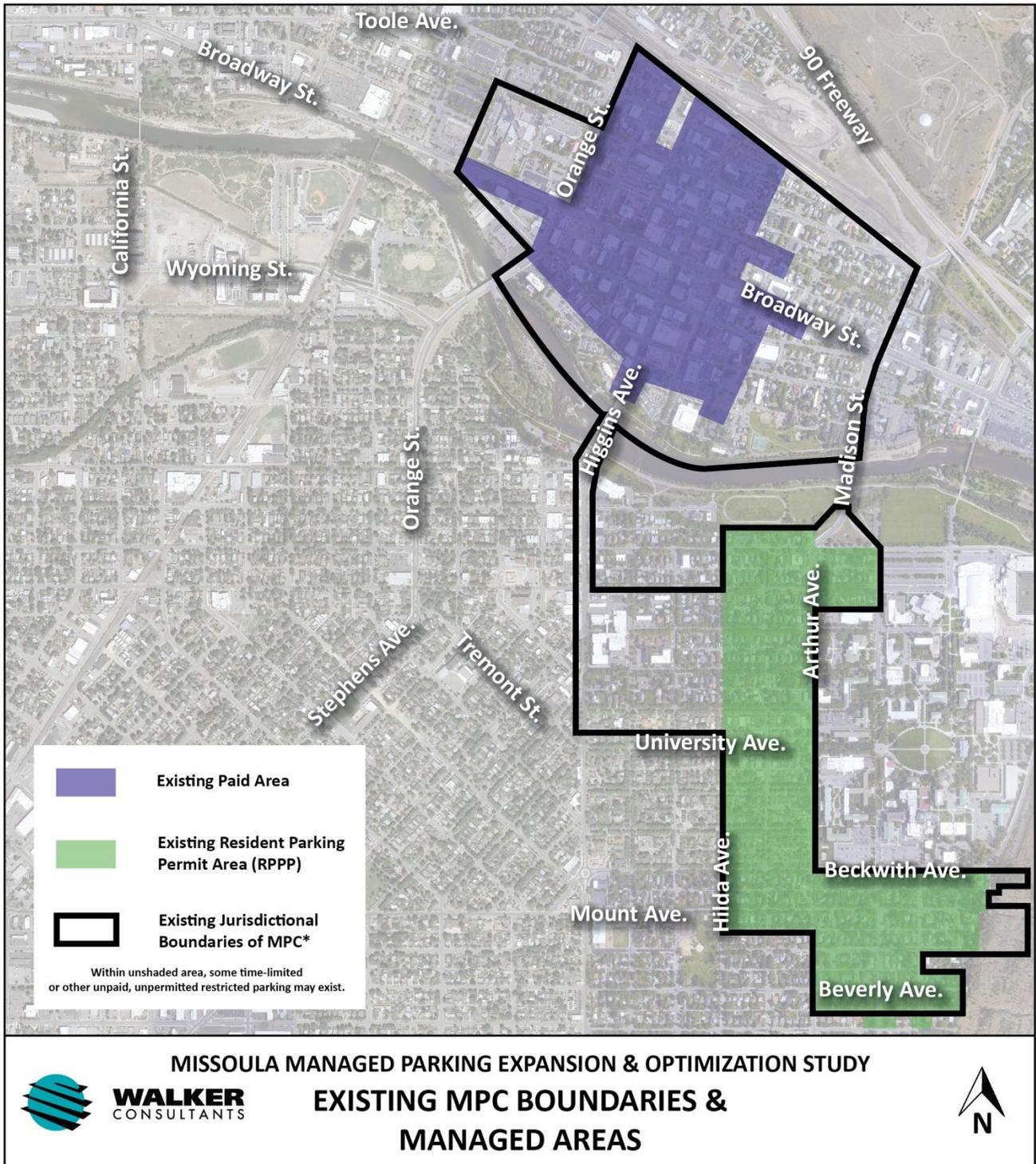
Based on our analysis, the map below shows potential boundary expansion opportunities for the MPC that may be appropriate, feasible, or warranted in the near term, as well as the management strategies that may be most appropriate or applicable to address some of the parking challenges observed within each potential area of expansion.



Introduction

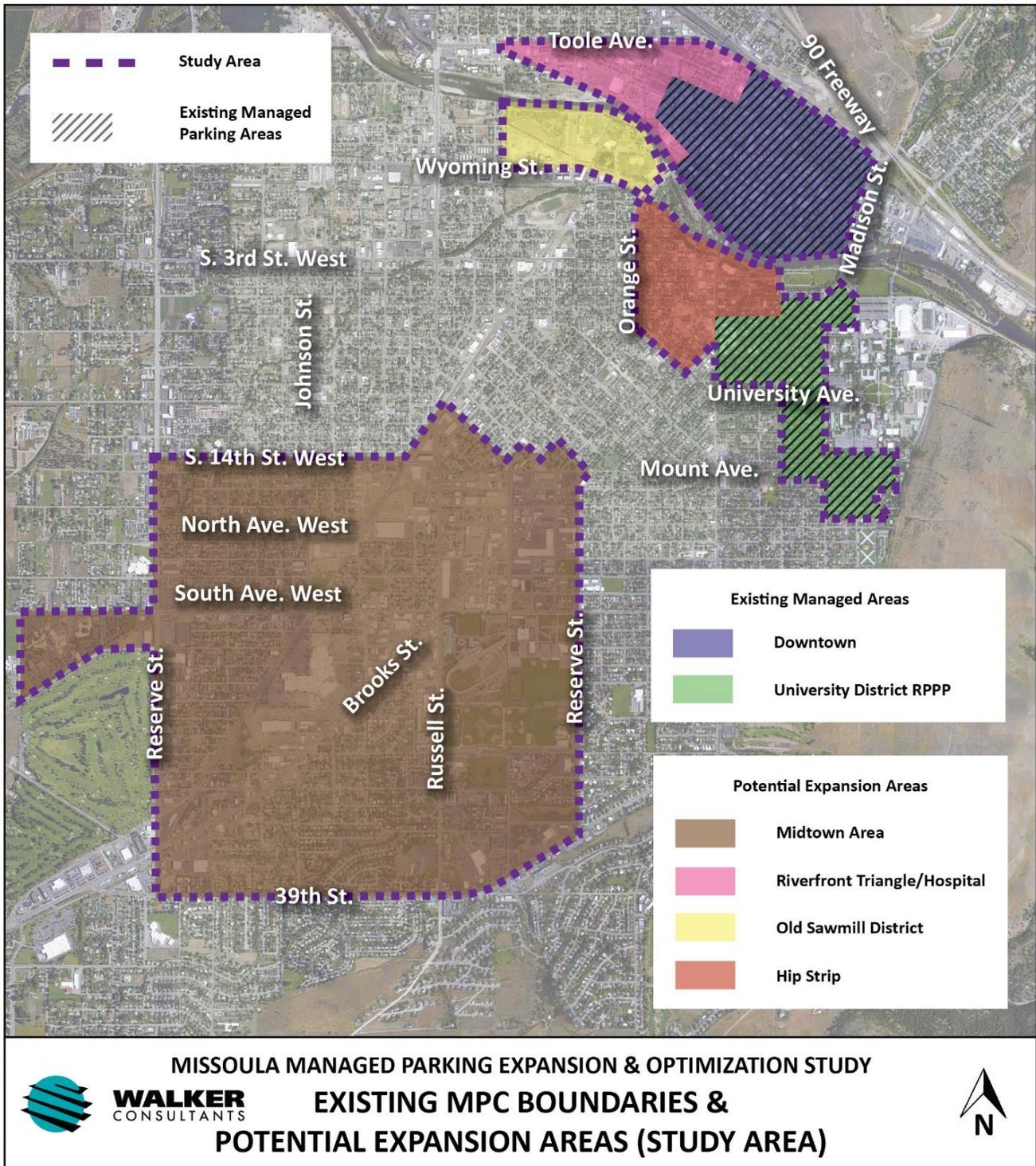
Figure 1 below shows the existing boundaries of the MPC, along with shaded areas showing where paid and residential parking permit (RPPP) zones are currently in place and in effect.

Figure 1. Existing MPC Boundaries & Managed Parking Zones



In Spring 2023, Walker Consultants (“Walker”) conducted a study of existing parking conditions in some key selected areas. **Figure 2** below shows existing managed areas, along with the potential expansion areas that were considered for study as part of the existing conditions evaluation.

Figure 2. Areas Included or Considered in Study Area for 2023 Parking Study



WALKER
CONSULTANTS

MISSOULA MANAGED PARKING EXPANSION & OPTIMIZATION STUDY

EXISTING MPC BOUNDARIES & POTENTIAL EXPANSION AREAS (STUDY AREA)



After considering the analysis conducted and results determined from Walker’s Spring 2023 evaluation of existing parking conditions within certain key areas that were selected for study, Walker has determined that additional parking management strategies and/or more active parking enforcement may be appropriate or warranted in some of those areas.

Criteria for Potential Inclusion within MPC

With the key study areas, Walker considered a number of factors or criteria in determining what areas may be candidates for incorporation into the MPC boundaries and what additional parking management strategies may be appropriate. These factors include:

- Contiguity of the MPC boundary and managed area(s).
 - Would an area proposed for expansion be contiguous with the existing MPC?
 - Would a proposed expansion have the effect of streamlining and simplifying the boundary?
 - If not, would a proposed expansion represent a logical and reasonable expansion of the boundary according to existing streets, landmarks, or other natural edges?
- Contiguity of managed areas within the MPC.
 - Would an area proposed for additional management strategies be contiguous with an existing managed area within the MPC?
 - Would a proposed expansion have the effect of streamlining and simplifying the boundaries and enforcement area?
 - If not, would a proposed expansion represent a logical and reasonable expansion of the boundary according to existing streets, landmarks, or other natural edges?
- Whether observed or estimated on-street parking occupancy exceeded 75% across several block faces in the study during a typical weekday or weekend.
 - If so, Walker asked the following questions:
 - Was the high occupancy the result of spillover parking from user group(s) not directly associated with the land use(s) adjacent to each respective block face with high parking occupancy?
 - Do multiple user groups “compete” for parking resources on a regular basis?
 - Would managed parking potentially help to increase on-street parking turnover in commercial-orientated areas where high turnover may be desirable?
 - Would managed parking potentially help to increase the chances that residents are able to use on-street parking in front of their places, especially in areas where off-street residential parking may be lacking?
- Current and future redevelopment projects resulting in or likely to result in increased density, if known.
 - The likelihood that a certain area will experience significant densification and diversification in land use(s) and development in the near term or mid term and that such developments would effectively need or be expected, in effect, to require existing on-street parking resources.
- Would the benefits of managed or paid parking be reasonably likely to adequately offset the costs and/or justify the expense and effort required to implement it and conduct enforcement?
 - Would the area, in Walker’s opinion, be likely to generate adequate revenue from managed parking and/or active enforcement?

- Is it feasible or likely that managed parking would achieve a benefit in terms of more effectively and efficiently allocating and distributing parking demand and helping to increase the chances that parking is being used by those who need it the most?

Note that, when possible, Walker overlaid quantitative data collected to evaluate potential areas for expansion. However, detailed parking counts were not conducted across the entire study area, per the scope of work specified as part of the evaluation of the existing conditions. Detailed parking inventory and occupancy counts were only obtained within some of the Hip Strip and downtown, while general parking conditions were evaluated within the Riverfront Triangle and the Sawmill District. A high-level survey of the Midtown area was conducted to discover any areas that visually appeared to have potential or actual on-street parking issues or challenges.

Criteria for Determining Management Strategies

Once a particular area was deemed a potential candidate for inclusion into the boundaries of the MPC, Walker then further considered what management strategies may be or would be applicable or most appropriate to use for a given area proposed for inclusion with the MPC in the short term.

The following list describes management strategies considered:

- **Expanded paid parking.** For this management strategy, Walker considered whether the on-street corridor or corridors considered abutted mixed-use or commercial, Main-Street-style shopping areas, whether high parking occupancy was observed during at least one observation period, whether the area is targeted for significant growth or change (or whether significant growth or change is expected in the near to mid term), whether more frequent turnover may be desirable for businesses along the corridor, and whether there is a likelihood that employees or other long-term parkers not associated with adjacent businesses typically park in spaces that may be intended for use by customers or visitors. Based on those criteria, Walker then considered whether sufficient meter revenue potential may exist.
- **Expanded resident permit area.** For this management strategy, Walker considered whether the on-street corridor or corridors considered abutted residential areas, whether high parking occupancy was observed during at least one observation period, and whether user groups other than residents were likely using such parking on a regular basis, potentially crowding out the ability for residents to park during peak hours.
- **Commuter/resident permit area.** For this management strategy, Walker considered whether the on-street corridor or corridors considered abutted mixed or exclusively residential areas, whether high parking occupancy was observed during at least one observation period, and whether user groups other than residents were likely using such parking on a regular basis, crowding out the ability for residents to park during peak hours. However, unlike with the previous strategy, Walker also considered whether there was or may potentially be an immediate and pressing need for key user groups other than residents to be accommodated by available on-street parking, as well as whether there was a compelling need to consider the needs of a limited number of short-term parkers.
- **Time limited parking.** For this management strategy, Walker considered whether the on-street corridor or corridors considered abutted mixed-use or commercial, Main-Street-style shopping areas, whether high parking occupancy was observed during at least one observation period, and whether the area is targeted for significant growth or change (or whether significant growth or change is expected in the near to mid term), where more frequent turnover may be desirable for businesses along the corridor. This strategy differs from expanded paid parking in that an area may not be dense enough, or feature parking

occupancy high enough, to where sufficient meter revenue potential may exist, but there still may be a need for some parking management (e.g., time limits) to encourage turnover and discourage employee parking in valuable on-street parking spaces.

Note that not all areas within the potential expanded MPC boundary described herein are proposed for any management strategies at this time. Also, Walker was unable to evaluate areas for potential expansion, and which management strategies may be most appropriate, for which no formal or informal occupancy data or very limited data was collected, such as Midtown.

However, it is possible that additional areas of potential expansion not described herein, along with expanded and or new particular management strategies for such areas, may be feasible or desirable in the future if certain key performance indicators are met. These are elaborated on later in this memo.

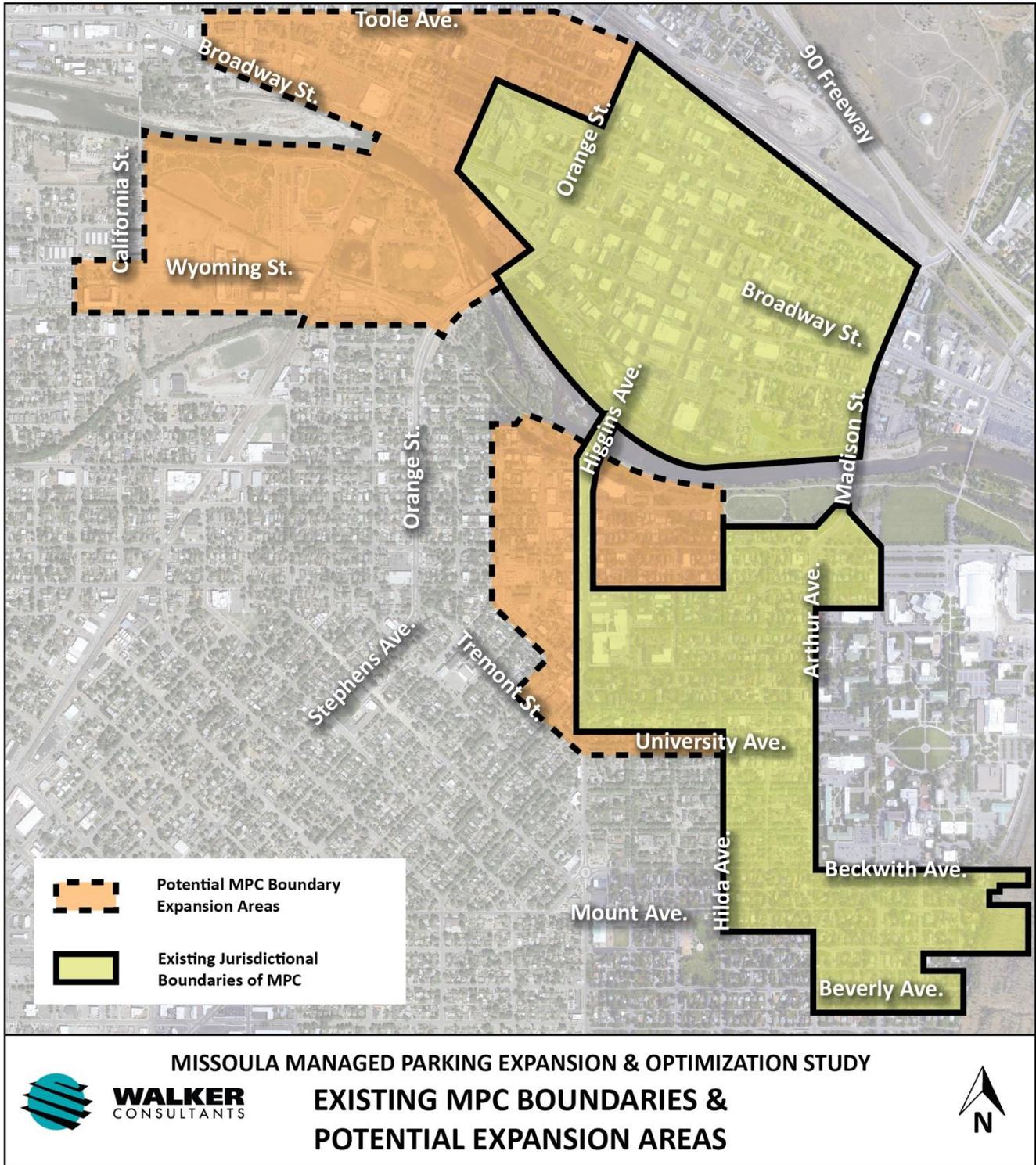
For areas shown within the potential expansion area, but not proposed for any additional management strategies at this time, it should be noted that the boundary expansion would make it much easier to implement new or expanded parking management strategies in the future if/when warranted or needed within such areas.

Near to Mid Term

Potential MPC Expansion Areas

Figure 3 shows the potential expansion areas for the MPC that, after evaluating the study area based on the criteria described previously, may be appropriate and feasible in the near term or mid term, as determined by Walker.

Figure 3. Potential Expansion Areas for MPC Jurisdictional Boundary in Near Term or Mid Term

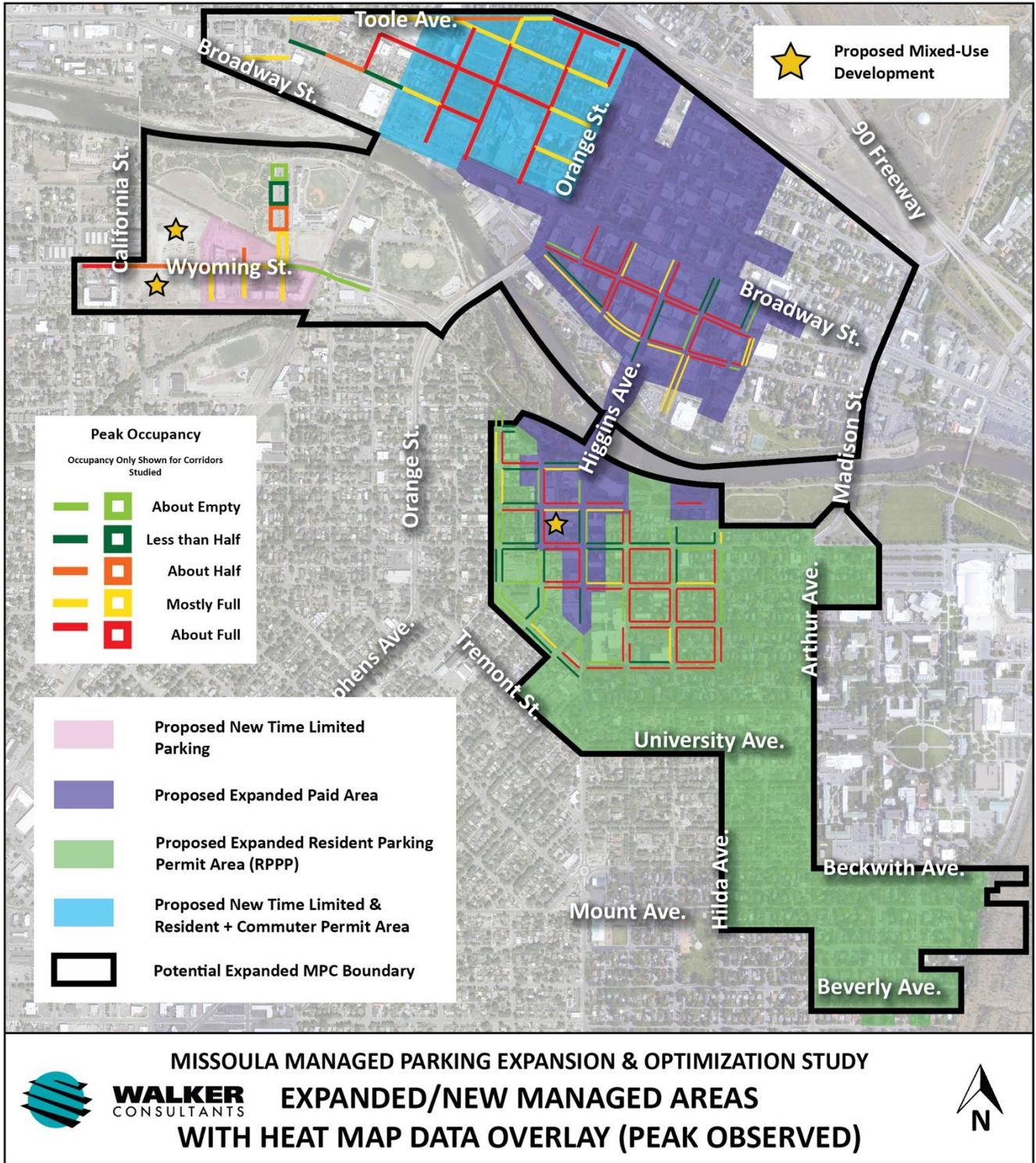


Potential Management Strategies by Key Area

Figure 4 below shows the potential expanded jurisdictional boundary for the MPC along with shaded areas that correspond to particular management strategies that may be feasible or appropriate within the expanded area for areas not already under or subject to a management strategy.

For reference, parking occupancy heat map data collected during Walker’s parking study is overlaid onto the map. A composite of peak observed parking occupancy (selected areas in downtown and the Hip Strip) or general occupancy conditions (Sawmill District, Riverfront Triangle) as it was observed for each individual sub-area studied is shown.

Figure 4. Proposed Short- or Mid-Term Management Strategies within Potential Expanded MPC Boundaries



Hip Strip

In the parking demand analysis of the Hip Strip, very high parking demand was observed during weekdays during school hours in residential areas, likely a result of spillover parking demand from Hellgate High School students and staff, as a byproduct of the lack of off-street parking for the high school. During the peak demand period of weekday mornings, several block faces surrounding Hellgate High School had over 85% on-street parking occupancy, as shown in the figure above.

During the evening times and on weekends, on-street parking occupancy was high near the Historic Train Depot, and along 4th, 5th, and 6th between Higgins Avenue and Myrtle Street, and along Higgins Ave.

Finally, at least one known mid-density, mixed-use project has been proposed for the area¹ (as shown in the above figure), and more may be in the works. Therefore, parking needs within the area, and therefore, parking supply crunches, are only likely to intensify in the near future.

For these reasons, Walker has determined that a combination of residential permit and paid parking areas in this neighborhood may be appropriate.

As shown above, paid parking would extend along Higgins, encompassing a half-block on each side of all cross-streets, as well as along 3rd west of Higgins for 1.5 blocks, along Myrtle for two blocks, and along 4th for 2 blocks on either side of Higgins and between Gerald and Hilda, in order to capture observed high parking demand related to adjacent park and trail uses.

Within the remainder of the potential expanded boundaries, an extended resident permit parking area may be most appropriate. This area would help to manage spillover parking demand from both those looking to park outside of paid zones as well as from high school parkers, in addition to other spillover from the existing RPPP and from the University of Montana, that may not be currently fully captured by the existing RPPP area.

Note that, for an extended resident permit area, specific policies and restrictions would have to be evaluated. The parking status quo in the neighborhood has existed for a very long time, as Hellgate High School does not have significant off-street parking available for either students or staff/faculty. It is likely that any RPPP program put into place would have to consider the needs of staff, faculty, and students as well as the needs of residents. **Potentially, the best solution may be a sort of combination student/faculty commuter/resident permit parking program**, similar to the one proposed as a potential solution for the Riverfront Triangle, discussed in more detail later in this memo.

Under a hybrid program, Walker would recommend that student/staff commuter permit costs be set low to begin with. Much of the value of such a program would be to obtain quantitative data about how many students and staff are using and need to use on-street parking in the neighborhood.

It is likely that two or more different sets of rules and restrictions may apply for the existing University RPPP versus the extended or additional RPPP area that would be a function of the individual needs and parking spillover dynamics occurring. For instance, the RPPP in and around Hellgate may not need to be in effect during the summer months and may require a shorter period during the day that permit restrictions are in effect. The RPPP zone east of Myrtle, however, may allow 1 or 2 hours of parking once per day by non-permit holders. Because of

¹ A mixed-use development with ground-floor retail/restaurant uses and 100 residential units is planned for Myrtle Street between 4th and 5th Streets.

this, it may be the case that the RPPP zone shown above should be or would be subdivided into multiple different and distinct organized RPPP areas.

Finally, it should be noted that Walker's occupancy counts did not extend all the way to Orange St. However, due to the fact that single-family homes predominate west of Hazel, and that observed parking occupancy did not appear to be elevated, as a function of spillover parking, west of Hazel, it is unlikely that managed parking or more active enforcement is needed or desirable. Orange St. itself is a major arterial with no on-street parking and auto-orientated businesses predominating.

Riverfront Triangle

In the parking demand analysis of Riverfront Triangle, significant spillover parking demand was observed on residential streets surrounding Providence St. Patrick's Hospital during business hours, likely generated by hospital employees and patients. On blocks near the hospital, on-street parking was near capacity during the peak demand period of weekday mornings.

Certain morning and weekend-orientated businesses, including a coffee shop and a gym, were also likely generating elevated demand in the morning along Toole Avenue west of Alder Street/May Street occupancy in the Riverfront Triangle. On-street parking on Toole Avenue ranged from half full to near capacity during the peak demand period of weekend mornings.

As a result of these observed conditions, a new hybrid management strategy may be an appropriate option for much of the Riverfront Triangle. Under this strategy, both residents and commuters would be eligible for permits enabling day parking within the area, which would otherwise be subject to 2-hour parking only.

Such a strategy could make it easier for residents to park in front of their residences when they need to while also still allowing for longer-term parkers like hospital staff and shorter-term parkers like patients to park on-street when they need to. As with the Hip Strip and Hellgate High School, the parking status quo in and around the hospital has likely been mostly unchanged for a long time, as the hospital appears to lack adequate off-street parking resources, though it may have worsened over the last several years as a function of hospital growth.

Walker would recommend that permit prices be set low, in order to generate revenue that could offset the cost of increased parking enforcement in the potential area. In the context of this area, much of the value would be obtained on the form of quantitative data about how many staff and patients are using on-street parking in the neighborhood, as well as how many residents were getting crowded out prior to implementation of such a program.

In the short term, such a program, if implemented, should not be used punitively to mitigate parking demand resulting from hospital staff. The specifics of management strategies can be reevaluated in the future in conjunction with a plan or plans to provide employees with adequate alternative parking or transportation resources and solutions.

As shown in the figure above, such an area would extend to the railroad tracks between May and Nora Streets in order to fully encompass the areas of high/spillover parking demand observed.

Sawmill District

The Sawmill District is an in-progress mid-density, mixed-use development intended in part to serve the needs of off-campus university students and other active, young adults. As of this writing, much of the site's planned

mixed-use buildings and facilities have been constructed and are completed east of Moose Creek Trail, while parcels between Moose Creek Trail and California Street are under construction or yet to begin construction.

During general parking condition observations conducted in the Sawmill District, high on-street parking occupancy was observed on both weekdays and Saturdays along Wyoming and some of the cross-streets though the areas for which construction and development have been completed, though for the most part parking did not appear to be nearing or at capacity. The Ogren Park surface lots north of Wyoming had plenty of availability at all times observed.

As a result of high parking occupancy observed on selected street segments, as well as based on the expectation that the site will continue to develop under a mixed-use, mid-density context, parts of the Sawmill District may be appropriate or suitable for inclusion within the MPC's boundaries. In that case, it is Walker's opinion that some time limited parking may be appropriate in the near term along segments of Wyoming and associated cross-streets where development has occurred, and buildings are In use and occupied.

Downtown

Based on Walker's limited on-street parking occupancy counts, it is possible or feasible that an expansion eastward of the paid parking area may be warranted. Alternatively, an alternative management strategy such as an RPPP or time limited parking adjacent to the existing paid area as defined may be warranted or feasible.

However, due to limitations in the quantity and geographical extend of occupancy data collected downtown, Walker is unable to further analyze opportunities for additional or expanded management strategies in downtown immediately east of the existing paid area at this time.

It should be noted that the jurisdictional boundary of the MPC already extends well beyond the existing paid area to the west. Therefore, the boundary would not have to be modified for the MPC to consider or implement alternative or additional management strategies in the area. Walker would suggest, if the MPC were to consider such strategies in any time horizon, that it consider some key performance indicators that may help the Commission to determine when or if strategies may be warranted, feasible, or desired.

Midtown

While Walker did not conduct formal or general parking occupancy counts in Midtown, it did survey the area looking for potential parking issues or challenges that may suggest that more active parking management or enforcement may be warranted or needed.

In short, Walker was unable to find or make note of any such areas, even along key corridors and in key areas that were identified as potential problem areas. However, as noted in the Existing Conditions report, field work was not conducted during a football game or during a large event such as the County Fair. Walker acknowledges that atypical parking demand loads may result as a function of these events during a typical year. However, Walker typically does not recommend or suggest active management for areas with atypical or temporary parking demand crunches.

Due to the fact that parking within Midtown does not appear to be a challenge at this time on any regular or typical basis, and that no corridors or areas were discovered that meet any or most of the criteria outlined previously, it is Walker's opinion that MPC expansion into the Midtown area is not warranted or needed at this time

Mid to Long Term

A summary of certain items that the MPC should consider in the longer term for managed parking within the Hip Strip and other areas discussed above is provided below. A more detailed description of certain best practices, metrics, and key performance indicators that the MPC should consider in the long term for implementation of managed parking strategies is provided in the next section.

Hip Strip

In the long-term, it is likely that many new developments will be proposed in and around the Hip Strip, including mixed-use and commercial development along Higgins Avenue and mixed-use development, residential development, and expansion of trails in the waterfront area (between Russel Street and Silver Park along the Clark Fork River). Some of these developments may occur outside of the potential expanded jurisdictional boundary described herein.

As development occurs, MPC should include the areas in which new development is occurring in future parking demand studies. If observed parking demand were to exceed 75% during peak hours on multiple blocks outside the boundary, the MPC jurisdictional boundary could potentially be expanded further to include those blocks in the future, such as the blocks west of Hazel to Orange St.

Also, when or if mixed-use or commercial development expands beyond the Higgins corridor and other areas where it currently exists, those areas can be evaluated for the expansion of the paid parking area.

Finally, in the event that spillover parking activity from the high school and/or from the university is reduced or eliminated (for instance, if new off-street parking facilities are constructed or if Hellgate High School is repurposed or closed), then the MPC should consider reevaluation to determine whether or not existing/future managed parking strategies are still warranted or necessary.

Riverfront Triangle

As the Riverfront Triangle continues to change and densify, and if the hospital continues to expand, MPC can continue to assess parking demand in the Riverfront triangle to evaluate the effectiveness of the existing or proposed interventions and determine whether additional interventions are or may be needed. Such interventions may include, but not be limited to, expanding the permit area further west, expanding the paid area west of Orange, capping the number of commuter and/or residential permits issued, increasing permit fees, and transportation demand management strategies, such as incentives for hospital employees to use alternative modes of transportation.

Also, in the event that the hospital constructs a parking structure to better accommodate its parking needs, the City may wish to evaluate whether or not management strategies are still needed or warranted.

Sawmill District

In the mid- to long-term, especially as development continues in the Sawmill district (mixed-use, office, and residential development), MPC can continue to assess parking demand in the Riverfront triangle to evaluate the effectiveness of the interventions and determine whether other interventions are needed. MPC may consider implementing shorter time restrictions and/or paid parking on Wyoming Street to increase turnover of customers.

Downtown

It is likely that the downtown core will continue to densify in the future. Also, it is likely that peripheral neighborhoods immediately north, west, and east of Downtown will continue to grow and infill in the long-term, including the Railyard District, West Broadway area, the East Broadway Area, and the Madison Street Area.

In these growing neighborhoods and districts adjacent to the downtown core, as development occurs, MPC should include these in future parking demand studies. If observed parking demand were to exceed 75% during peak hours on multiple blocks, paid parking or other management strategies could be expanded into those areas, depending on the specific needs and land use mix. If such development occurs outside the existing or potential expanded boundary, and observed parking demand were to reach or exceed 75% during peak times, the MPC jurisdictional boundary could be expanded to include such blocks in the future.

Midtown

It is likely that land use development patterns in Midtown will continue to remain low-density and auto-orientated well into the foreseeable future. In addition, for any mid-density, mixed-use or transit-orientated developments that may be constructed within the area, it is likely that such developments would be “self-parked,” meaning that most or all parking needs would be accommodated by private parking on-site.

However, if large-scale infill redevelopment or new development were to occur on a significant scale (multiple standard blocks in size) with parking intended to be shared and provided as a public asset, it is possible that such a development may be a candidate for inclusion within the MPC as a managed parking area.

In such a case, Walker would recommend that the site be evaluated according to the best practices and key performance indicators described below. Walker cautions that such a site would likely be non-contiguous with any existing or future MPC boundaries, separated by a wide area. Therefore, the operation and active enforcement within such an area may be cost prohibitive, with the costs outweighing revenue potential.

Best Practices for Expanding Parking Management

Neighborhood-specific parking solutions, such as the University District RPPP, are important features of a parking and access strategy that help preserve neighborhood character and promote safety and efficiency.

Neighborhood-specific parking solutions can help shape outcomes which meet the unique needs of specific

character areas and can include tailored use and time restrictions, prioritization of certain travel choices, and other initiatives.

In this section, Walker discusses general guidelines and best practices for expanding parking management to areas outside the existing managed areas in Missoula.

By identifying metrics and indicators for the type of parking management to implement proactively, City staff can more quickly respond to community needs and leverage potential opportunities to optimize community resources. Also, they can promote predictability and transparency of neighborhood parking regulations, which can suffer and fall victim to stagnation and perception bias when reviewed on a case-by-case basis, ultimately hurting public opinion and trust in staff and leadership.

In all cases, Walker strongly recommends that the views of the community, and the community or neighborhood's overall appetite and desire for additional parking management, be considered carefully when evaluating any proposed changes, additions, or subtractions to the managed parking system.

Implementing Parking Management in Additional Areas

Clear and quantitative metrics for establishing, expanding, and maintaining managed parking in areas outside of Downtown, combined with effective communication, can help the community understand how the city makes decisions about neighborhood parking management. Eligibility and prioritization to actively manage parking should be based on the unique characteristics of each neighborhood, such as land use, parking supply and utilization, surrounding trip generators, and multimodal access.

- **Establish neighborhoods/areas:** Determine boundaries of neighborhoods and district areas citywide. These neighborhood or area definitions and boundaries could be driven by the boundaries of existing neighborhood parking permit zones or other managed areas, official neighborhoods, area plan boundaries, zone districts, or walking distance level of service to key destinations, such as major trailheads.
- **Data collection:** Collect data for the following:
 - Primary metrics to use as key indicators for establishing newly managed areas:
 - Typical Peak Hour Parking Occupancy: Typical peak hour parking occupancy within the neighborhood or zone boundary.
 - New Development and Trip Generation: Projected new development within the zone boundary or proximate to the zone boundary, and the peak hour trip generation projected for the new development.
 - Secondary metrics to use to evaluate, expand, or adjust existing zones.
 - Length of Stay: The cumulative average length of a parking session within the zone boundary.
 - Violation Data: The cumulative average number of parking violations pertaining to length of stay within the zone boundary.
 - Access Score: The access score within the zone boundary. This score should be determined by the level of transit and active transportation amenities within the zone. For continuity and ease of interpretation by the community, the city could incorporate the ranges used by Walk Score/Bike Score/Transit Score with some updates, as follows:

- 00-24: Dependent on cars, with nearly all local trips requiring a car.
 - 25-49: Dependent on cars, with most local trips requiring a car.
 - 50-69: Some local trips can be accomplished on a bike, on foot, or using transit.
 - 70-89: Most local trips can be accomplished on a bike, on foot, or using transit.
 - 90-100: Local trips do not require a car at all.
- **Establish KPIs:** Establish Key Performance Indicators (KPIs) for the primary metric to determine parking management eligibility and type of management that may be warranted or appropriate.
 - Typical Peak Hour Parking Occupancy: 70% is an appropriate base parking occupancy to begin managing parking in an area before adequacy issues arise. However, this must cover a reasonable geographic area that supports allocation of public parking resources, including staff time and investments in infrastructure for administration and enforcement.
 - New Development and Trip Generation: A new development projected to generate 200 trips at the peak hour, or more, is an appropriate base KPI.
 - Classify Areas: Classify each area or neighborhood based on determined KPI(s). Publish a publicly available, online map showing each zone’s classification, with an option for address look-up.
 - Apply KPI-Based Management and Subsidies: Establish parking management options and available subsidies based on KPI(s).
 - Average duration of stay exceeding posted time limits in a currently managed but unpaid zone should be considered for paid parking to further encourage the desired level of turnover.
 - Managed areas experiencing localized occupancies of 85% or greater, even if the average length of stay is below posted time limits, should be considered for demand-based pricing to distribute parking demands more effectively.
 - Managed areas with overall parking demands exceeding 75% for at least 6 hours or more per day, that are not attributable to a single land use or otherwise eligible for a neighborhood parking permit zone, should be considered for additional public parking supplies. Additional public parking supplies are discussed more in its section below.
 - Offer percentage-based subsidies on parking and transportation fees for areas with access scores indicating the need for a car for all or most local trips. Additionally, offer percentage-based subsidies for qualifying low-income households. Based on score ranges as provided by the Walk Score platform, areas where locations score at or below 50 should be considered for these subsidies, with percentage subsidies potentially varying based on how low the aggregate Walk Score is for a given area.
- **Monitor and adjust:** Make adjustments to zone classification(s), if needed, on a regularly scheduled, annual basis with publicly accessible reporting.

Implementing Parking Permit Programs in Additional Areas

Walker recommends this policy sparingly, as on-street parking is a public resource and not a right of ownership of adjacent parcels (in this case, by residents). In some cases, generally where historical land use development has created a hardship on residents, such as not having on-site, private parking available, implementation of NPPs is supported to improve safety or access for residents and their guests. This is also true where historical land use development has created hardships amongst non-residential land uses that exist fully within otherwise residential

areas, and parkers associated with those uses have no alternatives. Both conditions are likely occurring within the existing University RPPP and within the Hip Strip near Hellgate High School.

With any RPPP, Walker recommends that the zone incorporate flexibility in accommodating visitor parking in zones with various levels of needed management. For example, residential areas near Downtown may be best served by hourly time limits to facilitate residential guests. In contrast, a residential area that experiences excessive parking loads most of the time may be better served by paid parking for non-residents, in order to still maintain access by non-residents while encouraging alternative modes of access.

Before considering the implementation of a new neighborhood parking permit zone, the City should verify that all of the following criteria are met:

- **Area size.** The proposed permit zone should be at a minimum:
 - 15 contiguous block segments, segments including both sides of a street between intersections, and
 - Block segments running on parallel streets or avenues include the cross street or avenue segments within the contiguous segments so that unpermitted segments are not imbedded within a zone, or
 - 10 contiguous blocks, blocks including all four sides, or
 - 6,000 linear feet of contiguous curb space.
- **Lack of parking.** On-street parking during the daytime should be at or above 70% occupancy for at least three days per week, no less than six months per year.
 - Manual or license plate reader (LPR)-based parking occupancy counts should be performed on non-holiday days.
 - One count should be performed during the day and a second count should be performed during the late night or early morning (11 PM – 4 AM).
 - To establish a sufficient data sample size for this purpose, data should be collected on at least 3 weekdays (excluding Monday) and one weekend day (Friday or Saturday) during a selected non-holiday week during three non-consecutive months, one during the peak season and one during a traditionally less busy season.
- **Parking shortage.** Establish that an observed parking shortage is not a result of residents within the zone. At least 25% of the vehicles parked in on-street spaces have no clear connection to properties within the zone.
 - In order to determine the ratio of parked vehicles with no clear connection to the properties within the zone to parked vehicles that likely belong to residents or properties within the zone, the alphanumeric license plate number should be recorded for all vehicles parked during occupancy counts.
 - The 25% threshold would be met if 25% or more of the license plate numbers recorded during the daytime count are not found on vehicles parked during the late evening/early morning count.

Neighborhood parking permits shall be priced so that each zone achieves cost recovery for its administration and enforcement. Cost recovery will be defined as the annual administrative labor and supplies incurred by the City on behalf of the zone to provide the service in addition to any capital investments in signage and infrastructure necessary, assuming a three-year return on the investment.

Capital investments and equipment shared between zones will assume a pro-rated, market-value use of the equipment based on its projected useful life. Labor associated with administration and enforcement shall be projected based on personnel costs attributable to the zone.

**APPENDIX B: ON-STREET SHORT-TERM PARKING PRICING
COMPARISON TABLE**

City	Missoula, MT		Seattle, WA ¹		San Francisco, CA ²		Sacramento, CA ³		Boise, ID ⁴		Helena, MT		Denver, CO	Aspen, CO		Boulder, CO	Fort Collins, CO
Type of Pricing Scheme	Downtown tiered pricing scheme		Demand-based pricing scheme that varies by location and parking demand (time of day)		Demand-based pricing scheme that varies by location and parking demand (time of day)		Zone-based tiered pricing scheme		Zone-based tiered pricing scheme (max. 2 hours)		Downtown tiered pricing scheme		Flat hourly rate (max. 2 hours) ⁵	Seasonal tiered pricing scheme		Zone-based flat hourly rate ⁶	Free (max. 2 hours)
Criteria	Number of Hours	Price	Time of Day	Price	Time of Day	Price	Number of Hours	Price	Number of Hours	Price	Number of Hours	Price	Hourly Price	Time of Day	Peak Season Price	Hourly Price	N/A
	Hour 1	\$1.00	Morning	\$2.50	12 am - 9 am	Free	Hour 1	\$1.75	First 20 minutes	Free	Hour 1	\$1.00	\$2.00 per hour	10:00 am-10:59 am	\$4.00/hr	\$1.50 to \$2.00 per hour	
	Hour 2	\$2.00			9 am - 12 pm	\$2.25/hr					Hour 2	\$2.00		11:00 am-2:59 pm	\$6.00/hr		
	Hour 3	\$3.50	Afternoon	\$4.00	12 pm - 3 pm	\$5.25/hr	Hour 2	\$3.00	Hour 1	\$1.25	Hour 3	\$3.50	-	3:00 pm-5:59 pm	\$4.00/hr		
	Hour 4	\$5.50			3 pm - 6 pm	\$4.75/hr					Hour 4	\$5.50					
	Hour 5	\$8.00			6 pm - 12 am	Free	Hour 5	\$7.50									
	Hour 6	\$11.00	Evening	\$2.00	-	-	Hour 3	\$3.75	Hour 2	\$2.00	Hour 6	\$9.50	-	-			
	Hour 7	\$14.50					Hour 4 and beyond	\$3.75			Hour 7	\$11.50					
	Hour 8	\$18.50					Hour 8	\$13.50									

¹ Price varies by block face. Example taken from Commercial Core District (retail)

² Price varies by block face. Example taken from Valencia St (between 15th and 16th St in Mission District)

³ Price varies by zone. Example taken from Zone 1 (Capitol Mall and Theatre Districts)

⁴ Price varies by zone. Example taken from Zone 2 (secondary zone of downtown core)

⁵ Parking is free city-wide on Sundays

⁶ Parking is free city-wide on Sundays and for the first 15 minutes daily

APPENDIX C: EXISTING CONDITIONS EXECUTIVE SUMMARY



Preparing our Parking System for a Big, Bright Future



Missoula Citywide Parking Plan: Existing & Influencing Conditions

EXECUTIVE SUMMARY

Missoula manages a parking and multimodal system to support community needs—from commuting to conducting business, shopping and dining, attending events, or enjoying our recreation opportunities. As our city evolves and we prepare for the future, we're looking inward at how our parking programs and options can better support the people that live, work and play all around Missoula.

We have begun this project by examining the existing conditions and factors that will impact the Citywide Parking Plan, including related past and concurrent planning efforts, jurisdiction, governance, operation and management of the parking system, community experience and perception, and parking supply and use conditions in key areas throughout the city.

Past and Concurrent Planning Efforts

This Plan is informed by the many active community, transportation, neighborhood, and other plans and documents that have been adopted by Missoula's governing bodies, including Our Missoula, the City's growth policy update. Policy initiatives that influence the Citywide Parking Plan generally include:

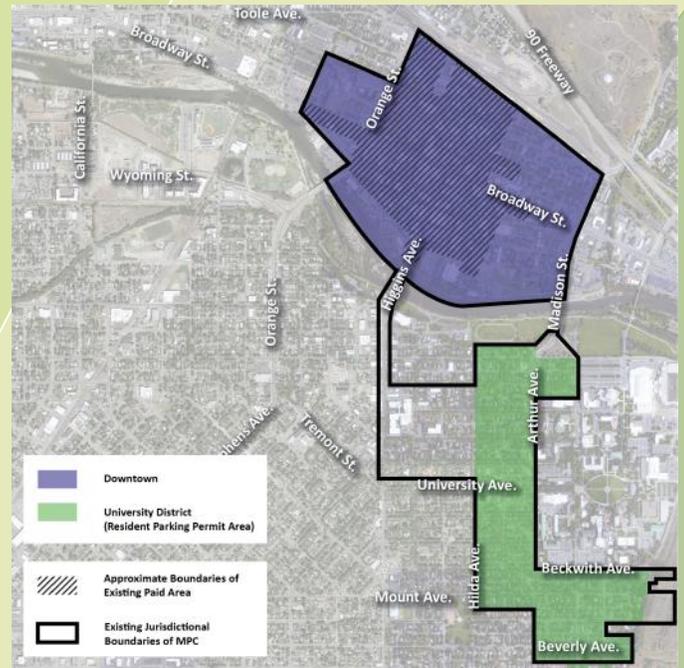


- **Regional Transportation and Transit:** The Missoula Urban Transportation District Strategic Plan, Missoula Connect, and the Transportation Options Action Plan advance expansion and increased service for Missoula's transit system, and support a more holistic approach to access beyond just driving and parking.
- **Active Transportation:** The Bicycle Facilities and Pedestrian Facilities master plans provide goals for the percentage of trips completed on foot or by bicycle and create overarching frameworks for providing better active mobility infrastructure. Various corridor planning and design efforts Downtown seek to implement some of these broader goals and policies through actual infrastructure changes.
- **Land Use, Development and Housing:** Place-specific plans like the Downtown Master Plan and Midtown Master Plan set broad visions for sense of place, economic vitality, community character, sustainability and more in some of the city's key neighborhoods. Broader initiatives like Our Missoula work to set forth policy strategies for contextual growth and inform direction around prioritizing investment and reforming regulations to meet goals like housing availability and affordability, fiscal strength, and environmental readiness.

Existing Operations & Management

The Missoula parking system is robust and comprehensive, operated by the Missoula Parking Commission in close collaboration with the City itself. The Commission, founded in the early 1970s, has the authority to conduct enforcement of parking rules and regulations, adjust rates, procure technology, and generally make management and operational decisions in support of its mission: to provide and manage affordable and convenient parking and “parking alternatives” for the Missoula community.

The only actions in support of this mission for which City Council approval is required are expansion of jurisdictional boundaries, which currently include the Downtown core and the University Resident Parking Permit District, and changes to parking violation fine structure.



Existing Parking Options

The existing system provides a wide variety of parking options for both day-to-day and longer-term needs.



- **Short-Term and Day-to-Day Parking:** Short-term parking is managed on-street and off-street in Downtown Missoula. Rates on-street start at \$1 per hour for the first 2 hours and then increase by 50 cents an hour for each hour thereafter, with a max rate of \$4 per hour. Garage parking is free for the first hour, and costs \$1.00 after that. In certain pay lots, the rate is \$1 for the first hour and each hour thereafter.



- **Long-Term Parking:** Residents of the University Resident Parking Permit District can get a parking permit for \$17 annually, plus a set number of guest permits. Other long-term parking options are available on a monthly basis in the MPC-managed structures and surface lots, with rates ranging from \$35 to \$85 depending on location, as well as on a daily basis at long-term meters at a rate of \$1 for the first 5 hours and \$2 for all-day parking per day. For those meters, a code is required, which expires every 6 months.



- **Special Situations:** The MPC offers some other permit types for specific users, like a commercial use permit (roughly \$34/month), a loading zone permit (roughly \$7/month), and a special service/utility vehicle permit (roughly \$44/month), which enable MPC to track and manage these evolving curb uses while minimizing negative impacts on regular business activity.

Enforcement & Parking Fines

Enforcement of parking rules and regulations is performed by MPC parking enforcement officers on weekdays. Enforcement for violations such as non-payment at meters or overstaying a time limit is conducted between 9 AM and 5 PM. Enforcement for such violations in off-street facilities is conducted between 8 AM and 5 or 6 PM.

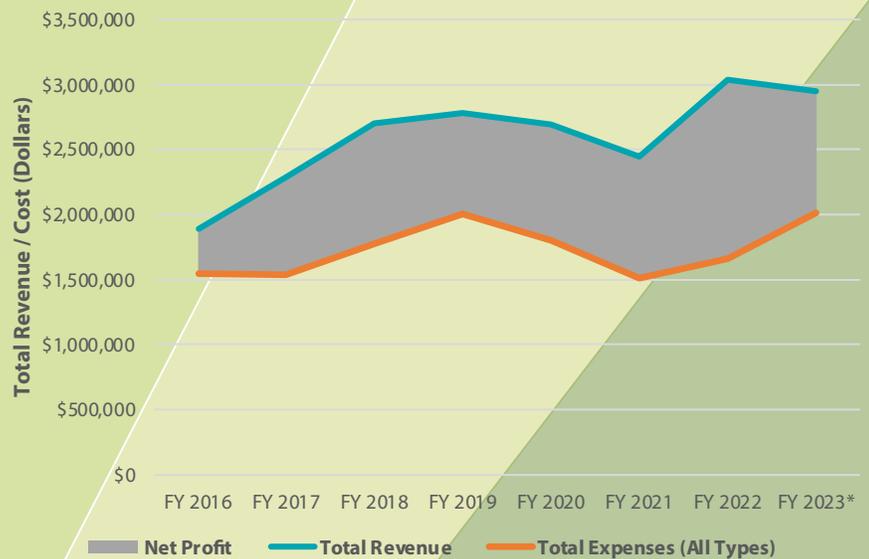
Fines for unpaid parking and overtime violations are graduated, and range from a warning on the first offense to \$20 for the 5th offense. Fines for other parking violations are typically \$20 per offense, with ADA parking violations carrying a \$100 fine. The fines are relatively low, as demonstrated by the fact that even 5-time offenders pay barely more per parking stay than the total daily on-street rate (\$20 fine vs. \$18.50).



Cost Recovery

The parking system currently covers its cost strongly, with an average percentage cost recovery of 154%. Changes to jurisdiction in response to community needs and resulting changes to staffing and capital investments, in addition to investments in parking facility repair and structural maintenance, may diminish cost recovery over time and necessitate new revenue strategies.

The MPC is committed to using its revenues to invest in the efficacy of the parking and mobility system and its ability to serve the Missoula community as it evolves and grows.

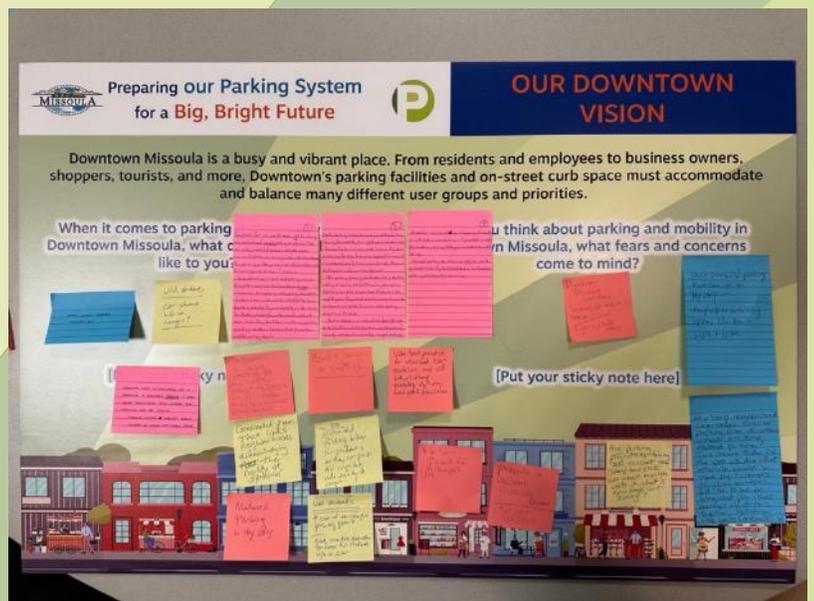


Community Experience & Perception

Community engagement for this project is ongoing, but the community has already had opportunity to share perspectives and vision for success through the project's Engage Missoula website and three in-person focus groups held in March 2023. In general, the Missoula community is largely accepting of parking management as a key tool for facilitating economic vitality and enhancing quality of life.

Most participants in engagement efforts clearly understood that parking management is a means to improve and augment a city's success, rather than a revenue-generation effort. Most comments were about making effective and community-focused changes to parking management practices and approaches, indicating that the MPC and the City have done a good job of making the initial transition to managed parking and educating the public on its utility. Missoulians want the MPC and the City to continue to clearly demonstrate the benefits of parking management for the entire community and prioritize transparency and clarity.

Participants were excited about proactive strategies to respond to changes in parking demand patterns and potential spillover, holistic approaches to providing access beyond just parking, and leveraging user-focused technology and communication to respond to needs, like very short-term parking and loading.



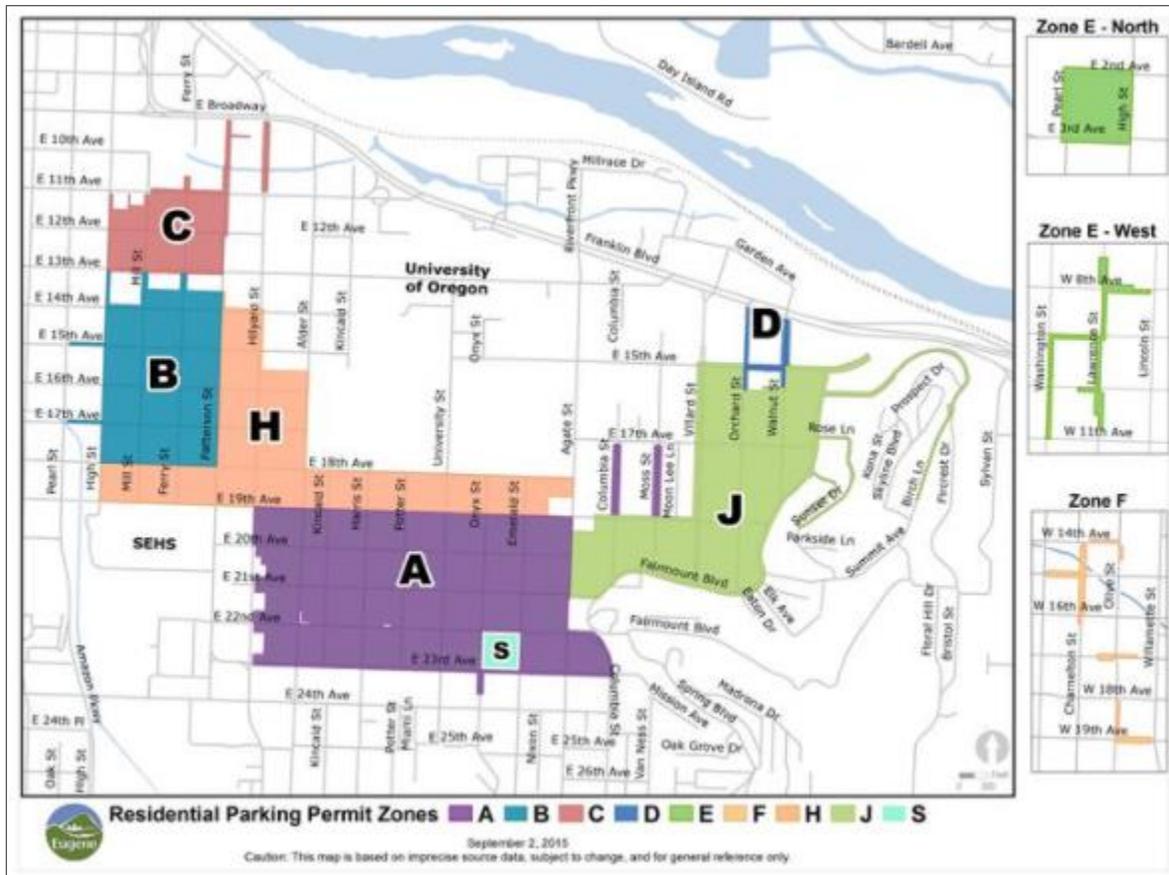
APPENDIX D: EXAMPLE PRACTICES

PERMIT MANAGEMENT AND PERMIT AREA EXPANSION STRATEGIES

CUSTOMIZE PERMIT MANAGEMENT STRATEGIES TO MEET SPECIFIC NEEDS

The City of Eugene, Oregon, home to the University of Oregon, has nine residential parking permit zones, mostly in neighborhoods adjacent to downtown Eugene and the University of Oregon. Zone prices and requirements are customized based on zone location and dynamics. **Figure 1** below depicts a map of residential parking permit zones in Eugene.

Figure 1: Eugene, Oregon Residential Parking Permit Zones



Source: City of Eugene

Table 1 below includes the permit prices for each of the zones.

Table 1: Eugene, Oregon Residential Parking Permit Zones

Residential Parking Permit Zone	Rate
Zone A, E, F, G	\$40.00 per year
Zone B, C - Quarterly Permit	\$99.00 per quarter
Zone B, C - Homeowner/Long-Term Resident	\$40.00 per year
Zone H - Quarterly Permit	\$150.00 per quarter
Zone J	First two free, \$40 per year for additional

Source: Walker Consultants, 2020

There are several items to note which highlight the customization of residential permit policies in different permit zones to meet specific needs:

- Zone H is designed in part to manage spillover from the University of Oregon. The quarterly basis on which permits are sold corresponds to the University of Oregon’s quarter-based (rather than semester-based) academic calendar. This provides added flexibility for students and other short-term residents who might live in this area relative to how they purchase permits. The price of \$150 per quarter is set just above the price for a four-month quarter (\$144 per quarter). While residency rules are in place, this price differential further disincentivizes parking in this zone from any potential student commuters.
- Zones B and C, also proximate to the University of Oregon, include both a quarterly permit option that caters to students and others affiliated with the university who want more flexibility, and a homeowner option for long-term residents. Quarterly permits for Zones B and C are less expensive than quarterly permits in Zone H, which is closer to the University of Oregon campus. Homeowner/long-term resident permits are available to an owner/occupant who is an owner of record on the County tax roll and occupies the dwelling unit for a minimum of six (6) months per year. Those who do not own their property but who have lived there for more than four years are also eligible for this permit type. Acceptable documentation must be provided to the city before this type of permit is issued.

Austin, Texas employs a similar approach to Eugene in that residential permits for streets around the University of Texas expire at a different point of the year (July 31) than all other permits (December 31).

INTEGRATION WITH MISSOULA CITYWIDE PARKING PLAN’S GUIDING PRINCIPLES

The strategies employed in Eugene are aligned with guiding principle of contextual approaches to parking management in Missoula’s different neighborhoods and communities. Missoula recognizes that parking needs vary depending on the area’s predominant land uses and parking users, requiring customized approaches to parking management.

CHARGE MARKET RATE FOR PERMITS AND LEVERAGE FUNDS TO MANAGE PARKING AND TRANSPORTATION DEMAND AND IMPROVE MOBILITY OPTIONS

The Northwest Parking District, a vibrant residential and mixed-use area northwest of Downtown Portland, Oregon, leverages a residential parking permit “surcharge” to subsidize non-drive alone travel modes like transit and bikeshare. The parking district charges a \$120 surcharge in addition to the \$75

MISSOULA CITYWIDE PARKING MANAGEMENT PLAN

Interim Deliverable: Example Practices

June 5, 2023

per year permit charge for a total permit price of \$195. The second and third permits for eligible residents have a price of \$390 and \$585, respectively. The District strives to price permits according to market rates to control and influence parking demand, while providing multimodal options and surcharge waivers for low-income qualifying residents.

The funds earned from the TDM surcharge help subsidize a district wide TDM program. The core element of the program is a "Transportation Wallet," which residents and businesses that opt-out of parking permits can receive free of charge. The Transportation Wallet includes the following multimodal transportation resources:

- \$100 Tri-Met Hop card, which can be used on Tri-Met and C-Tran (Vancouver, WA) public transit routes
- Portland Streetcar annual pass
- \$25 BIKETOWN (bikeshare) credit
- \$30 scooter credit for use on with Spin scooter company

The Transportation Wallet program originated in 2016, when the Portland City Council first allowed the issuance of a permit surcharge fee to fund a TDM program, along with measures to limit the number of parking permits issued and in circulation. Transportation Wallets can also be purchased for \$99 by residents who do have a parking permit.

INTEGRATION WITH MISSOULA CITYWIDE PARKING PLAN'S GUIDING PRINCIPLES

The strategies employed by the Northwest Parking District in Portland are consistent with the following guiding principles:

- Prioritizes a multimodal environment that maximizes mobility freedom, choice and safety for all Missoulians.
- Leverages revenue generation to maximize cost recovery and reinvest in ways that demonstrably and tangibly benefit the Missoula community.

STRATEGICALLY MANAGE BUSINESS AND EMPLOYEE ACCESS, PARKING AND MOBILITY

Portland's Northwest Parking District acknowledges the important role that businesses play in the fabric of the area and offers resources aimed at servicing the parking and mobility needs of businesses and employees, who are typically parking for longer durations. The following strategies are employed:

- As it does with residential permits, the District applies a \$120 surcharge on top of the cost of permits and funds are used to subsidize TDM options and the Transportation Wallet program.
- To reduce the number of permits in circulation and manage traffic congestion and parking demand, businesses receive a free Transportation Wallet (for employee use) for every permit not renewed from the previous year.
- Discounted Transportation Wallets are available for businesses who purchase fewer permits than they are eligible to receive.
- The maximum number of permits a business can obtain is 50. Businesses may request an exception to purchase more than this by writing the NW District Liaison. Businesses that want to purchase more than 30 permits must complete a mandatory survey on TDM strategies employed.

Columbus, Ohio offers another example of deliberate parking management to manage spillover parking demand while promoting options for employees. High Street between Downtown Columbus and The

MISSOULA CITYWIDE PARKING MANAGEMENT PLAN

Interim Deliverable: Example Practices

June 5, 2023

Ohio State University is a vibrant mixed-use and arts corridor and district flanked by single-family residential. The area is home to numerous businesses and is a popular entertainment district. Residents of the surrounding neighborhoods have experienced spillover parking pressures from the High Street corridor.

- A planning effort a few years ago led to the establishment of six residential permit parking zones surrounding the High Street corridor. The following features were employed:
 - Paid parking via mobile payment only was employed in all six zones. The zones further from High Street were set at a lower hourly rate than the zones nearest High Street.
 - Permits are offered to residents and businesses to park on-street and exceed posted three-hour time limit. Business permits are time-restricted after four permits.
 - Non-permitted vehicles must pay to park using mobile payment between 8:00 a.m. – 10:00 p.m. Paid parking manages spillover and encourages parking turnover, while generating valuable revenues to promote access and mobility in the area. Other than High Street, payment is collected via mobile payment only. Permits are virtual and enforcement is done with mobile license plate recognition.
 - Collected on-street parking revenue (minus City operations and administrative expenses) is reinvested back into the area to promote the following:
 - Managing existing parking.
 - Improving signage, wayfinding and communications.
 - Improving technology.
 - Promoting mobility alternatives, including employee travel options like car share, bike share, discounted transit passes, discounted TNC use and shuttling to discounted remote parking facilities.

A committee of community representatives advises on parking management in the area, including how parking benefit district funds should be spent.

Arlington, Virginia offers a further example of working to facilitate employee access and parking. The city's residential parking permit program does not have a commercial component and only offers on-street permits for residents, but the city does offer a discount parking program for employees in city garages in the central business district of Old Town. Employees of Old Town can park after 4:00 p.m. Monday through Friday and all-day on weekends and holidays for \$1.00/hour, down from a normal price of \$2.50/hour.

Due to the congested nature of many of its permit parking areas, Seattle, Washington has a deliberate approach to granting on-street permits to businesses. Employees and volunteers are eligible for permits only if they are in certain Southeast Seattle Link Light Rail zones. Businesses within other permit zones are only granted permits on a special case-by-case basis. In order to maintain consistency with the goals of the restricted parking zone (RPZ) program the Seattle Department of Transportation considers the following criteria when determining if it is appropriate to issue permits to businesses:

- Availability of on-street parking within a reasonable walking distance of the employer.
- Availability of alternate modes of transportation.
- Availability of off-street parking.
- Time of day that employees work.
- Number of permits requested.

MISSOULA CITYWIDE PARKING MANAGEMENT PLAN

Interim Deliverable: Example Practices

June 5, 2023

- Existence of other employees within the zone that could potentially request permits (occupancy levels are maintained at a maximum of 85percent).
- Other hardships.

INTEGRATION WITH MISSOULA CITYWIDE PARKING PLAN'S GUIDING PRINCIPLES

These strategies employed in Portland, Columbus, Arlington, and Seattle are consistent with three of Missoula's guiding principles:

- **Prioritize a multimodal environment that maximizes mobility freedom, choice and safety for all Missoulians: In addition to providing options for resident parking, the program funds mobility and parking options for commuters and businesses.**
- **Leverage revenue generation to maximize cost recovery and reinvest in ways that demonstrably and tangibly benefit the Missoula community.** In Portland, surcharge funds from the permit program are used to fund the Transportation Wallet program. In Columbus, parking revenue is reinvested back into the parking benefit district to fund parking and mobility services for residents and employees.
- **Equitably accommodate all users in need of a parking option:** Options provided both in Portland and in Columbus are meant to address the needs of residents, businesses and employees of different income levels and parking needs.

STRATEGICALLY MANAGE UNIVERSITY ACCESS, PARKING, AND MOBILITY

Colorado State University has a campus TDM program that uses parking permit revenue to fund transit, bicycle infrastructure, shared mobility programs, and education for CSU students and employees.

Students have access to free citywide bus transit using the CSU student ID card (RamCard) and various bicycle facilities and resources at CSU, named a Platinum Bicycle Friendly University by the League of American Bicyclists. CSU offers free bicycle education classes, campus and citywide bicycle maps, and has 18,000 bicycle parking spaces, including secure bicycle parking options. In terms of purchasing and maintaining a bicycle, CSU has an on campus bicycle recycling program called Surplus Property offering used bicycles for a reasonable price and has an on campus bike repair center called the Spoke.

Employees can participate in the Get Back on the Bike program, a TDM program administered by the Parking and Transportation services that provides education, encouragement, and incentives to ride their bicycle to campus and help to alleviate parking demand. The program offers free services and resources for participants, including monthly bicycle education workshops, a bike tune-up, a fitness assessment at the Campus Recreation Department, safety and commuting gear, and an individualized bicycle commute consultation.¹

In addition, students and employees have access to Spin, the citywide e-scooter and e-bikeshare program. CSU students and staff are one of the largest user groups, making up 30 percent of trips in 2021.² The broad range of transportation options offered by CSU, several of which are offered at a discounted price, provide a strong TDM package that competes well with driving as a mode of travel to

¹Walsh, Maggie Hall. (4 August, 2020). Program to get CSU employees back on the bike. Colorado State University. <https://source.colostate.edu/program-to-get-csu-employees-back-on-the-bike/>

² <https://pts.colostate.edu/bicycle-general/>

and from the University, helping to make Fort Collins a safer and more equitable place to live and work, while improving access to regional destinations and reducing parking demand.

INTEGRATION WITH MISSOULA CITYWIDE PARKING PLAN'S GUIDING PRINCIPLES

The University TDM program is aligned with three of Missoula's guiding principles:

- **Equitably accommodate all users in need of a parking option.** It accommodates specific user groups, in this case students and university employees, in need of customized parking options and affordable options to opt out.
- **Leverage revenue generation to maximize cost recovery and reinvest in ways that demonstrably and tangibly benefit the Missoula community.** The University TDM program reinvests funds from parking permit revenue into transit, bicycle infrastructure, shared mobility programs, and education for CSU students and employees.

Prioritize a multimodal environment that maximizes mobility freedom, choice and safety for all Missoulians. The CSU campus offers a broad range of bicycle facilities, services and amenities that are convenient and reliable, making the bicycle a feasible commute option for both students and staff.

IMPLEMENT SOLUTIONS TO "UNLOCK" OFF-STREET PARKING TO EASE ON-STREET PRESSURES

Efficient use of adjacent off-street parking is critical to effective on-street parking management. The West End Neighborhood in Vancouver, British Columbia, Canada has developed a multi-faceted parking strategy, with unlocking unused off-street parking being a key component of that strategy. Analysis of neighborhood data indicates 1.5 unused off-street residential parking spaces for every vehicle owned in the neighborhood. Observations identified an imbalance in the location of unused spaces relative to where hotspots in parking demand were occurring, indicating that some unused spaces may be able to be used to address acute parking needs.

Various strategies are employed such as reviewing zoning amendments to facilitate shared parking, working with building owners to understand and eliminate barriers to shared parking (such as security, liability and maintenance issues), exploring technology to support the finding of shared parking spaces and ensuring that future developments have parking that can be shared.

Sacramento, California also illustrates best practices in promoting shared parking. The City of Sacramento Parking Division (SacPark) takes an active role in promoting and facilitating efficient operations of off-street parking assets by offering resources and partnering with the private sector. The Parking Division offers the following important programs specific to efficient use of parking resources:

- **Managed Parking Solutions:** The Parking Division offers four types of services for privately-owned parking facilities:
 - Enforcement only
 - Payment management and enforcement
 - Enforcement and monthly parking contracts
 - Full management

The program is meant to ease the operational burden on private entities operating and managing private parking resources along with maximizing accessibility, efficiency and revenue. Program participants include parking facilities associated with a variety of user types: government entities, office complexes, mixed-use residential and others.

MISSOULA CITYWIDE PARKING MANAGEMENT PLAN

Interim Deliverable: Example Practices

June 5, 2023

- **Certified Partners Program:** This program aims to increase the use of privately-owned parking assets with available inventory by providing marketing and operational assistance. Participating facilities in the Certified Partners Program are included in SacPark's online parking reservation system and mobile parking app, as well as cashless payment functionality. The program also includes a no-risk three-month trial period and options for enforcement, revenue control, validation and other management assistance upgrades from SacPark.

INTEGRATION WITH MISSOULA CITYWIDE PARKING PLAN'S GUIDING PRINCIPLES

The strategies employed in Vancouver and in Sacramento are consistent with three of Missoula's guiding principles, including:

- **Equitably accommodate all users in need of a parking option** Shared parking programs promote efficient land use and benefit those parking for long-term as well as those seeking short-term street parking.
- **Encourage efficient land use practices whenever possible to maximize available land's utility to the Missoula community.** These programs promote overall efficient use of land and resources.
- **Offer opportunities for consistency and collaboration among the many City departments and external institutional partners that work to make Missoula an even better place.:** At its core, shared parking is about working with the private market to identify and unlock parking assets that can serve critical public parking and access objectives.

BE DELIBERATE ABOUT CREATING NEW PERMIT PARKING ZONES

Seattle, Washington has a comprehensive and intentional process for determining the need for new Restricted Parking Zones (RPZs) meant to ensure there is a true need for each zone before they are implemented. Like the City of Boulder, 75 percent of parking spaces must be occupied, but differing from the City of Boulder, at least 35 percent of the occupied spaces must be occupied by vehicles not belonging to residents (the City of Boulder's requirement is 25 percent). Two additional criteria are added to the program: a specific traffic generator must be identified that creates demand for long-term parking that "spills over" into the residential streets, and a minimum of 10 adjoining blocks (or 20 block faces) must be affected by the traffic generator.

After the initial request letter is received by the Seattle Department of Transportation (SDOT), SDOT examines potential mitigating measures in-lieu of an RPZ such as expanding parking to both sides of the street, allowing angled parking or working to encourage and promote employees traveling by alternate means. Not until these options are considered does SDOT commission a formal parking study to be conducted followed by formal community outreach to review study results if the results meet a certain threshold. Following this outreach, SDOT renders a final decision about the addition of an RPZ.

INTEGRATION WITH MISSOULA CITYWIDE PARKING PLAN'S GUIDING PRINCIPLES

These strategies from Seattle are consistent with the following guiding principle:

- **Enables contextual approaches to Missoula's different neighborhoods and communities.** Seattle has implemented a deliberate and rigorous process for creating new permit parking zones, recognizing the implications these zones have on mode share, access and mobility, and working to avoid a proliferation of zones that are not completely necessary or are not consistent with long-term transportation and sustainability objectives.

PARKING PRICING BEST PRACTICES

PERFORMANCE PRICING

In 2008, the San Francisco Municipal Transportation Agency (SFMTA) approved an ordinance to pilot *SFPark* a performance pricing pilot that set and adjusted rates for on-street parking meters and off-street facilities (garages and lots) in the downtown area based on utilization goals. In 2010, the city received a \$25 million grant from the U.S. Dept. of Transportation's Urban Partnership Program to implement the *SFPark* pilot. Meter rates in the pilot area were adjusted periodically to maintain an average occupancy of 60 to 80 percent, or at least one spot per block to prevent circling for parking. During the pilot, sensor technology monitored real-time information about where parking was available. SFMTA used this data to adjust rates and transmit space availability to a smartphone app for drivers to quickly find open spaces.

Meter prices during the pilot ranged from \$0.25 to \$6.00 per hour and varied by block, time of day, and day of the week. The parking meter rates were adjusted once a month based on the sensor occupancy data, and never by more than \$.50 at a time. *SFPark's* on-street meter pricing pilot program was paired with performance-based pricing for 14 of the city's publicly-owned parking garages³.

SFPark is perhaps the most encompassing and sophisticated parking demand management plan currently implemented in the U.S. An evaluation of *SFPark* by Adam Millard-Ball of UC-Santa Cruz found that the pilot achieved the target occupancy rate and resulted in a 50 percent decrease in drivers cruising the block to find a parking spot⁴.

When the pilot ended, San Francisco extended performance parking to all meters.

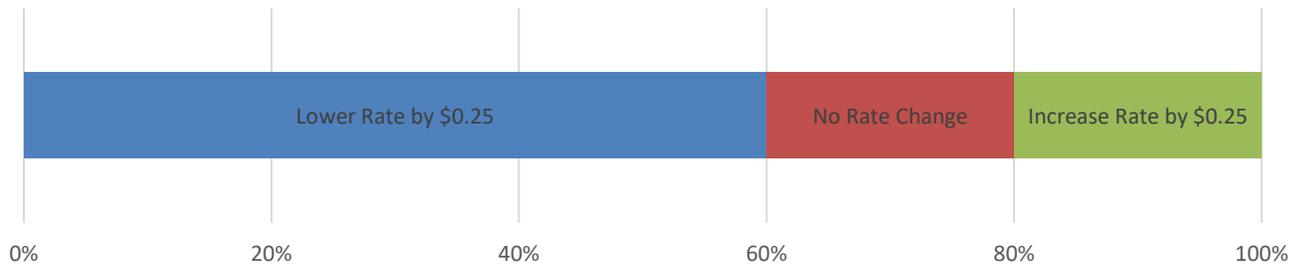
Most meters in San Francisco have a two-hour time limit, though approximately 25% of meters have a four-hour time limit or no time limit at all. Meters require payment from 9:00 a.m. to 6:00 p.m. Monday through Saturday. Only some parts of the city require meter payment on Sunday. A February 2020 proposal to extend meters to Sunday was stalled due to COVID-19.

The *SFPark* sensors reached the end of their useful life and were shut off. Due to the expense of sensor technology, the City now bases rate changes on using meter transaction data as a proxy for occupancy. Based on this data, meters are adjusted quarterly in \$0.25 increments based on demand. Rates are raised by \$0.25 on blocks where average occupancy is above 80 percent and lowered by \$0.25 on blocks where average occupancy is below 60 percent. Rates are not changed on blocks that hit the occupancy target of between 60 percent and 80 percent. These performance-based adjustments are summarized in **Figure 2**. Correctly pricing on-street parking is also critical to prevent spillover from new development, as San Francisco eliminated off-street minimum parking requirements for new development in 2018.

³ <https://www.sfmta.com/demand-responsive-parking-pricing>

⁴ https://people.ucsc.edu/~adammb/publications/Millard-Ball_Weinberger_Hampshire_2014_Assessing_the_impacts_SFPark.pdf

Figure 2: SFpark Performance-Based Rate Adjustment Schedule



Source: City of San Francisco

In 2010, the City of Seattle established performance-based parking pricing through adopting an ordinance to permit the Department of Transportation to set rates based on location, time of day, maximum time allowed, the capability of the payment device and other factors as determined by the Director. The Director of Transportation is permitted to set parking rates up to \$5.00 per hour and no lower than \$0.50 per hour based on measured occupancy so that approximately one or two open spaces are available on each block throughout the day to support the following goals:

- Support neighborhood business districts by making on-street parking available and by encouraging economic development
- Maintain adequate turnover of on-street parking spaces and reduce incidents of meter feeding in commercial districts
- Encourage an adequate amount of on-street parking availability for a variety of parking users, efficient use of off-street parking facilities, and enhanced use of transit and other transportation alternatives
- Reduce congestion in travel lanes caused by drivers seeking on-street parking
- Reduce emissions and lessen traffic congestion from drivers circling in search of parking

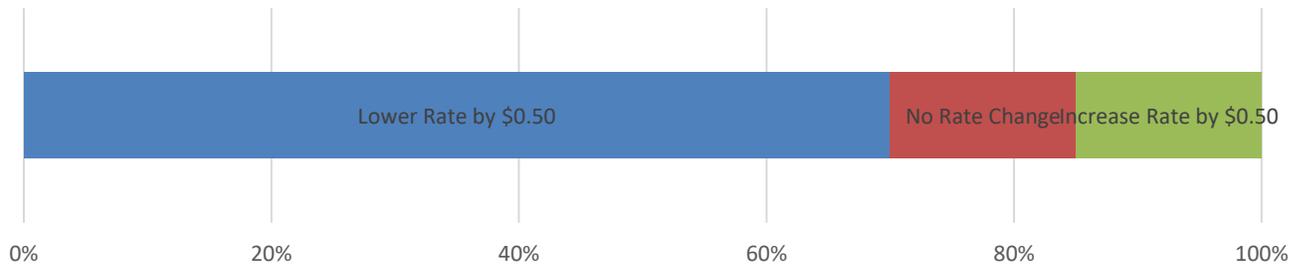
Seattle has approximately 11,500 parking spaces. SDOT collects occupancy data annually in all paid parking areas through a data collection survey. Data are used to determine potential changes to rates, time limit, and paid parking hours by comparing findings to the target occupancy rate of 70% to 85% occupancy. Rates are adjusted by time of day to account for different demands:

- Morning – 8:00 a.m. to 11:00 a.m.
- Afternoon – 11:00 a.m. to 5:00p.m./6:00 p.m.
- Evening – 5:00 p.m. to 8:00 p.m./10:00 p.m.

The following rules are used to adjust rates:

- If occupancy is over 85%, increase rate by \$0.50 per hour
- If occupancy is between 70% and 85%, rates do not change
- If occupancy is below 70%, decrease rate by \$0.50 per hour

Figure 3: Seattle Performance-Based Rate Adjustment Schedule



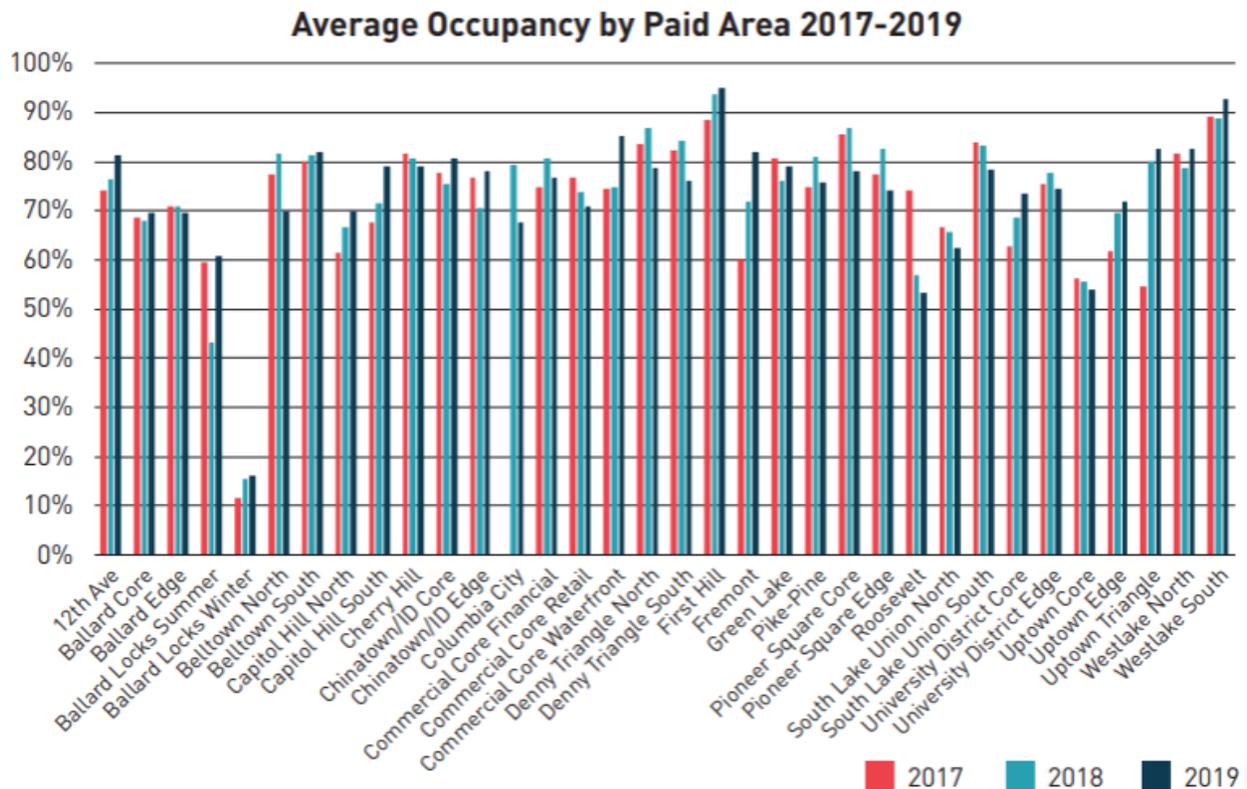
Source: City of Seattle

To evaluate when it may make sense to extend paid parking hours, the City collects data for two hours after paid parking ends.

To determine where to use pricing, in some areas, the City also collects occupancy data on blocks adjacent to paid areas to see where expanding time limits and/or paid parking can improve customer availability and access for those commercial areas.

Since 2011, SDOT has made over 300 different rate and hours of operations changes, including rate increases and decreases. SDOT adjusts rates seasonally because of they experience significant differences between summer and winter in parking activity. This policy has resulted in achieving the target range of one to two available spaces on a block face as show in **Figure 4**.

Figure 4: City of Seattle, WA Average Parking Occupancy by Paid Area: 2017-2019



Source: City of Seattle

Findings from the City of San Francisco, California’s SFPark performance pricing program and the City of Seattle, Washington’s performance based parking pricing program show that pricing parking based on demand can support neighborhood based business, make pricing more convenient, maximize existing parking capacity, improve congestion and vehicle emissions and create a transparent, data-based process.

Key to the success of a performance-based parking pricing program is granting the parking manager flexibility within regulations to update rates based on established metrics.

The challenges associated with a performance pricing program include the administrative costs of managing the program and the need for robust data collection and analysis to understand utilization.

INTEGRATION WITH MISSOULA CITYWIDE PARKING PLAN’S GUIDING PRINCIPLES

These strategies are consistent with three of Missoula’s guiding principles:

- **Prioritize a multimodal environment that maximizes mobility freedom, choice and safety for all Missoulians.** Performance pricing can balance all modes of access by using pricing to incentivize non-vehicle modes.

MISSOULA CITYWIDE PARKING MANAGEMENT PLAN

Interim Deliverable: Example Practices

June 5, 2023

- **Responsive to changes in parking and access demand patterns.** Pricing based on location and facility type (on or off-street) encourages turnover of the most prime spaces and utilization of off-street parking assets, making it easier to find a parking space. In addition, appropriate pricing of parking can reduce traffic circling and vehicle emissions.
- **Leverage revenue generation to maximize cost recovery and reinvest in ways that demonstrably and tangibly benefit the Missoula community.** Performance pricing based on demand can generate more revenue from areas near popular destinations which can contribute to fiscal sustainability and improvement of downtown districts.

TIERED PRICING TO ENCOURAGE TURNOVER AND OFF-STREET PARKING POLICIES TO ENCOURAGE USE OF THESE FACILITIES

Austin, TX is both a growing city and a university town, with over 50,000 students enrolled at the University of Texas. Parking is a major issue, with many competing users throughout the day. Austin has established a vision as a multimodal city that provides many transportation options, so people do not have to drive.

The City has a goal to achieve a 50/50 mode share with 50% drive alone and 50% use other travel options combined by 2039. Right sizing and managing parking supply is a strategy to achieve this goal. In September 2020, The Austin Transportation Department adopted a flexible street parking system. The new system removed all parking space time limits to allow a maximum stay of ten hours with a tiered rate that increases based on the number of hours parked.

There is a \$2 hourly base rate. Additional hours after the first two increase in cost to encourage turnover. This also encourages long term parkers to use off-street parking facilities. Commuters can rent daily parking at garages for \$5 per day. Metered parking hours vary based on the day of the week and location.

The rate structure is show in in **Table 2**.

Table 2. City of Austin, TX Parking Rate Structure

Hour(s)	Rate Per Hour	Parking Session Cost
1 st	\$ 2.00	\$ 2.00
2 nd	\$ 2.00	\$ 4.00
3 rd	\$ 3.00	\$ 7.00
4 th	\$ 3.50	\$ 10.50
5 th	\$ 4.00	\$ 14.50
6 th	\$ 4.50	\$ 19.00
7 th	\$ 5.00	\$ 24.00
8 th	\$ 5.00	\$ 29.00
9 th	\$ 5.00	\$ 34.00
10 th	\$ 5.00	\$ 39.00

Source: City of Austin

The Austin Transportation Department manages three off-street parking facilities that are priced based on location. Two facilities are priced lower than on-street parking and one is priced the same as on-street pricing.

The City of Madison, WI is home to a large student population from the University of Wisconsin’s 65,000 students. The City’s parking pricing policies align on and off-street pricing to encourage utilizing off-street facilities and place higher rates for the most in-demand spaces.

On-street parking meter policies and rates are intended to incentivize short-term parking. The City uses time limits to ensure that parking spaces are available for customers and regularly turnover. On-street spaces closest to downtown have the shortest time limits and highest rates at \$2 per hour. Spaces on the periphery permit longer parking stays and reduced rates between \$1.10 per hour and \$1.30 per hour. Parkers cannot pay for additional time after the time limit has been reached. They must leave the space or are subject to citation. Meters are enforced from 8:00 a.m. to 6:00 p.m. Monday through Saturday.

Off-street parking pricing and time limits are set to encourage utilization of these facilities. For the most part, parking in off-street facilities is permitted 24 hours per day, seven days per week and prices are lower than on-street rates. Downtown lots have the highest rates, between \$1.00 and 2.00 per hour, and periphery lots at \$1.20 and \$1.30 per hour. Downtown garages are priced at between \$0.80 per hour to \$1.80 per hour depending on the distance to the center of downtown.

MISSOULA CITYWIDE PARKING MANAGEMENT PLAN

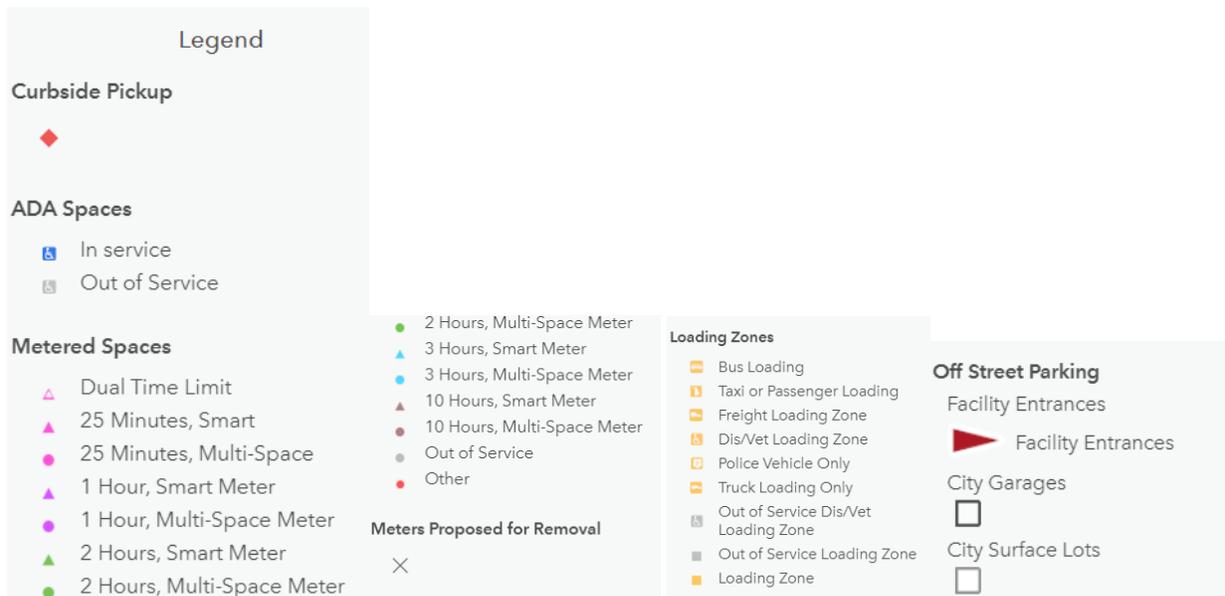
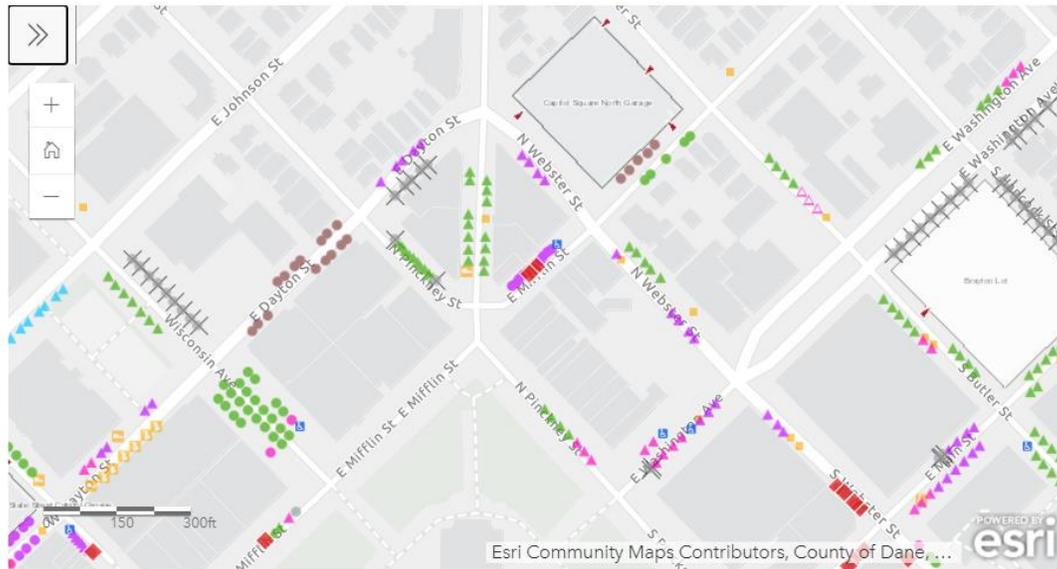
Interim Deliverable: Example Practices

June 5, 2023

Madison also offers daily parking and monthly parking permits to encourage other travel uses and to give students an option to park. This is important because there is just one parking space for every five people on the University of Wisconsin-Madison campus.

Figure 5 illustrates Madison's parking pricing policies.

Figure 5: City of Madison, WI On and Off-Street Parking Locations and Hours

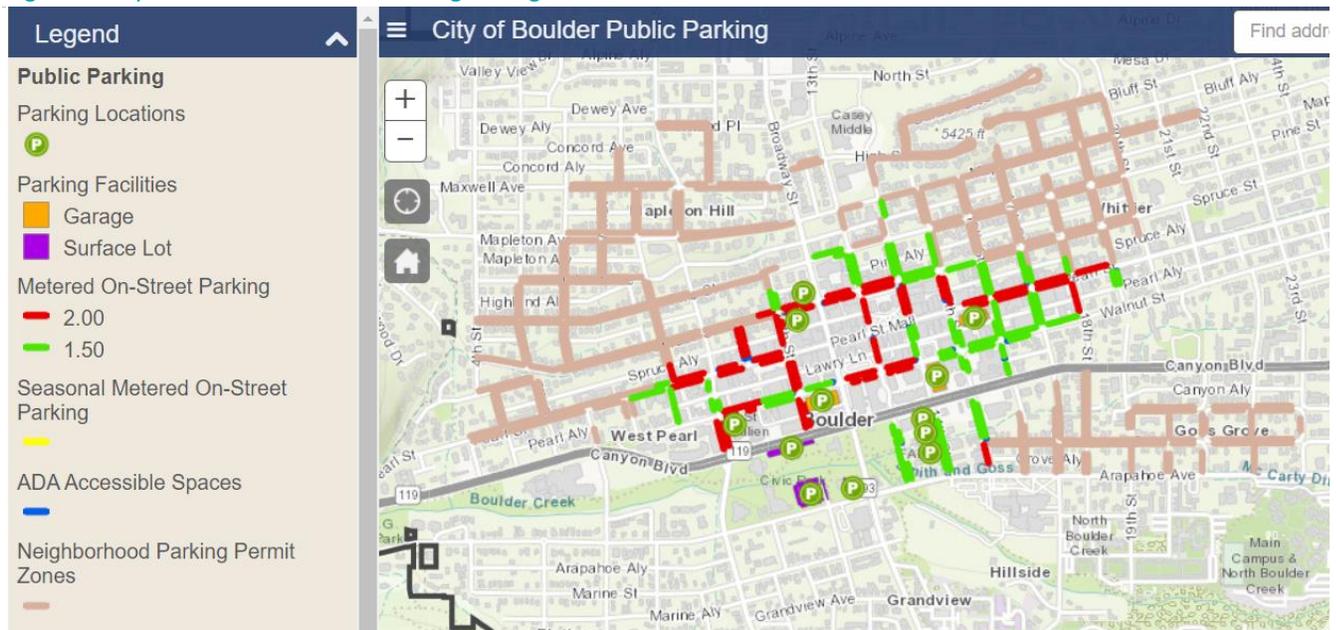


Source: City of Madison

ZONE-BASED PRICING TO ENCOURAGE TURNOVER AND HIGHER UTILIZATION OF OFF-STREET FACILITIES IN BOULDER, COLORADO

The City of Boulder implemented a zone-based pricing strategy that establishes higher on-street parking prices than off-street parking prices and establishes zones with tiered pricing based on average occupancy rates. The City has priced the zone with the highest occupancy, located nearest to downtown destinations, at a rate of \$2.00 per hour. The zone with lower occupancy is priced at a lower rate of \$1.50 per hour.⁵ Meanwhile, off-street parking facilities are priced at a lower rate of \$1.25 per hour to encourage higher utilization of off-street parking, with a \$3.00 flat rate between 3:00 pm and 3:00 am to encourage evening visits to downtown.⁶ On-street parking prices are adjusted based on typical peak parking occupancy measured on an annual basis in order to be responsive to changing parking demand in downtown Boulder. **Figure 6** shows the two downtown parking zones, with the highest occupancy zone in red and the lower occupancy zone in green.

Figure 6. City of Boulder On-Street Parking Pricing Model



Source: City of Boulder, 2023

SEASONAL PARKING PRICING MODELS FROM VAIL AND ASPEN, COLORADO

Vail and Aspen, two cities in Colorado that have high levels of seasonal tourism, have implemented seasonal parking pricing models in order to manage parking demand and increase parking revenue to reflect the higher value of these destinations during the winter ski season.

⁵ City of Boulder. (2023). Public Parking Map. City of Boulder. <https://bouldercolorado.gov/city-boulder-public-parking-map>

⁶ Bray, Jennifer. (23 March, 2023). City of Boulder. <https://bouldercolorado.gov/news/city-boulder-changes-street-pay-parking-pricing-high-demand-areas-downtown-effective-april-3>

MISSOULA CITYWIDE PARKING MANAGEMENT PLAN

Interim Deliverable: Example Practices

June 5, 2023

In Vail, during the summer, parking is free during the weekdays and there is an overnight parking fee of \$35.00 at the Vail Village and Lionshead parking garages or a fee of \$15.00 at the Red Sandstone parking garage.⁷ During the winter, parking is priced according to the day of the week. On peak days, which include Fridays, weekends, and holidays, parking is priced at a higher hourly rate than on non-peak days which are Monday through Thursday non-holidays⁸. **Figure 7** shows the price of hourly parking and overnight parking at Vail parking garages in the winter.

Figure 7. Hourly Parking Rates for Vail Village and Lionshead Parking Structures in Vail

Daily Rate	NON-PEAK DAYS	PEAK DAYS
0 to 1 hour	FREE	FREE
1 to 2 hours	\$5*	\$10*
2 to 3 hours	\$10*	\$20*
3 to 4 hours	\$20*	\$30*
4+ hours	\$30**	\$40**
Entry after 3 p.m. - 4 a.m.	FREE	FREE
Overnight Rate (4 a.m. - 5 a.m.) No top deck parking	\$60**	\$60**

*Transaction ends upon exit; must exit for 30 minutes before reentering

**Per day

Source: City of Vail, 2023

In Aspen, parking is also priced differently depending on the season due to high levels of summer tourism. During the off-season (months of April-May and October-November), hourly prices range from \$2.00 to 4.00 per hour on Monday-Friday depending on the time of day. During the peak-season (months of June-September and December-March) hourly prices range from \$4.00 to 6.00 per hour on Monday-Saturday. The higher price during peak season helps to manage parking demand during the busiest time of year and busiest time of day, while generating more parking revenue during these higher-value periods. Figure 8 shows the peak-season and off-season parking rates.

Figure 8. Seasonal Parking Rates in Aspen

Off-Season Rates (April-May, October-November, Monday-Friday)		Peak-Season Rates (June-September, December-March, Monday-Saturday)	
Time of day	Hourly rate	Time of day	Hourly rate
10:00 am-10:59 am	\$2.00/hr	10:00 am-10:59 am	\$4.00/hr
11:00 am-2:59 pm	\$4.00/hr	11:00 am-2:59 pm	\$6.00/hr
3:00 pm-5:59 pm	\$2.00/hr	3:00 pm-5:59 pm	\$4.00/hr

Source: City of Aspen, 2023

⁷City of Vail. (2023). Summer 2023 Parking. City of Vail.

<https://www.vailgov.com/government/departments/transportation-services/parking-information/summer-parking>

⁸City of Vail. (2023). Winter 2022/23 Parking. City of Vail.

<https://www.vailgov.com/government/departments/transportation-services/parking-information/winter-parking/-fsiteid-1>

INTEGRATION WITH MISSOULA CITYWIDE PARKING PLAN'S GUIDING PRINCIPLES

These zone-based and seasonal parking pricing models are consistent with two of Missoula's guiding principles:

- **Responsive to changes in parking and access demand patterns.**— Pricing based on location and facility type (on or off-street) encourages turnover and helps manage demand of the most prime spaces.
- **Enables contextual approaches to Missoula's different neighborhoods and communities:** Seasonal pricing of parking is a context-based decision that requires an understanding of the local economy and tourism patterns in Missoula.

AFFORDABLE PARKING PROGRAM

A partnership between the City of Austin and the Downtown Austin Alliance created the Affordable Parking Program to reduce economic barriers for Austin community members to access downtown. Austin service and entertainment industry employees who work downtown can park in specific public and private garages and surface lots for a daily rate of \$10 per day and monthly at \$35 to \$65 per month depending on facility location. The program is in effect evenings and overnight between 3:00 p.m. and 7:00 a.m. during the week and up to 24 hours on the weekend depending on the facility. Limited spaces are available during the day. This program provides both equity in parking and encourages use of off-street facilities.

INTEGRATION WITH MISSOULA CITYWIDE PARKING PLAN'S GUIDING PRINCIPLES

These strategies are consistent with two of Missoula's guiding principles:

- **Equitably accommodate all users in need of a parking option:** Austin's affordable parking program supports the diverse needs of people across the income spectrum.
- **Offer opportunities for consistency and collaboration among the many City departments and external institutional partners that work to make Missoula an even better place:** A partnership with the Downtown Austin Alliance on an affordable parking program provides equity in parking and encourages use of off-street facilities.

FEES FOR NON-PARKING MODES OF TRAVEL

The City of San Francisco recently implemented a per-ride TNC fee and charges dockless scooter and bike vendors fees to operate in the City. These policies work in tandem to encourage transit and provide first and last mile to transit riders. Seattle has also implemented a per-ride TNC fee and charges dockless scooter and bicycle vendors fees to operate in the City.

There have been several issues with dockless E-Scooter parking in Austin, TX including high demand for parking zones at hotspots and riders leaving scooters on the sidewalk, leaning against a tree or blocking pedestrian access. To solve the scooter parking problem, the City began a six-month parking pilot for scooter parking. It installed ten E-Scooter parking stations in high traffic areas, each with six to eight parking spaces. Scooter battery charging stations will be added to a second phase of the study, with a goal to eventually charge a fee to the operator when a scooter is plugged into the charging infrastructure. The goal is to help reduce sidewalk clutter and improve access to fully charged scooters. **Figure 6** shows Austin's dockless scooter parking locations.

Figure 6: Austin, TX Dockless Scooter Parking Locations



Source: City of Austin

Additionally, the Austin City Code permits the City of Austin to issue permits to commercial delivery vehicles to create parking options for delivery of goods in the downtown area. Permit costs range by dwell time. A 30-minute permit is \$150 per year, a one-hour permit is \$300 per year and a 2-hour permit is \$625 per year, subject to sales tax (8.25%) and a one-time processing fee of \$25.

The City has established 30-minute commercial loading zones that can be used with a permit for up to 30-minutes. Permits can also be used at metered parking spaces for up to 30 minutes and in locations where there are two or more travel lanes in one direction, delivery vehicles can load or unload in the curb side travel lane.

Blocking or stopping in a bike lane, transit priority lane or travel lane on a street with a single lane in each direction is prohibited.

INTEGRATION WITH MISSOULA CITYWIDE PARKING PLAN'S GUIDING PRINCIPLES

These strategies are consistent with two of Missoula's guiding principles:

- **Prioritize a multimodal environment that maximizes mobility freedom, choice and safety for all Missoulians:** Parking management districts in partnerships with the community that fund local streetscaping and mobility improvements improve access and support economic development. Dockless scooter parking improves safety and ensures sidewalks are prioritized for pedestrians.
- **Offer opportunities for consistency and collaboration among the many City departments and external institutional partners that work to make Missoula an even better place.** Pricing for non-parking modes of travel requires partnerships across a spectrum of entities including the community and private operators such as Transportation Network Companies and commercial delivery companies.

CURB MANAGEMENT BEST PRACTICES

With so much space in San Francisco allocated to personal vehicle parking and growing demands from other travel options and commercial delivery, issues of curb management and access have become increasingly important in the City. The City felt that policies granting more space to private vehicle parking

MISSOULA CITYWIDE PARKING MANAGEMENT PLAN

Interim Deliverable: Example Practices

June 5, 2023

was an outdated strategy and at odds with San Francisco's transportation landscape that includes the need for more commercial delivery space due to growing online and on-demand purchases, increased use of Transportation Network Companies (TNCs such as Uber and Lyft), growing bike, moped, and scooter ridership, and encouraging transit ridership.

Further, the change in travel and goods movement put increased pressure on the curb and the City was concerned with increased congestion, safety conflicts between pedestrians, cyclists, and car passengers, increases in double parking and blocking traffic and bike lanes, and inequity as some of these services are not available to individuals of all social and economic levels or those with mobility impairment.

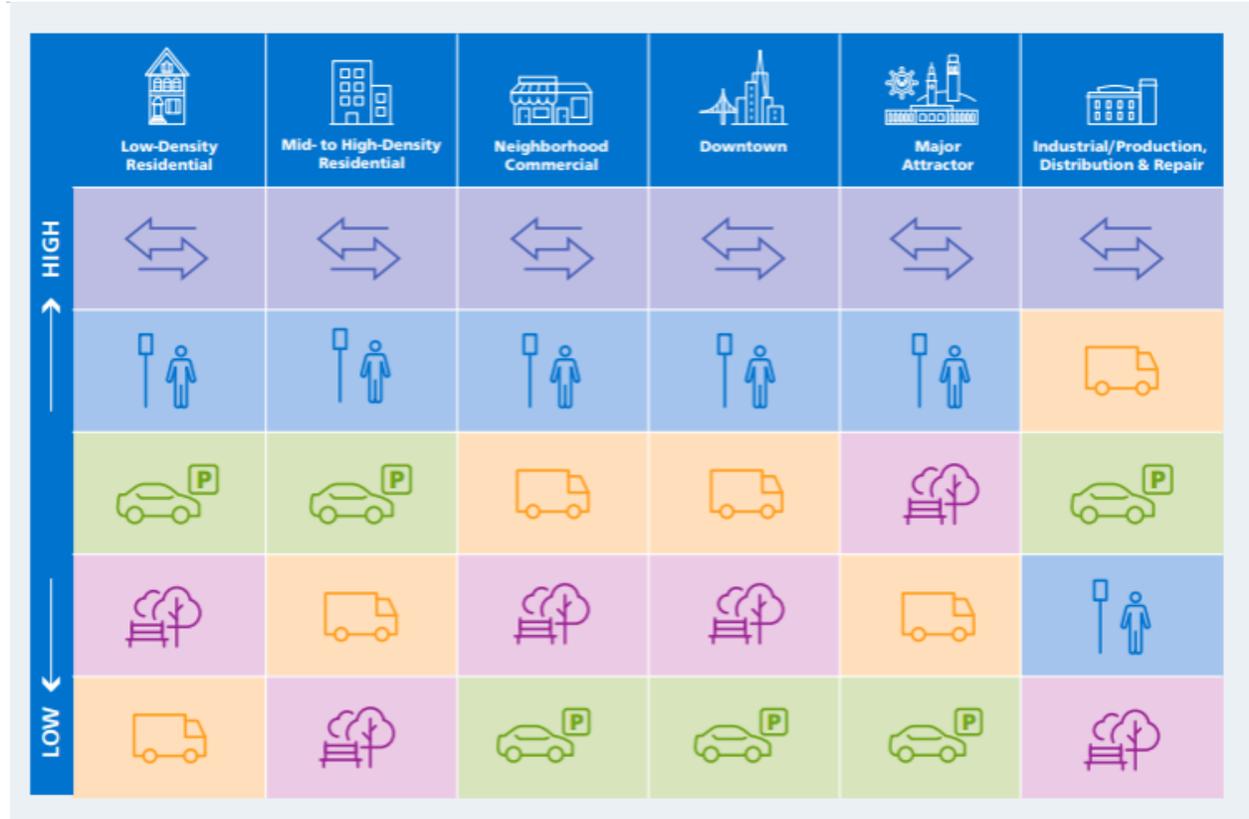
To solve this challenge, in February 2020, the SFMTA Board adopted the City's Curb Management Strategy to guide the SFMTA's decision making when it comes to allocating curb spaces for different uses. The goal of this strategy is to use curb (and parking) policies and pricing to promote safety, improve transit reliability and disabled access, reduce congestion, and support business vitality.

The City supports its Transit First and Vision Zero policies and its Climate Action Strategy by managing its curb space. The Curb Management Strategy is based on a framework for prioritizing different needs in different areas of the city based on five key curb functions:

1. Access for people
2. Access for goods
3. Public space and services
4. Storage for vehicles
5. Movement

Functions are prioritized by land use as shown in **Figure 7**:

Figure 7: City of San Francisco Curb Functions Prioritized by Land Use



Source: City of San Francisco

The recommended tools, policies, design standards, legislative changes, and process improvements support six key objectives:

1. Advance a holistic planning approach
2. Accommodate growing loading needs
3. Increase compliance with parking and loading regulations
4. Improved access to up to date data
5. Rationalize policies toward private uses of curb spaces
6. Promote equity and accessibility

The City is now implementing projects to test different curb management tools based on local needs including:

- **22nd Street Caltrain Station:** The streets around this important transit hub had no parking regulations. Staff added passenger loading zones, dedicated motorcycle parking, secure bike parking, and parking meters in the surrounding area to make it easier to safely access the station.
- **10th and 11th Street:** On 10th and 11th Streets just south of Market, there was very high passenger loading demand but little space allocated to it, leading to double parking in the bike lane, in front of the bus and in the travel lane. Staff reconfigured the curb to create larger, more usable passenger loading zones, as well as improving the bus stop, adding commercial loading and short-term parking space, and realigning travel lanes to improve safety.

- **Oracle Park:** The SFMTA implemented new loading zones near the San Francisco Giants stadium and worked with taxis and transportation network companies to ensure drivers and riders use them correctly.
- **Inner Sunset:** Working through a community- and merchant-led strategy, the City improved the allocation of loading and parking regulations in the busy neighborhood commercial district.

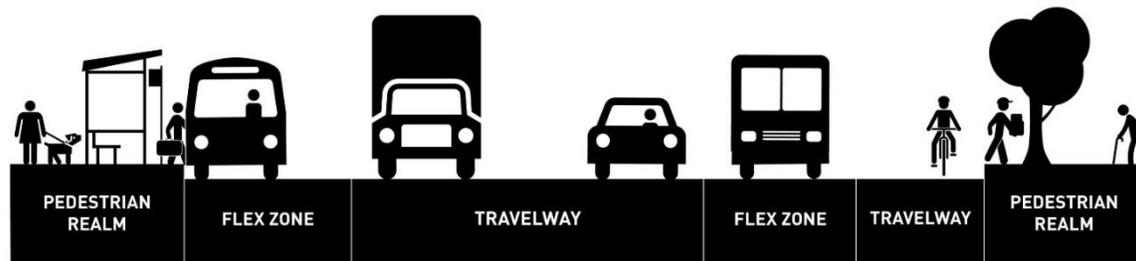
The City of Seattle’s Department of Transportation (SDOT) developed street right-of-way zones to assist in the planning of their streets from curb to curb. SDOT breaks the street up into three zones: pedestrian realm, travel way, and flex zone. They define these zones as:

- **Pedestrian Realm:** Comprised of frontage, pedestrian mobility, and landscape/furniture zones between the property line and the flex or travelway zones. This space includes the sidewalk, planting areas, bus shelters, sidewalk cafes, and bike racks..
- **Travelway:** Primarily used for mobility purposes. Lanes can serve all modes, or be dedicated to serve specific modes, such as a bus or bike lane.
- **Flex zone:** An essential zone for people and goods. It provides separation, access, and a space for users to transition between moving vehicles in the travelway and people in the pedestrian realm. This zone can contain multiple uses along a street including: transit stops, commercial deliveries, on-street parking, taxi zones, passenger loading, parklets, strategies, and shared mobility areas.

Figure 8 provides a graphic illustration of these three zones.

Figure 8: City of Seattle, WA Street Right-of-Way Zones

STREET RIGHT-OF-WAY (ROW) ZONES



PEDESTRIAN REALM

Comprised of frontage, pedestrian mobility, and furniture zones between the property line and the flex or travelway zones. This space includes the sidewalk, planting areas, bus shelters, sidewalk cafes, and bike racks.

TRAVELWAY

Most often used for mobility purposes. Lanes can serve all modes or be dedicated to serve specific modes, such as a bus or bike lane.

FLEX ZONE

An essential zone for people and goods, providing separation between moving vehicles in the travelway and people in the pedestrian realm. This zone can contain multiple uses along a street - including commercial deliveries, parklets, on-street parking, and taxi zones. It can be used for mobility at specific times of the day.



Source: City of Seattle Department of Transportation, 2016

MISSOULA CITYWIDE PARKING MANAGEMENT PLAN

Interim Deliverable: Example Practices

June 5, 2023

The Seattle DOT also developed six essential functions for the ROW within these three zones. According to SDOT, functions are not mode-specific and can be achieved through a variety of different uses and treatments for different modes in different places along the street or corridor. The six essential functions include storage, greening, activation, access for commerce, access for people, and mobility.

Table 3 provides a summary of these six functions. Uses, according to SDOT are the ways the space is utilized, designed, or allocated to serve one or more meta-functions. According to SDOT, *“For example, bus stops, passenger loading, bike parking, and short-term parking for carsharing vehicles are all uses that serve the primary function of providing ‘access for people.’ Bus-only lanes, turn lanes, general travel lanes and bike lanes are uses that serve a ‘mobility’ function.”*

Table 3: City of Seattle, WA Essential Right-of-Way Functions

	Definition	Uses
Mobility	Moves people and goods	Sidewalks Bus or streetcar lanes Bike lanes General purpose travel lanes – includes freight Right- or left-turn only lanes
Access for People	People arrive at their destination or transfer between different ways of getting around	Bus or rail stops Bike parking Curb bulbs Passenger load zones Short-term parking Taxi zones
Access for Commerce	Goods and services reach their customers and markets	Commercial vehicle load zone Truck load zone
Activation	Offers vibrant social spaces	Food trucks Parklets and strategies Public art Seating Street festivals

MISSOULA CITYWIDE PARKING MANAGEMENT PLAN

Interim Deliverable: Example Practices

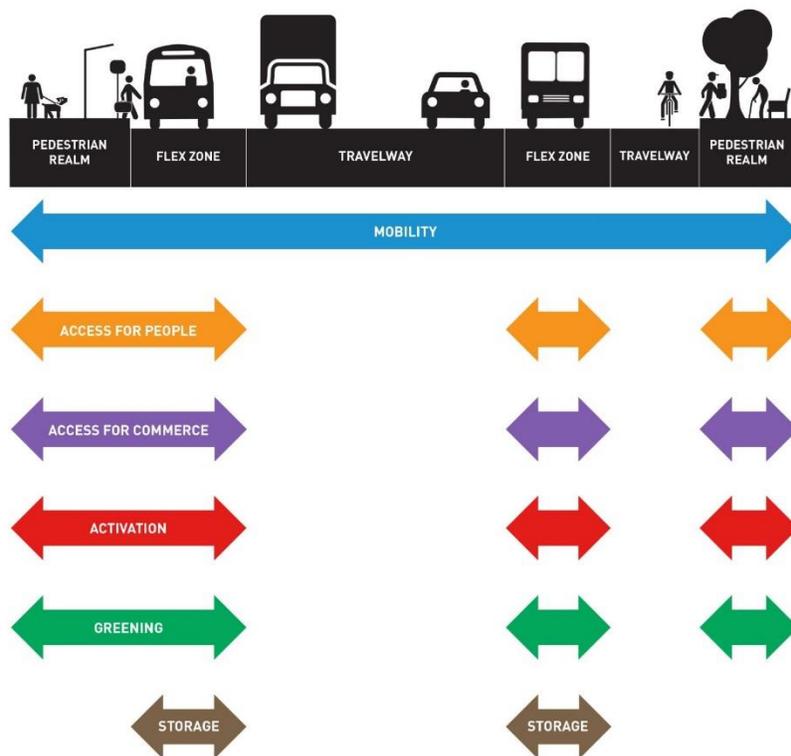
June 5, 2023

Greening	Enhances aesthetics and environmental health	and	Plantings -Boulevards -Street trees -Planter Boxes Rain gardens and bioswales
Storage	Provides storage for vehicles or equipment		Bus layover Long-term parking Reserved spaces (e.g. for Police or other government use) Construction

Source: City of Seattle Department of Transportation, 2016

The locations where these functions occur within the ROW are shown in **Figure 9**.

Figure 9: City of Seattle, WA Location of Right-of-Way Functions



Source: City of Seattle Department of Transportation, 2016

The City of Seattle has developed a useful prioritization ranking based on land-uses and street types. An example of this ranking system is shown in **Table 4**.

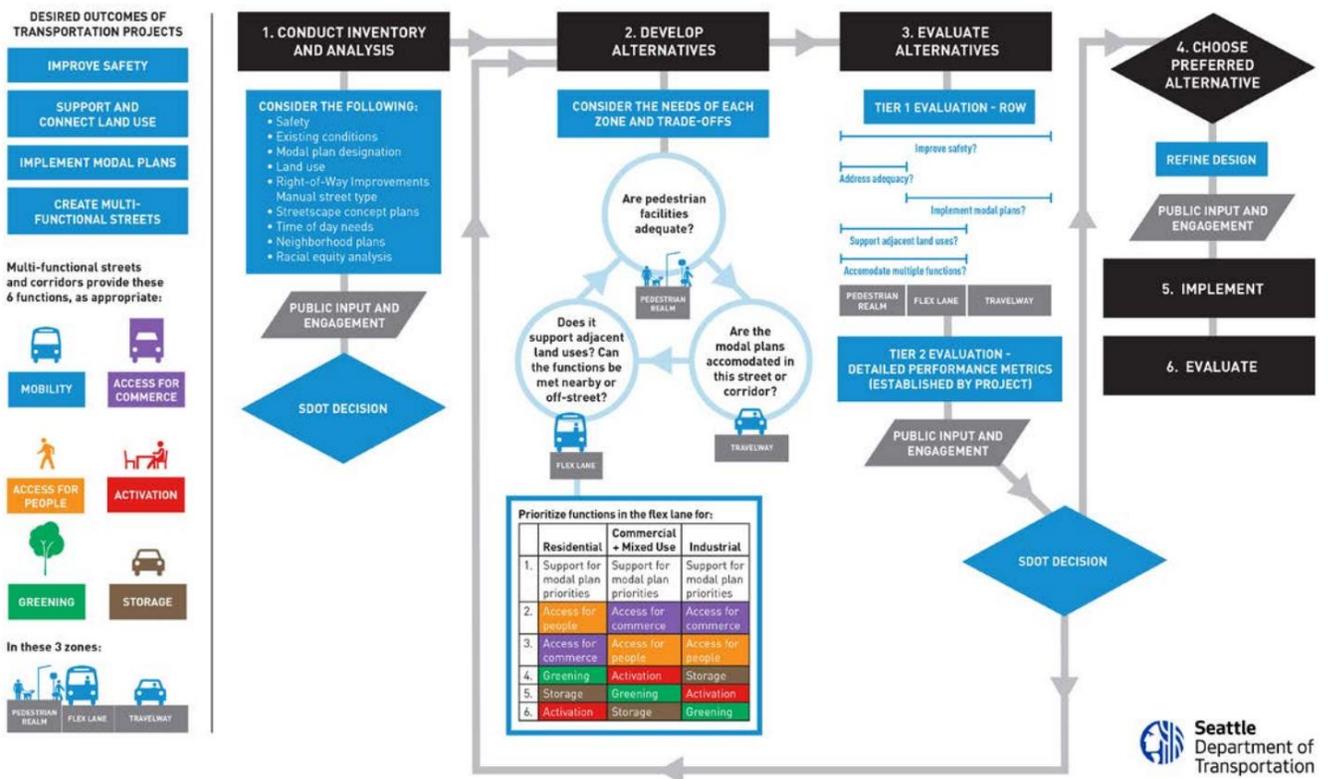
Table 4: City of Seattle, WA Example of Right-of-Way Prioritization Ranking

	Industrial Areas	Residential Areas	Commercial or Mixed-use Areas
Modal Plan Priorities	1	1	1
Access for Commerce	2	3	2
Access for People	3	2	3
Public Space Activation	5	6	4
Greening	6	4	5
Private Vehicle Storage	4	5	6

Source: *Curb Appeal*, NACTO, 2017

The City of Seattle also created a decision-making process for right-of-way allocation. In this process, communities are instructed to determine the desired outcome of a right-of-way project, evaluate existing conditions, develop alternatives based on user needs and analyze benefits and trade-offs, evaluate these alternatives and then choose a plan to implement based on this analysis. This also includes analyzing if the proposed alternatives meet the desired outcomes as well as gathering public input through the process. Once a design has been refined and reviewed by the public, it should be implemented. After implementation, the project should be evaluated for effectiveness. This decision-making process is shown in **Figure 10**.

Figure 10: City of Seattle, WA Right-of-Way Allocation Decision Framework



Source: City of Seattle

Both San Francisco and Seattle also have a coordinated curb management prioritization strategy that allocates curb space for all users based on demand and priorities (private vehicle parkers, pedal and e-bikes and scooters, transit, commercial and on-demand delivery, parklets, Transportation Network Companies (TNCs such as Uber and Lyft), food trucks and other users). A holistic curb prioritization strategy, in combination with performance pricing, supports increased access and therefore addresses different needs of people. This strategy also accommodates demand for the growth in various users of the curb and brings order and safety.

Lessons learned from Seattle and San Francisco include the importance of having a clear understanding of the infrastructure available to manage a performance pricing system, and to avoid going beyond the system’s capabilities. For example, San Francisco has a very sophisticated data infrastructure warehouse to automatically change parking rates by block face based on demand. This enables the city to change rates in a more precise area (block face). Seattle’s program relies on manual data collection, so the City bases rates on a larger area instead of by block face.

INTEGRATION WITH MISSOULA CITYWIDE PARKING PLAN’S GUIDING PRINCIPLES

These strategies are consistent with two of Missoula’s guiding principles:

- **Prioritize a multimodal environment that maximizes mobility freedom, choice and safety for all Missoulians:** In combination with performance pricing, curb prioritization strategy supports increased access of diverse curb users.
- **Offer opportunities for consistency and collaboration among the many City departments and external institutional partners that work to make Missoula an even better place:** Curb

MISSOULA CITYWIDE PARKING MANAGEMENT PLAN

Interim Deliverable: Example Practices

June 5, 2023

management strategy requires partnerships across a spectrum of entities including the community and private operators such as Transportation Network Companies and commercial delivery companies.

PARKING TECHNOLOGY BEST PRACTICES

MULTIPLE/CREATIVE/INTEGRATIVE PAYMENT OPTIONS

The City of Aspen, Colorado offers three ways to pay for parking, and also offers free parking options, to maximize convenience and affordability of access and parking in downtown Aspen. The three parking payment options are Text2Park (an option to pay that uses an online payment method that does not require downloading a mobile app), the PayByPhone mobile app, and Pay Stations. In addition, Aspen offers two ways to park for free using a carpooling permit and a park-n-ride facility with a free bus to Aspen.⁹

INTEGRATION WITH MISSOULA CITYWIDE PARKING PLAN'S GUIDING PRINCIPLES

These strategies are consistent with two of Missoula's guiding principles:

- **Offer opportunities for consistency and collaboration among the many City departments and external institutional partners that work to make Missoula an even better place:** By offering multiple payment methods for parking through partnerships with different parking technology service companies, Missoula can provide users with more choices and enhance the parking experience.
- **Equitably accommodate all users in need of a parking option.** Through multiple payment options, Missoula can provide options that suit users with different parking needs, including residents, employees, and tourists.

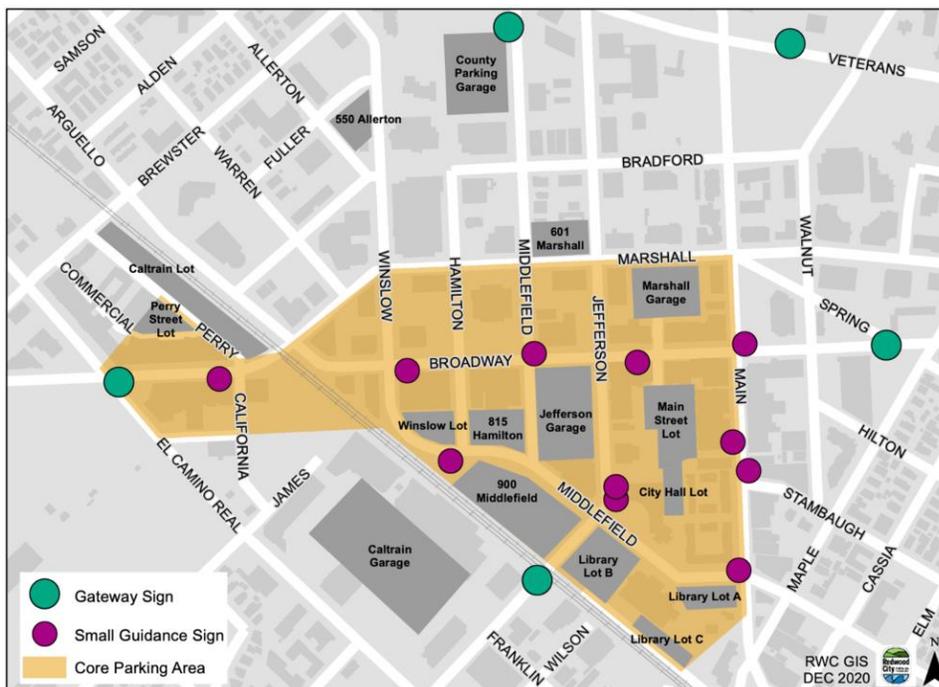
LEVERAGING TECHNOLOGY TO SUPPORT USER PARKING DECISIONS

In 2021, the City of Redwood City, California launched an automated parking guidance system for its more than 4,500 parking spaces in the downtown core, which include 400 on-street spaces, 7 parking lots, and 11 garages. The parking guidance system was installed to make it easier for residents and visitors to find available spaces, increasing utilization of existing spaces and reducing downtown traffic congestion and emissions associated with vehicles circling the block looking for parking. The parking guidance system, managed by CleverCiti, a smart mobility and parking technology firm, will provide real-time parking information on a mobile app, 23 digital LED gateways and signs with 360-degree visibility, and parking facility signs. The system provides parking information on multiple platforms, allowing residents and visitors to easily get real-time information to improve the parking experience downtown.¹⁰

⁹ City of Aspen, Parking Department. (2023). Parking Options. City of Aspen. <https://aspen.gov/1400/Parking-Options>

¹⁰ CalCities. (21 July 2021). Redwood City's innovative parking guidance system designed to spur a strong post-pandemic comeback. Calcities. <https://www.calcities.org/news/post/2021/06/02/redwood-city-s-innovative-parking-guidance-system-designed-to-spur-a-strong-post-pandemic-comeback>

Figure 11. Automated Parking Guidance System in Redwood City, California



Source: CalCities, 2021

The City of Vail has an automated parking occupancy tracking system with real-time data for five of the City’s parking facilities on the city’s website, including four parking structures and one surface lot. Parking availability is shown by level for the largest parking structure, the Red Sandstone Garage, with four levels and at the parking structures, occupancy information is displayed via a digital LED sign.¹¹

INTEGRATION WITH MISSOULA CITYWIDE PARKING PLAN’S GUIDING PRINCIPLES

These parking technology strategies are consistent with Missoula’s guiding principles:

¹¹ City of Vail. (2023). Parking availability. City of Vail. <https://www.vailgov.com/government/departments/transportation-services/parking-information/parking-availability>

DELIVERY AND DROP-OFF BEST PRACTICES

EFFECTIVE/CLIMATE-FRIENDLY INTEGRATION COMMERCIAL DELIVERY AND PICK-UP AND DROP-OFF

In support of the City's climate goals and Vision Zero goal, the City of Seattle conducted a Zero Emissions Freight study that outlines policy and program changes to prioritize and incentivize zero emissions (ZE) vehicles for commercial loading, with an e-cargo bicycle pilot program and zero emission neighborhood delivery hubs. The three policy steps involved in incentivizing commercial fleet electrification are to

- 1) Prepare Commercial Delivery for ZE Loading Zones:
Liaison with delivery companies to communicate the upcoming changes in routes, loading zones, and loading zone standards; implement a ZE loading zone pilot program.
- 2) Develop a Tiered Commercial Vehicle Loading Zone Permit Pricing Structure:
Increase the commercial vehicle loading zone fee and develop a tiered commercial vehicle permit pricing structure by which Seattle Department of Transportation (SDOT) charges vehicles by emission type.
- 3) Enhance Enforcement Practices
Collaborate with City departments and Seattle Police Department to develop and implement education and enforcement strategies focusing on Seattle businesses.¹²

In addition to a ZE loading zone pilot program, Neighborhood Delivery Hubs will provide sites for centralized cargo drop-off to increase efficiency and minimize freight traffic in residential neighborhoods. In support of an economical and low-carbon transport option to complete the cargo delivery, the e-cargo bicycle pilot program will offer a cargo bike lending library to incentivize the adoption of cargo bicycles for last-mile connections from Neighborhood Deliver Hubs to client's doorsteps. The planning process will involve robust community engagement to ensure that policies and programs are safe, equitable, and viable for residents, businesses, and community members.¹³

The City of Boston's Transportation Department is developing an electric cargo bike delivery service catered towards local businesses in the Allston area to improve traffic safety, roadway congestion, and air quality. In recent years, the on-demand nature of delivery services has resulted in more commercial delivery vehicles in urban areas, which are delivering fewer goods per vehicle. To increase efficiency of the last-mile delivery in urban areas, and at the same time reduce congestion, noise, and pollution associated with commercial vehicles, the city plans to replace motor vehicles with e-cargo bike trips.¹⁴

In summer 2023, the City plans to launch a pilot project called Boston Delivers, a neighborhood friendly and equitable delivery service for local businesses. The City has partnered with Net Zero Logistics, an urban e-commerce delivery company that uses sustainable delivery solutions, to manage the e-cargo bicycle fleet and perform the deliveries on behalf of Allston businesses. In order to test feasibility for

¹² Seattle Department of Transportation. (2023). Zero-emissions freight study and recommendations report. https://www.seattle.gov/documents/Departments/SDOT/ParkingProgram/Curbside%20Climate/Seattle%20C40_ZEF_Final%20Report_Layout.pdf

¹³University of Washington Urban Freight Lab. (2023). The Seattle neighborhood delivery hub: A zero-emissions last-mile delivery pilot in Seattle's Uptown. Seattle Neighborhood Hub. <https://www.seattleneighborhoodhub.com/>

¹⁴ City of Boston. (23 March, 2023). Boston delivers: A neighborhood-friendly deliver service powered by electric cargo bikes. City of Boston. <https://www.boston.gov/departments/transportation/boston-delivers>

MISSOULA CITYWIDE PARKING MANAGEMENT PLAN

Interim Deliverable: Example Practices

June 5, 2023

small businesses, the City is providing grants to cover the cost of e-cargo delivery services for 8 businesses for 1 year.

Businesses that have fewer than 100 employees, that are located in or do business in Allston, and are minority or woman-owned businesses are prioritized for receiving a grant. Participants in the program will receive a subsidy of \$500 per month for Tier 1, \$1,000 per month for Tier 2, or \$2,500 per month for Tier 3 to conduct between 20 and 150 deliveries per month depending on the Tier. The goal of the project is to test and promote a more equitable, environmentally sustainable, and traffic friendly way of delivering goods. If successful, the project can result in safer, less congested streets, more efficient and clean delivery systems, and incentives to shop locally.

INTEGRATION WITH MISSOULA CITYWIDE PARKING PLAN'S GUIDING PRINCIPLES

These climate-friendly strategies for commercial delivery are consistent with two of Missoula's guiding principles:

- **Prioritize a multimodal environment that maximizes mobility freedom, choice and safety for all Missoulians:** By incentivizing e-cargo last-mile delivery services, Missoula can support a safer, multi-modal transportation system with reduced congestion and air pollution from commercial vehicles.
- **Offer opportunities for consistency and collaboration among the many City departments and external institutional partners that work to make Missoula an even better place:** Sustainable freight systems require partnerships across a spectrum of entities including local businesses and e-cargo delivery companies.