

Exhibit A

Parking Management Manual

DEVELOPED FOR
PBOT
PORTLAND BUREAU OF TRANSPORTATION



PERFORMANCE BASED
PARKING
MANAGEMENT MANUAL

APRIL 2018

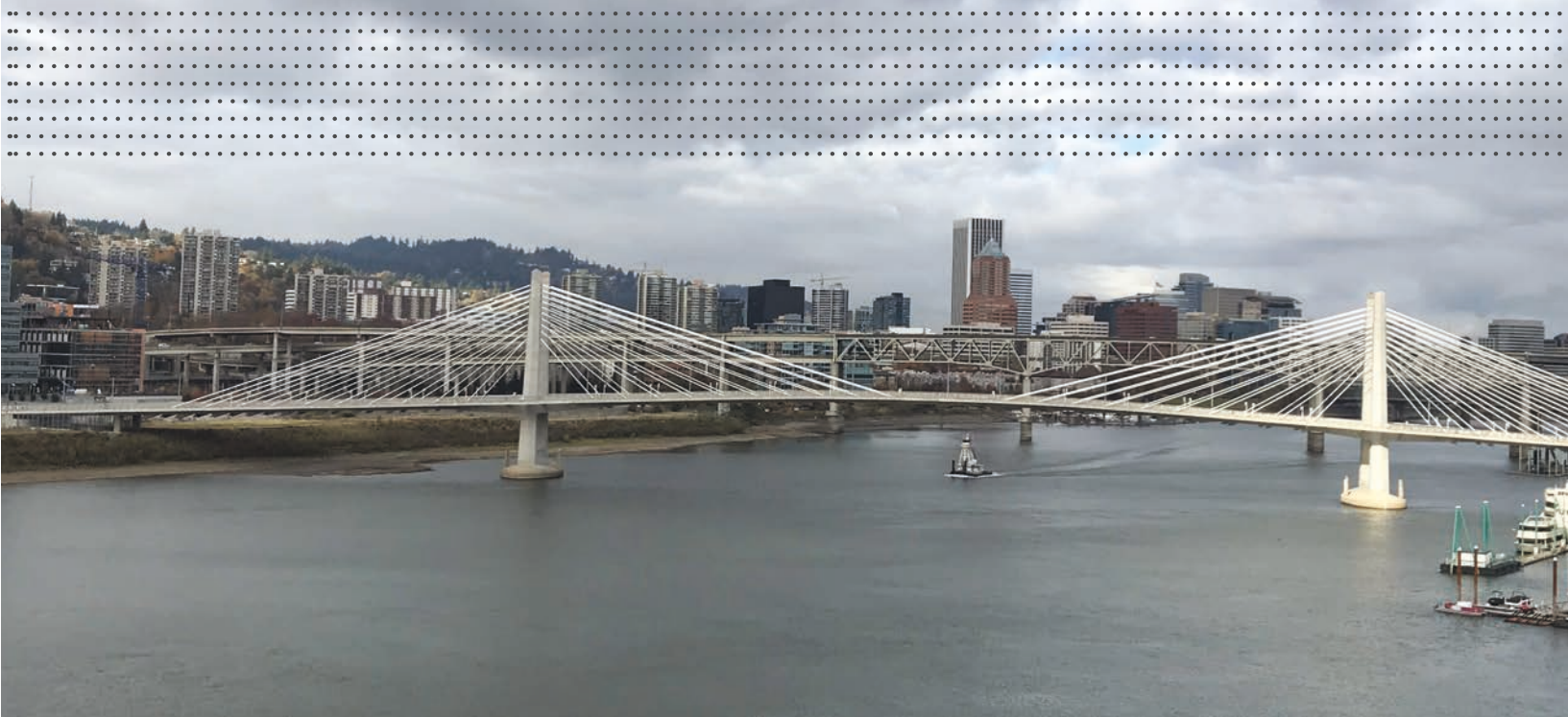
DEVELOPED BY

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ACKNOWLEDGEMENTS

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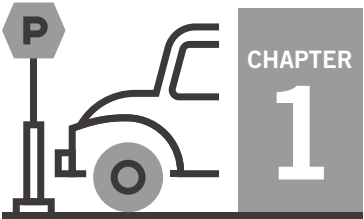
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TABLE OF CONTENTS



CHAPTER 1

INTRODUCTION AND CONTEXT 2

- What is the Parking Management Manual? 2*
- On-Street Management Objectives 4*
- How to Use the Manual 7*



CHAPTER 2

PARKING MANAGEMENT DISTRICTS (PMD) 10

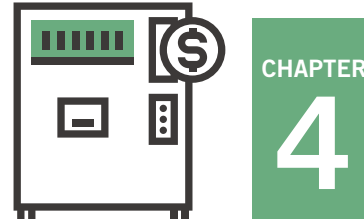
- Background 10*
- Forming New Parking Management Districts 11*
- Implementing Paid On-Street Parking 16*
- Net Meter Revenue Allocation 22*



CHAPTER 3

TIME LIMITS 30

- Background 30*
- Setting On-Street Parking Time Limits 31*



CHAPTER 4

PRICING 38

- Background 38*
- What is Performance-Based Pricing? 40*
- Collecting Data 40*



CHAPTER 5

EVENT DISTRICTS 50

- Background 50*
- Implementing Event Districts 50*
- Rate Adjustment Guidelines 53*



CHAPTER 6

TRUCK LOADING ZONES 58

- Background 58*
- Implementing a Truck Loading Zone (TLZ) 62*



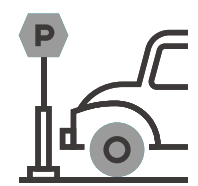
CHAPTER 7

ENFORCEMENT 68

- Background 68*
- Enforcement Division 70*
- Enforcement Responsibilities 73*
- Performance Management 75*

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1



INTRODUCTION



INTRODUCTION AND CONTEXT

WHAT IS THE PARKING MANAGEMENT MANUAL?

With Resolution 37204 (April 2016), City Council directed PBOT to develop a Performance-Based Parking Management Program, based on adopted parking policies, accepted performance targets, and defined program parameters. The purpose of this Parking Management Manual (PMM) is to translate policy into operational guidelines.



Parameters identified within the Resolution included:



Purpose of the parking system



Procedures for establishing new meter districts



Performance targets



Using **data** to adjust rates, set frequency of adjustments, establish hours of enforcement, monitor and evaluate operation.



Coordinating on- and off-street parking into a more **seamless** system



Parking management **communication** procedures

This Council-approved Manual builds on the outreach effort conducted in developing the Citywide Parking Strategy, and represents a collaborative effort of PBOT staff and a Stakeholder Advisory Committee.



The Policy further identifies **six key objectives**:



Contribute to economic vitality



Advance established transportation and parking district goals



Foster transportation options



Minimize parking impacts on adjacent areas



Support meter system maintenance and operational costs



Allocate parking revenue in accordance with the Revenue Allocation policy

ON-STREET MANAGEMENT OBJECTIVES

While the manual is applicable citywide, the operational guidelines focus on parking within and around **commercial districts**. Portland’s 1996 Parking Meter District Policy (TRN 3.102) captures the key goals of on-street parking management.

“...the on-street parking system in commercial districts is managed to support the economic vitality of the district by encouraging parking turnover, improving circulation, encouraging use of off-street parking, maintaining air quality, and promoting the use of alternative modes by managing the supply and price of on-street commuter parking. In managing the on-street parking system priority is given to short-term parking, followed by carpools, and the remaining supply is managed for long-term use” (such as employee parking).



The [2035 Comprehensive Plan](#) (2016) also identifies a series of management priorities for the overall on-street system. Additional details related to each of these policies is included within the [Transportation System Plan](#) (TSP):

- **Policy 9.55: PARKING MANAGEMENT.** Reduce parking demand and manage supply to improve pedestrian, bicycle, and transit mode share, neighborhood livability, safety, business district vitality, vehicle miles traveled (VMT) reduction, and air quality. **Implement strategies that reduce demand for new parking and private vehicle ownership, and that help maintain optimal parking occupancy and availability.**

- **Policy 9.56: CURB ZONE.** Recognize that the **Curb Zone is a public space**, a physical and spatial asset that has value and cost. Evaluate whether, when, and where parking is the highest and best use of this public space in support of broad City policy goals and local land use context. **Establish thresholds to utilize parking management and pricing tools in areas with high parking demand** to ensure adequate on-street parking supply during peak periods.
- **Policy 9.57:** Manage parking and loading demand, supply, and operations in the public right of way to achieve mode share objectives, and to encourage safety, economic vitality, and livability. **Use transportation demand management and pricing of parking in areas with high parking demand.**

HOW TO USE THE MANUAL

This PMM is intended to define parking guidelines for internal personnel and stakeholders. The document is organized into the following chapters, each covering a distinct management topic:



CHAPTER 2:
Parking Management
Districts



CHAPTER 3:
Time Limits



CHAPTER 4:
Pricing



CHAPTER 5:
Event Districts



CHAPTER 6:
Truck Loading Zones



CHAPTER 7:
Enforcement

Relevant City policies and plans are identified throughout the Manual for context and ease of reference. The content included in this Manual will be reviewed and updated on a regular basis.



Foundational Elements of the Parking Management Manual (PMM)

Key City policies, plans, and codes:

- [Portland City Code and Charter, Title 16](#)
- [TRN Parking Operations, Policy 3.102 Parking Meter District](#)
- [TRN Parking Operations, Policy 3.450 Transportation Fee Schedule](#)
- [Central City Transportation Management Plan \(CCTMP\)](#)
- [2035 Comprehensive Plan](#)
- [Climate Action Plan](#)
- [Central City 2035](#)
- [Resolution No. 37204](#)
- [State of Parking Report 2015](#)
- [Centers and Corridors Toolkit](#)
- [Portland Truck Parking and Loading Plan 2016](#)
- [Transportation System Plan 2035](#)
- [Smart Park Parking Garage System Strategic Plan 1999](#)

2



PARKING MANAGEMENT DISTRICTS (PMD)



THIS GUIDANCE
APPLIES TO:

- ☒ Existing Parking Management District
- ☒ Future Parking Management Districts

PARKING MANAGEMENT DISTRICTS (PMD)

BACKGROUND

Portland's 1996 Parking Meter District Policy (TRN 3.102) provides management objectives and guidelines for the formation of new meter districts. The policy has been used successfully to implement four meter districts outside of Downtown. As Portland moves toward performance-based parking management, additional guidelines are needed to ensure that new meter districts are established with the goal of meeting specific management objectives for the area.

Economic vitality and livability are key themes within the Parking Meter District Policy. An overview of on-street parking management in commercial districts is described in the policy below:

...the on-street parking system in commercial districts is managed to support the economic vitality of the district by encouraging parking turnover, improving circulation, encouraging use of off-street parking, maintaining air quality, and promoting the use of alternative modes by managing the supply and price of on-street commuter parking. In managing the on-street parking system priority is given to short-term parking, followed by carpools and the remaining supply is managed for long-term use. Minimizing impacts on surrounding neighborhoods to protect neighborhood livability is a key objective of the City's on-street parking management policies.

FORMING NEW PARKING MANAGEMENT DISTRICTS

Parking management strategies implemented in commercial corridors across Portland vary widely. Outside of the five meter districts, there are no established parking management districts that coordinate with PBOT to make requests for new or revised parking management strategies in commercial corridors such as time limits, enforcement, or paid parking.

The steps outlined in this document provide a process for establishing new Parking Management Districts (PMDs) outside of existing meter districts.

While each new PMD is likely to have varying degrees of active parking management strategies already in place, this process will inform how new strategies will be implemented moving forward.

THIS GUIDANCE APPLIES TO:

- ☐ Downtown (including Pearl, South Waterfront, Old Town, and Goose Hollow)
- ☐ Marquam Hill
- ☐ Lloyd
- ☐ Central Eastside
- ☐ Northwest
- ☒ **Future Parking Management Districts**

Related City Policy
TRN 3.102: Parking Meter District Policy (1996)

Step 1: Initiate Request for New Parking Management District (PMD)

Formalizing a PMD is a necessary first step in order to identify potentially impacted stakeholders and ensure that requests to PBOT for additional active parking management have been made in consultation with employees, business owners, and residents.

PBOT recommends that business owners interested in pursuing additional active parking management work with their representative Business Association to request the formation of a PMD¹.

Step 2: Establish Preliminary District Boundaries

The boundaries of the PMD may follow that of the sponsoring Business Association, but this is not a requirement. Any active parking management strategies, such as implementation of time limits or on-street paid parking, will **only apply in areas zoned commercial or mixed-use**. Parking management in residential areas will follow the processes defined for Area Permit Parking zones (APPs).²

Step 3: Establish Workgroup or Parking Committee

Formation of a decision-making group of district representatives is a necessary step to ensure requests to PBOT for new parking management strategies are supported by district stakeholders. The workgroup or Parking Committee should include at least five representatives, consisting of business owners/representatives and residents of a district.

Upon initial formation, the workgroup or Parking Committee's charge will be to recommend new parking management strategies within the PMD. Should the PMD implement pricing strategies such as paid on-street parking, the Parking Committee will make recommendations on the use of net meter revenue (in accordance with [TRN 3.102](#)).

Step 4: Document Existing Conditions and Active Parking Management Strategies

A detailed inventory of on-street parking supply and current parking management strategies is required in order to inform the extent of data collection efforts and identify areas that may need revised management strategies. The PMD will work with PBOT to document the number of parking stalls within the district, classified by type of parking space. Types of parking spaces may consist of:

- Short-term (such as customers and visitors)
- Long-term (such as employees and residents)
- Specialty use (loading zones, disabled spaces, car-share spaces, etc.)

Step 5: Collect Data

Implementation of revised parking management strategies will follow a performance-based process, informed by observed demand and turnover. The Parking Committee will work with PBOT to identify the boundaries for an occupancy and turnover study.



Step 6: Recommend Parking Management Strategies

Based on the results of the data collection effort and identified needs within the Parking Management District (PMD) and the Parking Committee will work with PBOT to develop a set of parking management recommendations. Order of implementation should follow the guidelines established within PBOT's *Parking Management Toolkit* (2016).

Parking Management Districts are primarily intended to manage parking within mixed-use and commercially-zoned areas of the city. However, active parking management in commercial corridors often impacts parking behavior in surrounding neighborhoods.

As such, any recommended modifications to parking management within commercial corridors should be developed in consultation with adjacent neighborhood groups. Surrounding residential areas may elect to pursue implementation of an Area Parking Permit zone (APP) in response to proposed management strategies within the adjacent commercial corridor.

Step 7: Implementation

Once approved, PBOT will lead implementation of the recommended parking management strategies, including measures such as sign installation or replacement, enforcement, or parking meter installation.

Step 8: Monitoring

Regular monitoring of system performance helps to ensure that the implemented strategies have the intended effect. PBOT-funded data collection efforts (Starting with Step 4) will not exceed once every two years for each PMD, with the exception of a six-month follow-up study following implementation of a new parking management strategy within the PMD.

Should a PMD implement paid on-street parking, data will need to be collected at least once per year, with data collection costs borne by the meter district using net meter revenue funds (see [Chapter 4](#) for additional data collection guidelines).

¹ Where a formal local business association is not in place, then area businesses work with their Chamber of Commerce or an organization like [Venture Portland](#).

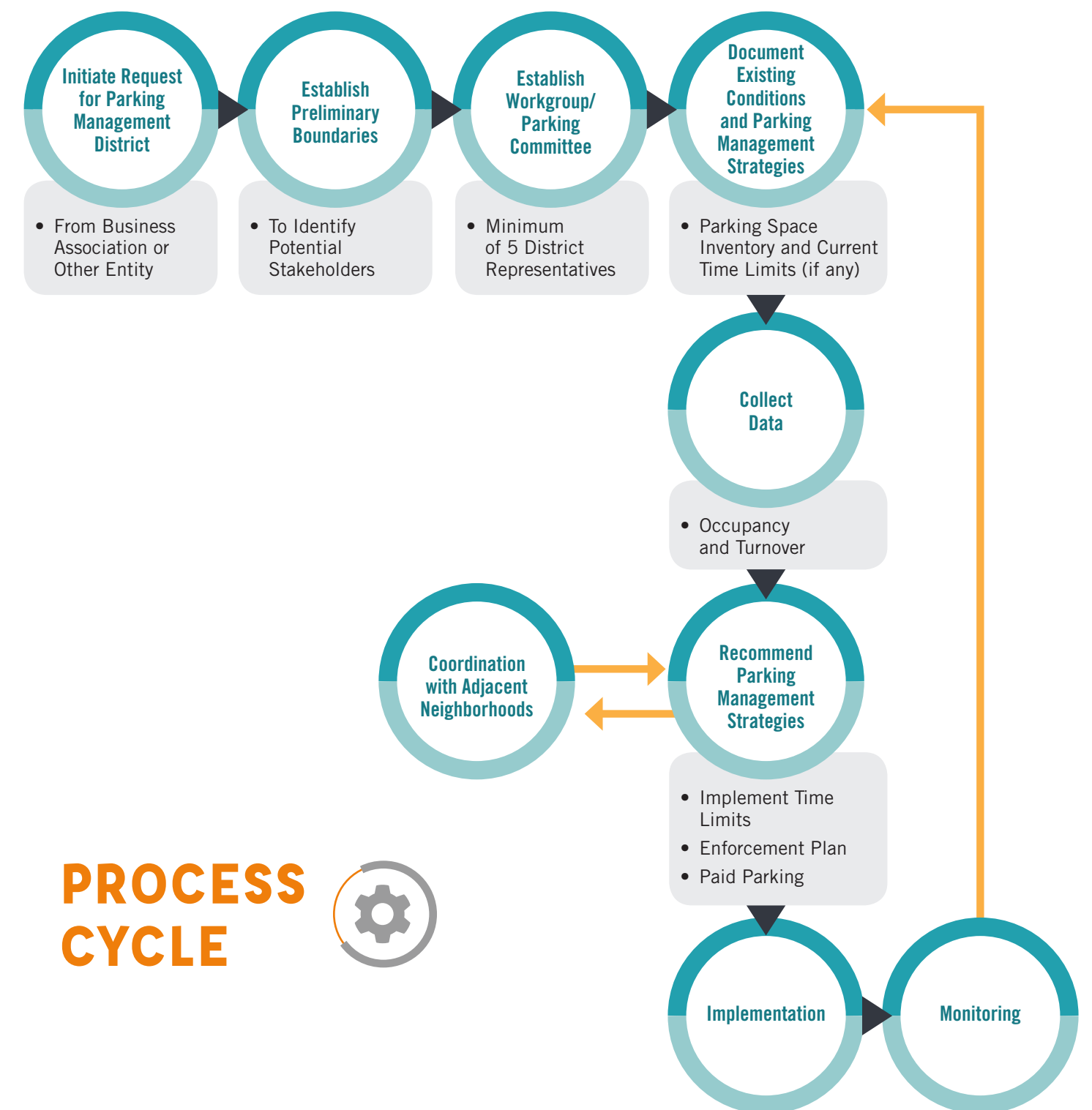
² See Area Parking Permit Programs (APPP), [Code Section 16.20.800](#).



Coordination with Surrounding Areas

Because active parking management strategies will only be applied in mixed-use or commercially-zoned areas, the boundaries of each new Parking Management District (PMD) will focus on commercial areas. However, forming an active partnership with surrounding neighborhoods is recommended to include input from key stakeholders.

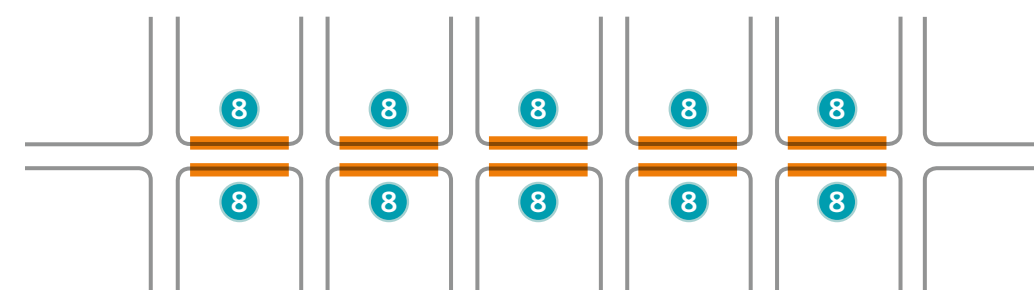
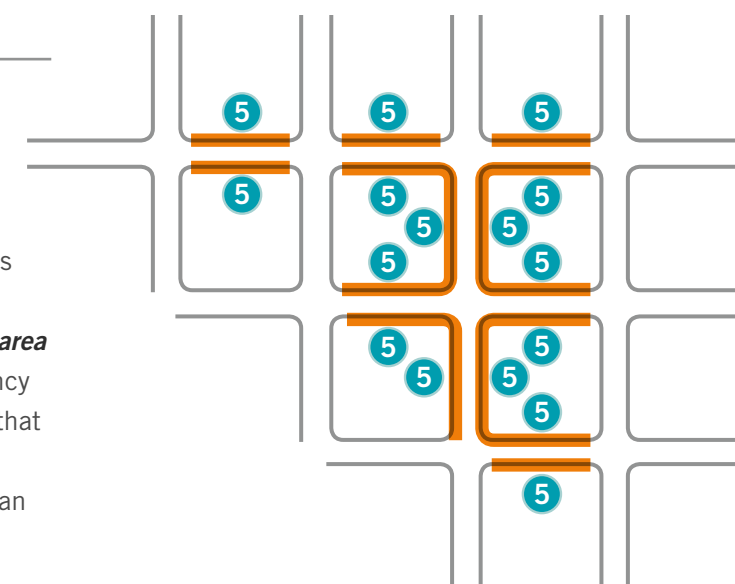
This partnership between a PMD and surrounding neighborhoods will only become more important should each area implement pricing strategies. Coordinating these revenue allocation programs enables strategic investment to reduce parking demand in the residential and commercial areas.





Requirement 3: Minimum Size

Assuming Requirements 1 and 2 have been met, a PMD may request an occupancy study within the areas of highest demand that should be considered for on-street paid parking. A new parking meter district will not be established unless the area includes **at least 80 on-street stalls in a mixed-use or commercially-zone area, covering an area of at least 10 contiguous block faces**. The occupancy study may include a larger area in order to ensure that data for the areas of highest demand are captured. PBOT will conduct an occupancy study no more than once every two years.



IMPLEMENTING PAID ON-STREET PARKING

The following section presents a series of requirements that must be met in order to establish a new meter district within a Parking Management District (PMD). They are not intended to be sequential but rather a general framework that establishes **minimum requirements**. Areas that meet all of these requirements do not necessarily need to implement paid on-street parking, but such districts would have this option as a management tool.

THIS GUIDANCE APPLIES TO:

- ☐ Downtown
- ☐ Marquam Hill
- ☒ Lloyd
- ☒ Central Eastside
- ☒ Northwest
- ☒ Future Parking Management Districts

Requirement 1: Parking Management District (PMD)

Requests for revised parking management in commercial corridors must be initiated through the PMD for the area.

Requirement 2: Existing Parking Management

On-street paid parking can be an effective tool to address high parking demands and low turnover in mixed-use or commercially-zoned areas, but other management and enforcement strategies should be applied first. Specifically, before implementing paid parking within a PMD, **the area must already have time limit restrictions in place with enforcement**.

Minimum
Size

At least

80
on-street
stalls

At least

10
contiguous
block faces

Minimum parking demand requirements for paid on-street parking

Average occupancy reaches or exceeds

**85% during
3 or more
hours**

during the day

Average occupancy reaches or exceeds

**70% during
5 or more
hours**

during the day

Requirement 4: Minimum Parking Demands

Effective parking management ensures there are typically 1 to 2 open parking stalls per block. According to best practice, this corresponds to an occupancy rate of no more than 85% during peak hours. In order to apply to a wide range of scenarios, a two-tiered approach has been established:

- Average occupancy reaches or exceeds 85% during 3 or more hours during the day, and
- Average occupancy reaches or exceeds 70% during 5 or more hours during the day

This two-tiered approach ensures that demands are relatively high (70% occupancy or more) for at least 5 hours, while also confirming that peak demands reach or exceed 85% during at least 3 hours prior to implementing paid parking. The area included within the calculation must be observed over **at least two weekdays, measured in separate weeks.**



For all future meter districts, hours of enforcement will be established by the parking committee for the meter district, based on data. As a starting point, PBOT recommends setting initial hours of enforcement to 10 am to 7 pm, Monday through Saturday. Parking demands typically remain low before 10 am. ***Delaying enforcement in the morning aligns with Vision Zero's Impairment Action Item #2*** to encourage impaired drivers to leave their cars overnight without concern of getting a parking ticket or being towed. Initial hours of enforcement may be reduced or extended based on data, with occupancy rates of 70% or higher needed to justify extended enforcement hours.

Requirement 5: Outreach to Surrounding Areas

Implementing paid on-street parking will, by design, shift parking demands within an area. Parking demands are likely to increase in surrounding areas with unregulated on-street parking. Prior to implementing on-street paid parking, ***notice must be given to all residents and businesses within 1,000 feet of proposed metered blocks.*** Neighborhood associations may choose to partner with business associations to measure demands in residential areas before and after the change to determine if an Area Parking Permit zone (APP) is needed. The APP process is independent from the meter district process and APPs will only be established when demand exceeds established minimums.

Summary

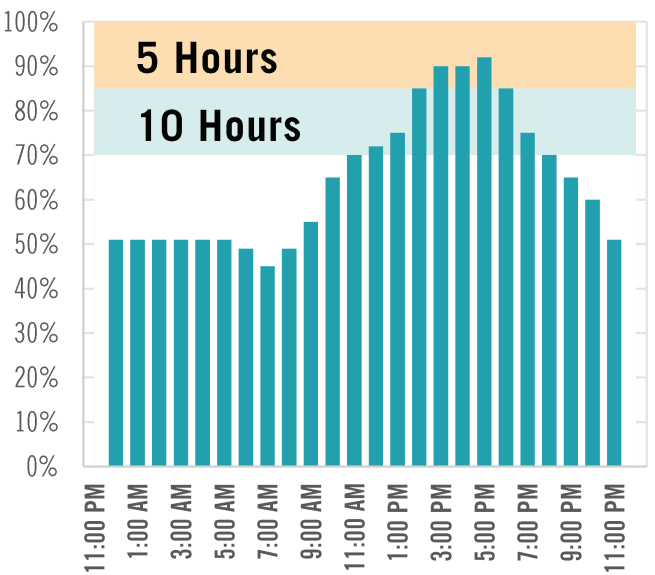
The following summary table presents the requirements and data needed to establish a new meter district within a Parking Management District (PMD).

DATA NEEDED	
REQUIREMENT 1	
Has a PMD been established?	Name of PMD
REQUIREMENT 2	
Have time limit restrictions been implemented?	# of stalls by type
Are time limit restrictions enforced?	Enforcement hours
REQUIREMENT 3	
Does the proposed mixed-use or commercially-zoned area include:	
• At least 80 stalls	# of stalls
• At least 10 contiguous block faces	# of block faces
REQUIREMENT 4	
Do peak demands averaged over a contiguous area with at least 80 stalls:	
• Reach or exceed 85% occupancy for 3 or more hours over at least 2 weekdays (measured in separate weeks), and	# of hours ≥ 85%
• Reach or exceed 70% occupancy for 5 or more hours over at least 2 weekdays (measured in separate weeks)	# of hours ≥ 70%
REQUIREMENT 5	
Have all residents and businesses within 1,000 feet of each proposed metered block been notified?	# of dwelling units
	# of businesses

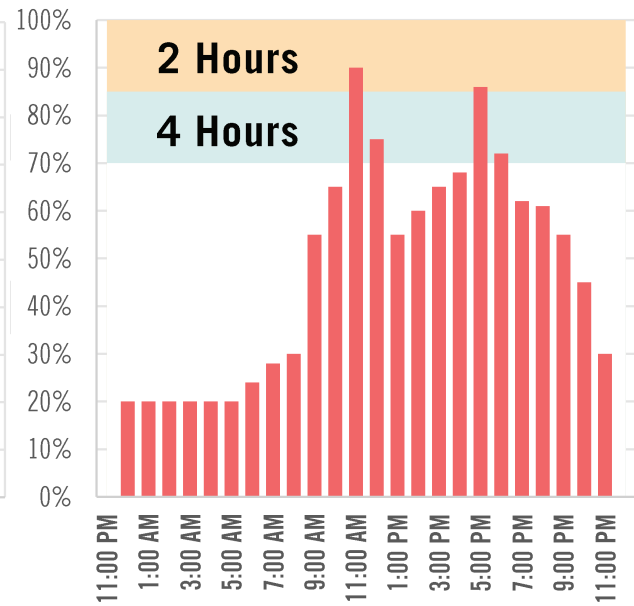
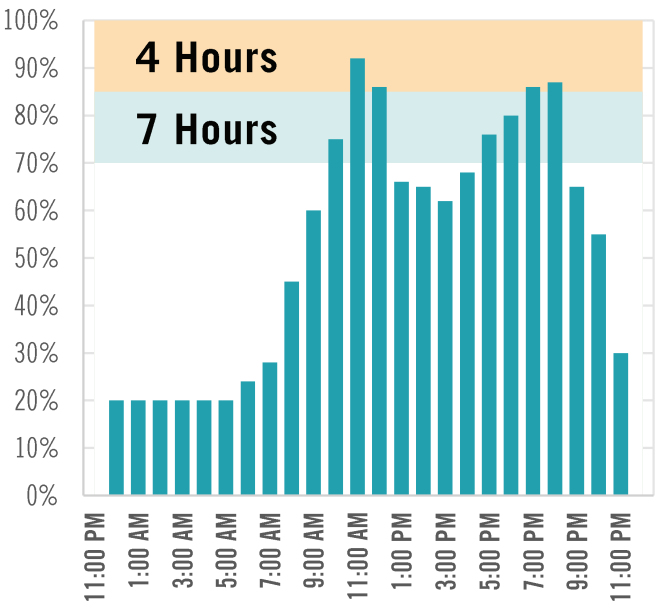
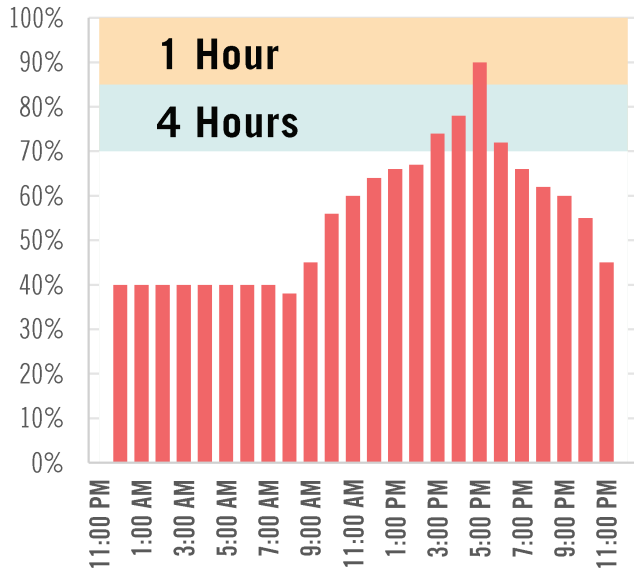
Example Occupancy Analysis

The following charts show a variety of **hypothetical** results along with the number of hours that would meet occupancy thresholds. Each bar represents an hour of data averaged over a **mixed-use or commercially-zoned area** containing **at least 80 on-street stalls** within a **contiguous area**.

Meets Criteria



Does Not Meet Criteria



Meets Criteria

Does Not Meet Criteria

NET METER REVENUE ALLOCATION

In general, parking meter revenue is intended to fund Transportation Demand Management (TDM) programs; parking services; small safety and/or capital projects for walking, bicycling, and transit; shared use arrangements for existing parking facilities; investments to improve the movement and delivery of goods and services; and new parking facility development. These investments help the City and PBOT meet the 2035 Comprehensive Plan and Transportation System Plan objectives by reducing drive alone trips and more efficiently manage parking as a key element of the overall transportation system.

The Parking Meter District Policy (TRN 3.102) was adopted in 1996 to address parking meter rates, fines and parking enforcement in existing meter districts, the formation of new parking meter districts, and the allocation of revenues derived within parking meter districts. This policy has not been updated in over 20 years. Given the new policy direction from the [2035 Comprehensive Plan](#), technology changes, and the evolving role of parking in a multi-modal transportation system, updating associated administrative rules is a key element of the Parking Management Manual. The revised rules allow opportunity for public input and consistent revenue allocation in new Parking Management Districts.

THIS GUIDANCE APPLIES TO:

- ☐ Downtown
- ☒ **Marquam Hill**
- ☒ **Lloyd**
- ☒ **Central Eastside**
- ☒ **Northwest**
- ☒ **Future Parking Management Districts**

The **Revenue Allocation Policy** section of TRN 3.102 gives the following specific guidelines:

A majority of net meter revenue should go to services and programs within the meter district in which they were generated

Meter system revenues are to be allocated to support transportation and parking services

Revenue remaining after capital and operating costs are covered may be allocated to support transportation services within the meter district and citywide

Under [TRN 3.102](#), the first priority for meter revenue is always as a back-up source of funds to insure that debt service obligations are met for the revenue bonds issued to finance the system of City-owned parking. Meter revenue allocation occurs annually as part of the City budget process; hence the deliberate use of the words “may” and “should” in describing revenue allocation priorities formed after 1996.

The Parking Management Manual clarifies existing policy to:



Standardize procedures for NMR expenditures



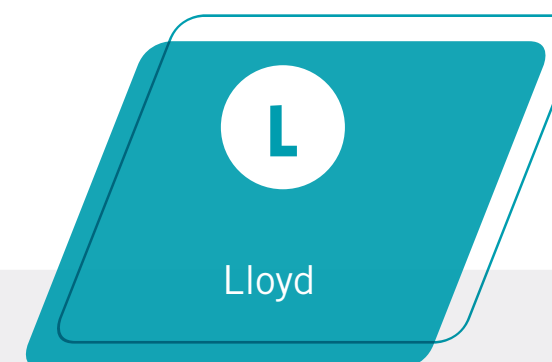
Refine guidelines so expenditures relate to current PBOT transportation policy and City wide goals recently adopted in the 2035 Comprehensive Plan



Follow City and PBOT public outreach/parking committee procedures for all existing and future parking districts.



There are four meter districts in the City that receive 51% of the net meter revenue (Lloyd, Northwest, Marquam Hill, Central Eastside). Each parking meter district establishes a Parking Committee according to each district's parking plan.



- The [LLOYD'S](#) Go Lloyd, which began operating as a non-profit in 1997, is funded with Enhanced Service District (ESD) and net meter revenue funds. Go Lloyd's TDM efforts have demonstrated long-term success and set the standard of effective net meter revenue expenditures.

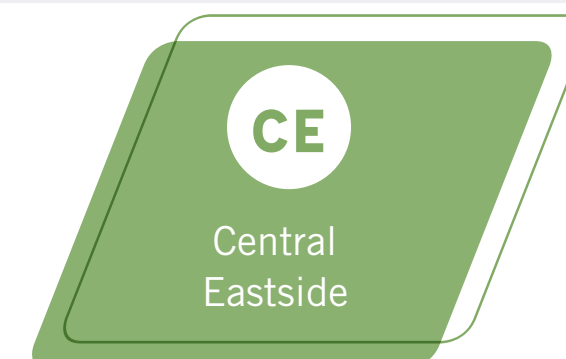
Go Lloyd's efforts include delivering education and incentives to thousands of district employees and providing reduced cost transit pass (Universal Pass) to over 20 employers and all of their employees. Most significantly, since 1997 Go Lloyd has helped reduce drive-alone commute rates by 25% among its Universal Pass participants.



- In [MARQUAM HILL](#), an ad hoc Stakeholder Advisory Committee (SAC) helps determine expenditures. To date the SAC has opted to save their funds focusing on larger projects with significant impact such as building several hundred feet of sidewalk.



- The [NORTHWEST PARKING DISTRICT](#) employs a SAC of varied community members that make recommendations to PBOT on how to invest net meter revenue. NW Parking District SAC members apply to serve on the committee through a public process and are then appointed by the Transportation Commissioner.



- The [CENTRAL EASTSIDE](#) operates through the non-city affiliated Central Eastside Industrial Council (CEIC) business membership group. The Central Eastside Transportation and Parking Advisory Committee (TPAC) is a sub-committee the CEIC created to advise PBOT on district parking revenue re-investment.



Recommended Procedure for Use of Parking Funds

ADVISORY COMMITTEE MISSION, FORMATION, AND FUNCTION

The mission of a Net Meter Revenue (NMR) Parking Committee is to advise the City on transportation and parking issues, with the goal of efficiently managing parking and reducing reliance on the single-occupancy automobile.

The Parking Committee should include at least five representatives, consisting business owners/representatives and residents of a district. The mission and activities of the Parking Committee are intended to implement City and neighborhood land use and transportation goals, objectives, and policies, and to provide guidance to PBOT for the development of more detailed projects, programs, and activities.

The Parking Committee will meet regularly as a committee and with the broader community to compile a list of recommended programs and projects for proposed revenue expenditure. All Parking Committee meetings are open to the public and are subject to public records law. PBOT staff works with the Parking Committee to identify eligible projects and programs.

Once a list of projects and programs for the year is finalized, an annual work plan will be developed to document the allocation of funds.

PBOT staff will attend the meetings, support the parking committee activities, and promote TDM efforts to further the mission and goals.

REQUIRED AND ELIGIBLE PROGRAMS AND PROJECTS

All parking revenue is collected and distributed by the City. Parking revenue is always retained by the City. As City funds, parking revenue expenditures must follow City purchasing procedures.

Parking revenue shall be used for outreach efforts to promote funded programs and projects, annual work plans to document goals and the allocation of funds, as well as regular on-street parking data collection and analysis. Data collection and analysis is used to determine if any parking management changes are needed to improve the function of the system.

For reference, examples of eligible projects/programs are shown in the table below. The list is not intended to be comprehensive but rather a starting point. Projects are further classified as required (**R**) project types or eligible (**E**) for NMR funds.

PROJECT TYPE

NMR

PROGRAM MANAGEMENT, MARKETING, AND OUTREACH (M)		
M.1	Develop work plans to attain identified mode split goals	R
M.2	Awareness campaigns and direct marketing	R
M.3	Materials and services, such as graphic design and printing	R
M.4	Evaluation and analysis, such as surveys and public outreach for specific programs and projects	R
M.5	Contract with outside staff to administer specific TDM programs or projects to help achieve mode split goals identified in the district work plan. This includes staff time for programs that provide information, incentives, and encouragement to district employees and residents to walk, bike, carpool, and use transit more often, as well as funding for special events and targeted outreach to employers and district employees.	○
M.6	Develop and promote a shared parking program	○
M.7	Perform shared-use parking analysis related to capital projects to determine impact	○
TRANSPORTATION DEMAND MANAGEMENT (T)		
T.1	TriMet Pass program to provide transit passes to district employees, residents, or as an opt-out incentive	○
T.2	Subsidized BIKETOWN memberships for district employees, residents, or as an opt-out incentive	○
T.3	Company or district-wide ridesharing networks using DriveLessConnect with incentives to carpool	○
T.4	Free day and week passes on TriMet to encourage people to try transit	○
T.5	District-wide BIKETOWN zones that allow commuters and customers to park at any bike rack without paying a fee	○
T.6	Free or discounted bicycling and walking safety accessories such as lights, locks, and rain gear	○
T.7	Subsidized car-share memberships	○
CAPITAL PROJECTS (C)		
C.1	Area walking maps and installation of pedestrian wayfinding signs	○
C.2	Design and installation of new sidewalks or curb extensions	○
C.3	Design and installation of crossing safety improvements	○
C.4	Bicycle infrastructure including bicycle network improvements or bicycle storage	○
C.5	Any project identified in the adopted Transportation System Plan	○
C.6	Transit tracker kiosks to provide arrival and departure information	○
C.7	Enhanced transit service or transit reliability improvements in partnership with TriMet and/or Portland Streetcar	○
C.8	Increase supply of off-street parking once all best practices have been implemented on-street and TDM tools are utilized	○

R = Required | ○ = Eligible

3



TIME LIMITS



THIS GUIDANCE
APPLIES TO:

- ☒ Existing Parking Management District
- ☒ Future Parking Management Districts

TIME LIMITS

BACKGROUND

PBOT uses time limits and pricing strategies to manage the public parking system, with the primary goal of supporting economic vitality.

A well-managed parking system uses a variety of strategies to encourage frequent turnover of the most desirable parking spaces, thus ensuring that visitors to an area will be able to quickly and easily find convenient parking without the need to spend time circling the area searching for an open space.

When visitors know they will be able to find parking, either at a premium directly adjacent to their destination or at a lower rate a reasonably short walk away, businesses are likely to benefit from this user-focused management approach. Maintaining one to two open parking spaces per block requires pricing and time limit strategies that reflect actual demands in order to provide users with a variety of parking options.

Clear, Consistent Messaging

Simplifying time limits to 15/30-minutes, 2-hours, and 4-hours helps ensure that Portland’s on-street parking system is easy to understand and navigate, allowing visitors to quickly find parking that meets their needs.

Ensuring Available Parking

Time limits and price are the two critical strategies the City of Portland uses to manage its on-street parking system. These strategies help ensure convenient visitor parking by encouraging frequent turnover of spaces.

SETTING ON-STREET PARKING TIME LIMITS

When updating or implementing time limits for the first time, it is recommended that 2-hour zones serve as the default. Additional data and land use information are needed to implement 15/30-minute or 4-hour zones. All other time limits will be phased out over time in order to simplify the on-street parking system and provide a clear, consistent message to customers and visitors.

At least once every two years, the inventory of 15/30-minute spaces and 4-hour spaces will be updated to determine if conditions supporting their use have changed.

High-Turnover
15/30-Minute
Spaces



Some businesses rely on high customer turnover and 2-hour parking may not provide sufficient turnover to meet their customers’ needs. For these businesses, such as coffee shops, dry cleaners, day cares, banks, post offices, or other businesses where a high percentage of customers stay for 15 minutes or less, a shorter base time may be necessary.

High turnover stalls (15 or 30-minutes) will be located adjacent to intersections in order to manage visitor expectations, minimize the number of different types of stalls on a block, and provide easy access to surrounding businesses. Therefore, no more than four high turnover stalls will be installed per block (two per block face).

High turnover spaces will be considered when the following criteria are met:



On-street parking on the block is managed with either time limits or meters; no high turnover stalls will be implemented in areas where on-street parking is unrestricted



The requesting business is recognized as a qualified high turnover business type or is able to demonstrate an average stay duration of 15 minutes or less



The requesting business does not have private off-street parking available for customers



On-street parking occupancy on the adjacent block exceeds 85% at least two hours during the most recent round of data collection¹

When a high-turnover space has already been installed on the corner closest to the requesting business, PBOT will review each application on a case-by-case basis to assess the need for an additional high-turnover stall on the block, taking into account proximity of next closest high-turnover space location as well as available occupancy, turnover, and citation data.

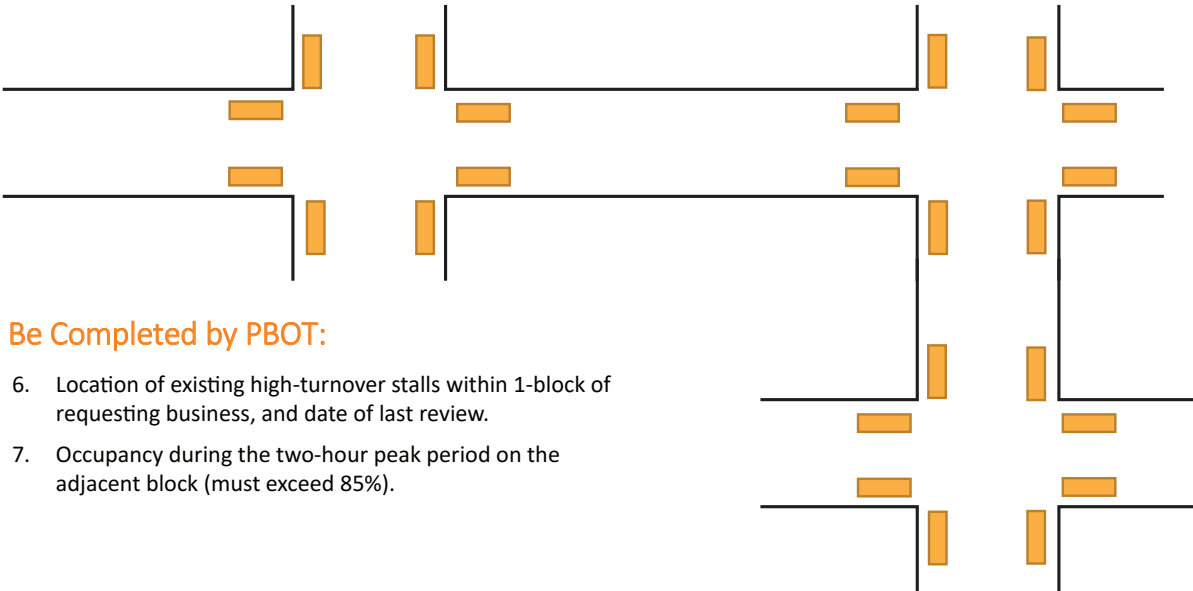
¹ If the block was not observed during the most recent round of data collection, PBOT will conduct an occupancy count during peak hours provided the requesting business meets all other criteria listed

HIGH-TURNOVER PARKING SPACE REQUEST WORKSHEET

To Be Completed by Requesting Business:

1. Name and address of requesting business: _____
2. Do you provide off-street parking for customers in an adjacent parking lot (circle one): Yes / No
(Businesses that provide private off-street parking are not eligible to request 15/30-minute parking stalls)
3. Type of high-turnover business: _____
(Examples of high-turnover businesses include coffee shops, dry cleaners, day cares, banks, and post offices. If your business is not one of these types of businesses, PBOT may request documentation to demonstrate the average visitor stays for 15-minutes or less).
4. Time-limit on the block on which your business is located: _____
(Examples: 2-Hours, 4-Hours. Note that the public on-street parking in your area must have time limits in place to be eligible—15 or 30-minute parking will not be installed in areas with free, unlimited on-street parking)
5. Desired location and type (circle one and indicate location): 15-minutes / 30-minutes

Identify the general location of your business (with an X) and circle the desired location of the 15 or 30-minute parking stall.



To Be Completed by PBOT:

6. Location of existing high-turnover stalls within 1-block of requesting business, and date of last review.
7. Occupancy during the two-hour peak period on the adjacent block (must exceed 85%).

4-Hour Zones

For some business types and institutions where many visitors stay for two hours or longer, 2-hour time limits may be too restrictive to provide a convenient parking option. When there are no off-street public parking options within a reasonably short walk of the area, 4-hour time zones may be used to provide additional long-term parking options for residents, employees, and visitors staying longer than 2 hours.

Four-hour zones may be requested by businesses provided the following criteria are met:



The proposed four-hour zone includes **at least 40 on-street parking stalls on contiguous blocks** for conversion from two-hour parking to four-hour parking



There are multiple identified destinations within the proposed 4-hour zone where the **average visitor stay duration is between 2 and 4 hours**



There are **no public off-street parking facilities near the proposed 4-hour zone**, or the average occupancy reaches or exceeds 85% during 3 or more hours during the day in all nearby off-street public parking areas of the proposed 4-hour zone



The **average parking duration** on each block proposed for conversion is **2 hours or longer** based on citation and occupancy data

FOUR-HOUR PARKING ZONE REQUEST WORKSHEET

To be Completed by Requesting Businesses

- 1. **Name and address of requesting businesses (minimum of 2):**

1. _____
2. _____
3. _____
4. _____
(List additional on back of form)
- 2. **Desired location of 4-hour zone** (each block listed must currently have time-limits in effect, and note that a minimum of 40-parking stalls will be converted)

Primary Street	From (Street Name)	To (Street Name)

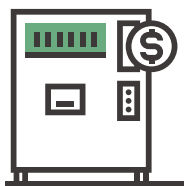
Example: SE Main St SE 2nd Ave SE 3rd Ave

To Be Completed by PBOT:

- 3. Total parking space count proposed for conversion.
- 4. Location of nearest public off-street parking areas (including distance to proposed zone, parking capacity, and occupancy during 3rd highest hour).
- 5. Average stay duration on each block proposed for conversion.
- 6. Outreach to all businesses within proposed 4-hour zone.

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4



PRICING



THIS GUIDANCE
APPLIES TO:

- ☒ Existing Parking Management District
- ☒ Future Parking Management Districts

PRICING

BACKGROUND

Since parking meters were first installed in downtown Portland in the late 1930s, rates have been adjusted within the downtown meter district nine times. Each rate adjustment was based on the results of an occupancy and turnover analysis, and required the formation of a Parking Committee and the approval of City Council. **Figure 4-1** shows each of these changes, along with the rate adjustments implemented in each of the four meter districts outside of Downtown. Meters in each meter district use the same hourly rate for each hour charged, regardless of time limit.

In 2016, the Portland City Council directed PBOT to develop a performance-based parking management program that uses data, performance targets, and defined program parameters. This performance-based process creates a City Council-approved range of rates.

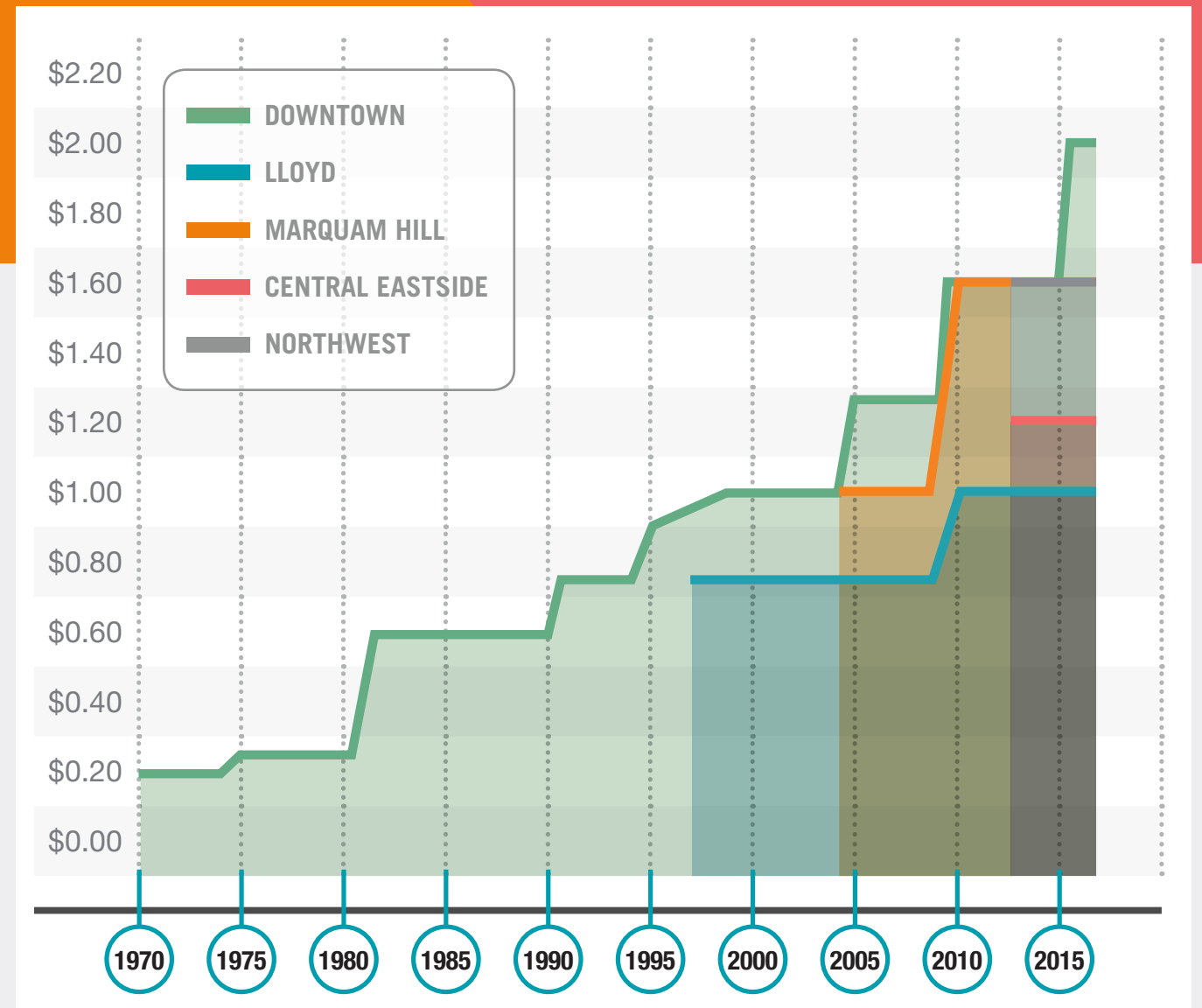


FIGURE 4-1: METER RATE ADJUSTMENTS



The Purpose of Performance-Based Pricing

Ensuring convenient, available parking through:



Increased
turnover



Redistribution
of parking



Tiered parking
options

WHAT IS PERFORMANCE-BASED PRICING?

Performance-based pricing refers to the process of modifying parking pricing based on an established set of metrics. Typical best practice modifies parking pricing to achieve a specified target occupancy level of no more than 85%. Blocks that peak at 85% occupancy have one to two parking stalls available per block face throughout the day, which allows visitors to easily find a parking space near their destination. Those who are willing to park further from their destination save on parking costs by seeking off-street parking facilities or reduced-cost on-street parking in areas of lower demand.

COLLECTING DATA

Collecting Data to Support Performance-Based Pricing

Performance-based pricing relies on regular data collection efforts to inform rate adjustments.

Meter districts within Portland have established best practice processes for collecting occupancy and turnover data. To ensure consistency across districts, the following metrics should be collected within each meter district as inputs into the performance-based meter rate adjustment process:

- **Hourly occupancy by block**, collected over at least two weekdays during hours when meters are enforced
- **Average duration of stay by block and posted time limit**, collected over at least two weekdays during hours when meters are enforced
- **Violation rates**, calculated based on observed duration of stay data and posted time limits

- **Annual on-street meter and SmartPark pay station transactions** as a check to review the total number and redistribution of transactions between public parking areas within the meter district
- **Citation rates** as a check to confirm levels of enforcement

This data should be collected **once every 12 months** using consistent processes to allow for year-to-year comparisons.



Maximum Annual Adjustment

+/- \$0.60

Council-Approved Hourly Rate Range:

\$1.00 to \$5.00 per hour

SAMPLING

Some meter districts are too large to allow for cost-effective data collection across all parking spaces within the district. Large meter districts should sample using a statistically-valid representation of the larger district. Data collection efforts for the Central City in 2008 and 2014, for example, divided the Central City into nine subareas with approximately 30 to 40 block faces each to inform meter rate adjustments for the larger downtown meter district.

Adjusting Meter Rates

The intended effect of rate adjustments is primarily to **redistribute parking between areas of higher and lower demands within a district based on data**. Economic vitality is supported by providing visitors with tiered parking pricing options within each meter district. By collecting annual paid parking data for both the on-street system and the SmartPark garages, a check may be performed to identify if rate changes resulted in a shift in parking demand or an overall reduction in parking demand within the district.

Parking meters in Portland allow users to pay in 15-minute increments, which requires all hourly rates to be evenly divisible by four. For consistency, Portland sets all hourly rates in multiples of \$0.20 per hour (*see table*). To maintain this, rates should be adjusted up or down by \$0.20, \$0.40, or \$0.60 per hour as needed. **A maximum annual adjustment of +/- \$0.60 is recommended** to allow for a performance-based approach while ensuring that prices will not rapidly increase or decrease each year without additional Council review and approval.

Currently, hourly rates in Portland vary between \$1.00 and \$2.00 per hour depending on meter district. To allow for a performance-based pricing approach, **an hourly rate range between \$1.00 and \$5.00 per hour is recommended** for approval by Council. It is further recommended that the PBOT Director have the authority to make meter rate adjustments that remain within this range. The PBOT Director’s decision would be informed by the described data metrics.

HOURLY RATE	PER 15 MINUTES
\$1.00	\$0.25
\$1.20	\$0.30
\$1.40	\$0.35
\$1.60	\$0.40
\$1.80	\$0.45
\$2.00	\$0.50

METER RATES SHOULD BE REDUCED ACCORDING TO FIGURE 4-2:
If the observed peak occupancy for a district

is less than 65%



Measuring the relationship between pricing and parking demand is referred to as price elasticity of demand. A rate increase would be expected to reduce peak observed occupancies. Based on the results from several studies, Parking Management for Smart Growth (Willson, 2015) reports that parking elasticity values typically range from -0.1 to -0.4, with -0.30 being the most common value. That is, a 10% price increase would be expected to reduce demands by 3% for an elasticity factor of -0.30. This -0.30 elasticity factor serves as a useful starting point to help inform the magnitude of adjustment, which is capped at +/- \$0.60 per year.

Using these assumptions, including \$0.20 incremental changes, a maximum rate change of \$0.60 per hour, a minimum hourly rate of \$1.00, a maximum hourly rate of \$5.00, an assumed elasticity factor of -0.30 to inform the magnitude of adjustment, and a **target peak occupancy range of 65% to 85%**, the following data-driven rate adjustment process will be used to inform rate adjustment recommendations for the PBOT Director's review:

- Meter rates should be **reduced** according to **Figure 4-2:**
 - If the observed peak occupancy for a district is less than 65%
- Meter rates should be **increased** according to **Figure 4-2:**
 - If the observed average peak occupancy for the district exceeds 85%, AND
 - Average occupancy reaches or exceeds 85% during 3 or more hours during the day, AND
 - Average occupancy reaches or exceeds 70% during 5 or more hours during the day, AND
 - Annual on-street meter and SmartPark pay station transactions have not decreased since the last meter rate increase

METER RATES SHOULD BE INCREASED ACCORDING TO FIGURE 4-2:

If the observed average peak occupancy for the district

exceeds 85%

Average occupancy reaches or exceeds

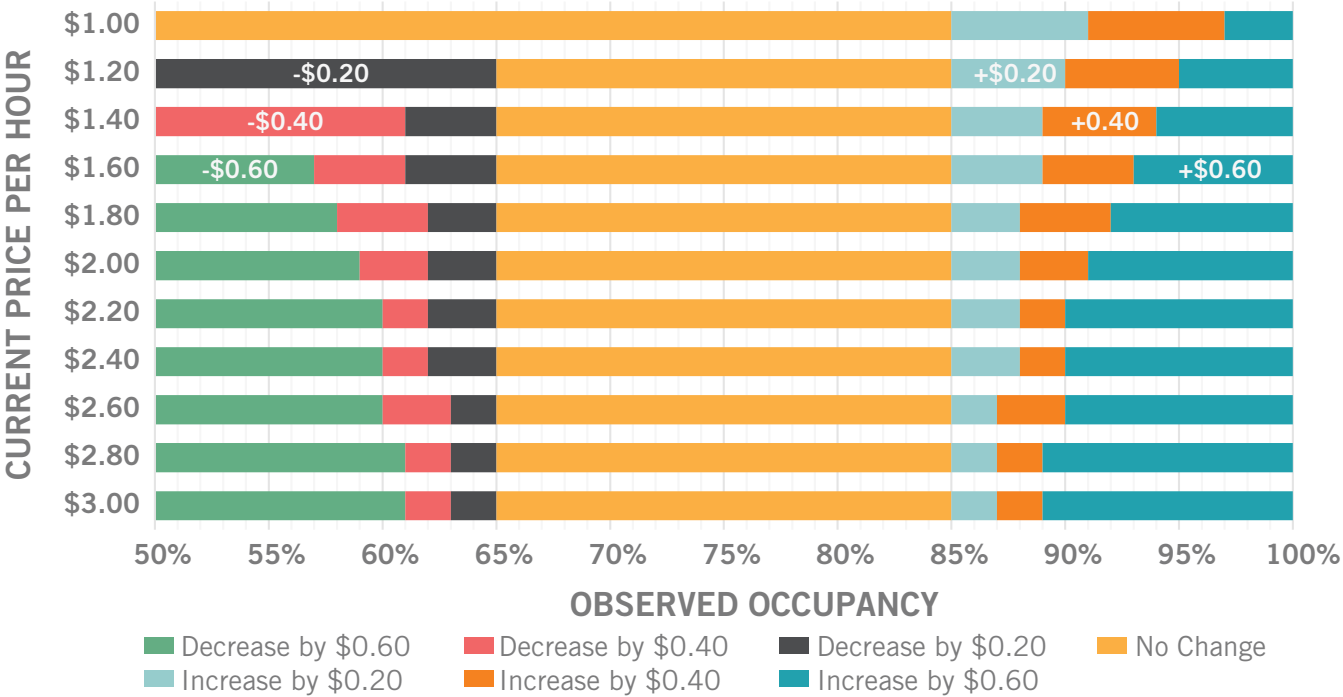
85% during 3 or more hours during the day

Average occupancy reaches or exceeds

70% during 5 or more hours during the day

Annual on-street meter and SmartPark pay station transactions have not

decreased since the last meter rate increase



STARTING RATE	DECREASE BY \$0.60	DECREASE BY \$0.40	DECREASE BY \$0.20	NO CHANGE	INCREASE BY \$0.20	INCREASE BY \$0.40	INCREASE BY \$0.60
\$1.00	—	—	—	< 85%	85% - 91%	91% - 97%	≥ 97%
\$1.20	—	—	< 65%	65% - 85%	85% - 90%	90% - 95%	≥ 95%
\$1.40	—	< 61%	61% - 65%	65% - 85%	85% - 89%	90% - 94%	≥ 94%
\$1.60	< 57%	57% - 61%	61% - 65%	65% - 85%	85% - 89%	89% - 93%	≥ 93%
\$1.80	< 58%	58% - 62%	62% - 65%	65% - 85%	85% - 88%	88% - 92%	≥ 92%
\$2.00	< 59%	59% - 62%	62% - 65%	65% - 85%	85% - 88%	88% - 91%	≥ 91%
\$2.20	< 60%	60% - 62%	62% - 65%	65% - 85%	85% - 88%	88% - 90%	≥ 90%
\$2.40	< 60%	60% - 62%	62% - 65%	65% - 85%	85% - 88%	88% - 90%	≥ 90%
\$2.60	< 60%	60% - 63%	63% - 65%	65% - 85%	85% - 87%	87% - 90%	≥ 90%
\$2.80	< 61%	61% - 63%	63% - 65%	65% - 85%	85% - 87%	87% - 89%	≥ 89%
\$3.00	< 61%	61% - 63%	63% - 65%	65% - 85%	85% - 87%	87% - 89%	≥ 89%
\$3.20	< 61%	61% - 63%	63% - 65%	65% - 85%	85% - 87%	87% - 89%	≥ 89%
\$3.40	< 61%	61% - 63%	63% - 65%	65% - 85%	85% - 87%	87% - 89%	≥ 89%
\$3.60	< 62%	62% - 63%	63% - 65%	65% - 85%	85% - 87%	87% - 88%	≥ 88%
\$3.80	< 62%	62% - 63%	63% - 65%	65% - 85%	85% - 87%	87% - 88%	≥ 88%
\$4.00	< 62%	62% - 63%	63% - 65%	65% - 85%	85% - 87%	87% - 88%	≥ 88%
\$4.20	< 62%	62% - 64%	64% - 65%	65% - 85%	85% - 86%	86% - 88%	≥ 88%
\$4.40	< 62%	62% - 64%	64% - 65%	65% - 85%	85% - 86%	86% - 88%	≥ 88%
\$4.60	< 62%	62% - 64%	64% - 65%	65% - 85%	85% - 86%	86% - 88%	—
\$4.80	< 62%	62% - 64%	64% - 65%	65% - 85%	85% - 86%	—	—
\$5.00	< 63%	63% - 64%	64% - 65%	≥ 65%	—	—	—

FIGURE 4-2: RECOMMENDED HOURLY RATE ADJUSTMENTS FOR METER DISTRICTS



This process is consistent with the 2016 meter rate adjustment within the downtown meter district. In 2014, average peak occupancies were observed to be 90%. The meter rate at that time was \$1.60. Using these factors, **Figure 4-2** shows a rate increase of \$0.40 would achieve desired occupancies, which is what was implemented at the time.

In some cases, known land use changes, low citation rates, or any number of other local factors could lead to a delayed or modified rate adjustment compared to the outcome of the data-driven process. These recommendations should be documented and submitted to the PBOT Director within 90 days of the completed data collection report for consideration.

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5



EVENT DISTRICTS



THIS GUIDANCE
APPLIES TO:

- ☒ Existing Parking Management District
- ☐ Future Parking Management Districts

EVENT DISTRICTS

BACKGROUND

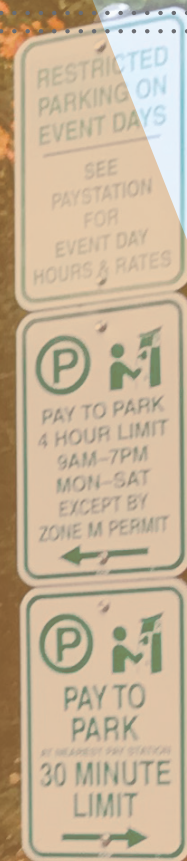
As of 2017, Portland is home to four venues with capacities of at least 10,000 attendees that host regular events. These include:

- Providence Park
- Moda Center
- Veterans Memorial Coliseum
- Oregon Convention Center

Portland currently has one parking Event District, which is the area within the Downtown Meter District immediately surrounding Providence Park. Starting 90 minutes before Portland Timbers' home matches, the meter rate changes to \$3.50 per hour. This rate has not been updated since it was originally implemented in 2011.

IMPLEMENTING EVENT DISTRICTS

Future parking event districts for the areas surrounding these large venues may be implemented at the direction of the PBOT Director following a targeted outreach effort to district stakeholders to assess local needs. The Moda Center, Veterans Memorial Coliseum, and the Oregon Convention Center are all located within Lloyd. Decisions regarding pricing, time limits, and revenue allocation are **subject to the following guidelines (on the next page):**



Why Implement Event Districts?



In event districts, the primary objective of increased meter rates is to incentivize the use of alternative modes, such as walking, biking, or taking transit.

Requirement 1: Event Size

Only events which are expected to draw at least 10,000 attendees should be considered for increased Event District on-street parking rates

Requirement 2: Data Driven

A parking demand study during a representative event should be completed to inform the development of event district boundaries.

Requirement 3: Utilize Existing Metered Parking

On-street event pricing should only be used on blocks with existing metered parking;

Requirement 4: Publish Dates in Advance

PBOT should be notified at least 6 months in advance of the Event District on-street parking management plan (on-street rates, time limits, and dates/times in effect) by the district Parking Committee.

SETTING THE INITIAL RATE

Initial Rate

When the Event District around Providence Park was first implemented, the rate was set to approximately 220% of the standard meter rate for the area: \$3.50 per hour compared to \$1.60 per hour, which was the standard meter rate in Downtown in 2011. For future event districts, the recommended initial meter rate is shown in **Table 5-1**, which represents at least 200% of the starting meter rate. For consistency with future meter districts, it is recommended that rate for the Providence Park Event District change to \$4.00 per hour.

TABLE 5-1: INITIAL EVENT RATE RECOMMENDATIONS

METER DISTRICT RATE	INITIAL EVENT DISTRICT RATE
\$1.00	\$3.00
\$1.20	
\$1.40	
\$1.60	\$4.00
\$1.80	
\$2.00	
\$2.20	\$5.00
\$2.40	
\$2.60	
\$2.80	\$6.00
\$3.00	
\$3.20	
\$3.40	\$7.00
\$3.60	
\$3.80	
\$4.00	\$8.00
\$4.20	
\$4.40	
\$4.60	\$9.00
\$4.80	
\$5.00	

THIS GUIDANCE APPLIES TO:

- ☒ Downtown
- ☐ Marquam Hill
- ☒ Lloyd
- ☐ Central Eastside
- ☐ Northwest
- ☐ Future Parking Management Districts



RATE ADJUSTMENT GUIDELINES

To allow for a performance-based pricing approach, **an hourly rate range of \$3.00 to \$10.00 per hour is recommended** for approval by Council. As with the performance-based process for the full meter districts, it is recommended that the PBOT Director have the authority to make meter rate adjustments that remain within this range, with input from local stakeholders, based on a data-driven process.

In order to allow users to pay in 15-minute increments, even during event times, all hourly rates should be adjusted in increments of \$1.00 per hour, or \$0.25 per 15-minutes. To maintain this, rates should be adjusted up or down from the starting rates shown in **Table 5-1** by \$1.00, \$2.00, or \$3.00 as needed based on a data-driven process. **A maximum annual adjustment of +/- \$3.00 is recommended.**

METER RATES SHOULD BE REDUCED
ACCORDING TO FIGURE 5-1:

If the observed peak occupancy for
an event district

is less
than 65%

METER RATES SHOULD BE INCREASED
ACCORDING TO FIGURE 5-1:

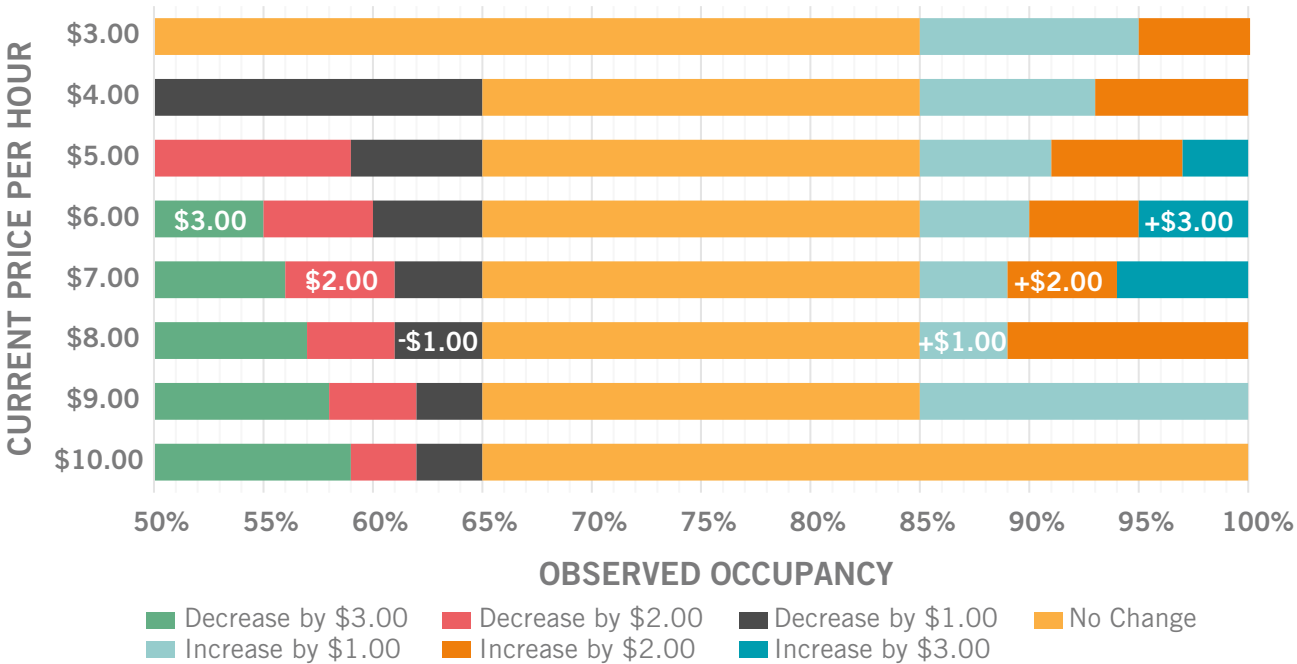
If the observed average peak
occupancy for the district

exceeds
85% during 2
or more hours
during the event



Using these assumptions, including \$1.00 incremental changes up to a maximum rate change of \$3.00 per hour, a minimum hourly rate of \$3.00, a maximum hourly rate of \$10.00, and an assumed elasticity factor of -0.30 to inform the magnitude of adjustment, **the following data-driven rate adjustment process will be used to inform rate adjustment recommendations** for the PBOT Director’s review:

- Meter rates should be **reduced** according to **Figure 5-1:**
 - If the observed peak occupancy for an event district is less than 65%
- Meter rates should be **increased** according to **Figure 5-1:**
 - If the observed average peak occupancy for the district exceeds 85% during 2 or more hours during the event



	DECREASE BY \$3.00	DECREASE BY \$2.00	DECREASE BY \$1.00	NO CHANGE	INCREASE BY \$1.00	INCREASE BY \$2.00	INCREASE BY \$3.00
\$3.00	—	—	—	< 85%	85% - 95%	≥ 95%	—
\$4.00	—	—	< 65%	65% - 85%	85% - 93%	≥ 93%	—
\$5.00	—	< 59%	59% - 65%	65% - 85%	85% - 91%	91% - 97%	≥ 97%
\$6.00	< 55%	55% - 60%	60% - 65%	65% - 85%	85% - 90%	90% - 95%	≥ 95%
\$7.00	< 56%	56% - 61%	61% - 65%	65% - 85%	85% - 89%	89% - 94%	≥ 94%
\$8.00	< 57%	57% - 61%	61% - 65%	65% - 85%	85% - 89%	≥ 89%	—
\$9.00	< 58%	58% - 62%	62% - 65%	65% - 85%	> 85%	—	—
\$10.00	< 59%	59% - 62%	62% - 65%	≥ 65%	—	—	—

FIGURE 5-1: RECOMMENDED HOURLY RATE ADJUSTMENTS FOR EVENT DISTRICTS



Even with increased rates, if on-street parking is priced lower than event rates in nearby off-street facilities, it is likely that occupancies will continue to exceed 85% during events. The proposed rate adjustment process is therefore presented as a guide to inform the magnitude of rate adjustments, and in many cases, the PBOT Director with input from local stakeholders may elect to maintain existing event rates or implement a lower rate increase than suggested by **Figure 5-1**.

The primary consideration when determining the rate adjustment should be the effectiveness of the proposed rate in encouraging the use of alternative modes for travel to and from events.

A Note About Revenue Allocation

On-street meter revenue collected during events is subject to the same revenue allocation processes established for the host Meter District. Should PBOT move forward with Event District pricing in parts of Lloyd, 51% of net meter revenue collected would be allocated through the City's partnership with Go Lloyd to fund transportation programs and improvements in the district, including (but not limited to) investments in additional event-related multimodal transportation services.

6



TRUCK LOADING ZONES



THIS GUIDANCE
APPLIES TO:

- ☒ Existing Parking Management District
- ☒ Future Parking Management Districts

TRUCK LOADING ZONES

BACKGROUND

On-street truck loading zones (TLZ) allow for the efficient delivery of freight to businesses. Effective TLZ management is necessary to ensure that businesses are able to receive on-time deliveries and operate effectively in constrained urban environments. The physical design of urban streets poses a number of challenges for accommodating a diversity of street users. Many of these challenges are a consequence of competing demand; e.g. balance in the needs of diverse ground floor users with upper floor office and residential uses.

Portland currently reviews TLZ requests by businesses on-demand. There is no formal process to inform how or where TLZs are created. Businesses, delivery companies, and the parking public are left to navigate a disconnected, piecemeal system. Currently there are 44 separate signage designations for TLZs, no default standard advising where on a blockface to locate a TLZ, and a lack of usage data for existing TLZs. The lack of default guidance to implement TLZs has led to an inefficient use of public right-of-way with multiple conflicts between users in the limited curbside environment.

The guidelines provided below are intended to provide a framework for making informed decisions leading to durable, flexible, and effective on-street TLZ management. The guidelines focus exclusively on the on-street system, and do not address off-street loading space requirements.



Loading Zone Management Goals:



Enhance mobility and accessibility in commercial districts; prioritizing an engaging and attractive pedestrian experience.



Balance the access needs of freight operators, visitors, customers, residents, and employees.



Strengthen commerce and economic vitality.



Create streets that are well planned, managed, adaptable, and maintained

Desired Outcomes: Adequate Loading Zones, Parking, and Enforcement

Freight carriers rely on loading zones and parking to support loading and unloading of goods. In urban environments with few loading docks or off-street loading zones, loading and unloading activities tend to occur curbside. Commercial loading zones tend to be located in front of commercial buildings with designated signage for the loading zone. Curbside loading zones may be enforceable during certain periods of the day, corresponding with business hours or off-peak delivery periods. Some key outcomes for managing on-street loading zones include:

- **Establish truck loading zones in areas that are as close to the receiving areas of shipping/receiving businesses as possible** to reduce delivery/pick-up time and disruptions to pedestrian and vehicular traffic that could result from moving goods to and from the truck.
- **Designate truck loading zones to balance the various user demands.** There are typically competing demands for curb space (i.e., shoppers and business patrons may need on-street parking during business hours, while residents may demand on-street parking overnight). Commercial loading zones should be established to meet freight needs while being sensitive to other demands for curbside space.
- **Through a data-driven process, consider greater use of “combination zones” to maximize the efficiency of truck loading zones to meet demand and capture capacity in periods of low or non-use for freight delivery.** Any parking stall is not efficient if it is restricted from use when it is not needed. Combination zones allow spaces to serve Truck Loading Zone (TLZ) functions during designated periods and to be used as timed zones for visitor or residential uses at other times of the day. This increases overall efficiency of TLZs.
- **Enforcement of parking and loading rules should be consistent.** To ensure that curbside truck loading space is used effectively without impacts to traffic operations and safety, enforcement of parking and loading rules is critical. Enforcement of time limits and vehicle types allowed to park in the loading zones discourages parking by passenger vehicles in these loading zones during designated TLZ hours.

Combination Zones

Combination zones allow spaces to serve Truck Loading Zone (TLZ) functions during designated periods and short term parking at other times of the day.



IMPLEMENTING A TRUCK LOADING ZONE (TLZ)

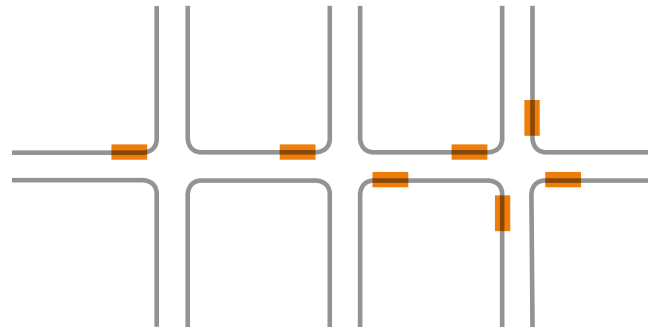
The City desires to simplify the current system associated with TLZs, while recognizing that there is no one-size-fits-all solution. The following elements for managing and providing TLZs are recommended:

1. Establish 3 to 5 Standard Loading Zone Sign options

There are currently 44 different signage designations for loading zones. This proves confusing for customers and cumbersome to manage effectively. Based on the Policy Framework and Desired Outcomes, the ideal is to ensure that loading demand is fully accommodated but allow access to such spaces for other uses when loading access is not needed. [Table 6-1](#) provides a summary of updated signage.

2. Maximize use of combination zones for both TLZ and customer/visitor use

The demand for parking in commercial districts has grown significantly. The ability to use TLZs as combination zones (for customer/visitor use) will maximize the overall capacity of parking on-street while providing TLZ access for delivery vehicles.



3. Establish preferred location on block

Clearly sign and mark loading zones to discourage use or encroachment by private vehicles. Locate loading zones near corners to facilitate maneuvering trucks in and out of curbside spaces. Locating TLZs on the far side of the block is the preferred approach when feasible. Additional information on this element can be found in the City's 2015 Truck and Loading Zone Study.



4. Maintain current 30-minute time limits in truck loading zones (during TLZ designated hours)

Time limit loading zones (30 minutes) to encourage use only while actively loading or unloading.

5. Prioritize placement of TLZs on certain types of streets

The City has adopted a new street character system that designates type of street use. Maps adopted within the Comprehensive Plan show street designations by color: red (retail/commercial), blue (boulevard) and green (flexible). An example map illustrating the designated uses for streets in the Central City is included in [Figure 6-1](#). TLZs will default to the following standards associated with the street character map.

6. Initiate a review process to confirm on-going need for TLZs

Often, businesses that request TLZs move or turnover, leaving previously approved TLZs underutilized or unnecessary. The City will review loading zones at least once every two years to ensure that they are in use and serving business needs. This is a housekeeping exercise that will keep better data on the number of TLZs, their use and benefit to area businesses. Such a review ensures that the number of TLZs is appropriate and business needs are being effectively served for both loading and customer/visitor demand. Key metrics to collect as part of the review should include TLZ occupancy, turnover, duration of stay, violation rates, and peak hour of use.



TABLE 6-1: RECOMMENDED TLZ SIGNAGE OPTIONS

TLZ DESIGNATION	COMBINATION ZONE OPTION	COMMENTS
7AM – 7PM MON – SAT	Yes	Open for any use 7PM – 7AM.
7AM – 11AM MON – SAT	Yes	Combination Zone option 11AM – 7PM. Unregulated SUN.
7AM – 2PM MON – FRI	Yes	Combination Zone option 2PM – 7PM. Unregulated SAT/SUN.
10 PM – 7AM ALL DAYS	Yes	Combination Zone option 7AM – 7PM. Short-term parking for customers.
ALL HOURS ALL DAYS	No	Demonstrated need for 24-hour zone.

TABLE 6-2: TLZ STREET RECOMMENDATIONS

TLZ DESIGNATION	RECOMMENDED STREETS	COLOR ON STREET CHARACTER MAP
7AM – 7PM MON – SAT	Boulevard / Undesignated	Blue
7AM – 11AM MON – SAT	Boulevard / Undesignated	Blue
7AM – 2PM MON – FRI	Boulevard / Undesignated	Blue
10 PM – 7AM ALL DAYS	Retail/Commercial	Red
ALL HOURS ALL DAYS	Boulevard / Undesignated	Blue

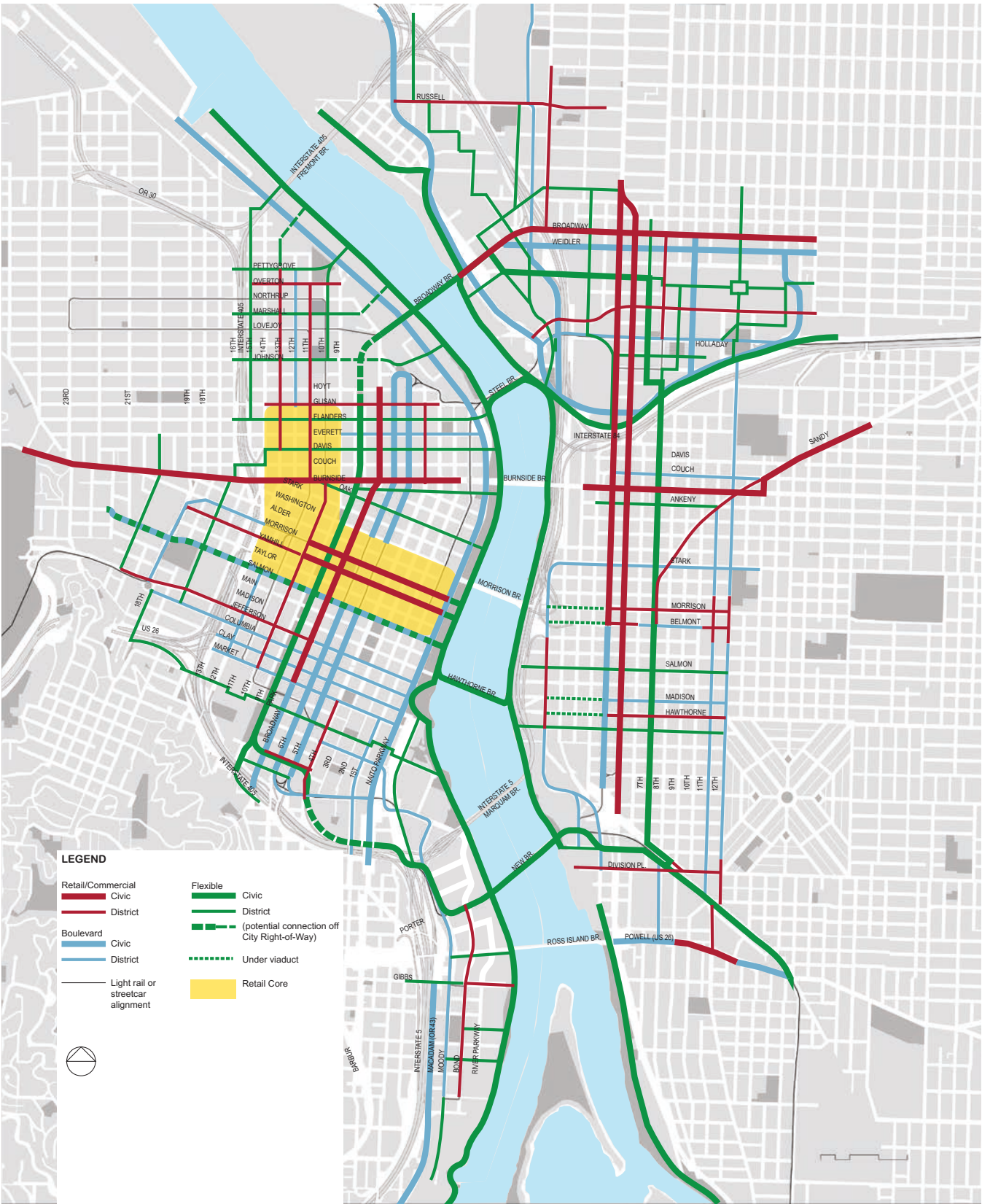


FIGURE 6-1: ADOPTED STREET CHARACTER MAP

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7



ENFORCEMENT



The content in this Chapter is for informational purposes only.

ENFORCEMENT

BACKGROUND

Effective enforcement is a critical component of any parking management program. This portion of the Parking Management Manual is for informational purposes only, describing the current operations of PBOT's Parking Enforcement Division, the role it plays in supporting PBOT's on-street programs, and key performance indicators which can be used to assess the Division's effectiveness.

Excellent parking enforcement programs typically achieve a 20% "capture" rate, or about one in five violations. This is an average across many types of infractions, with meter violations cited in the 30-40% range. Excessive enforcement above a 20% capture rate is usually harmful and can discourage people from patronizing local businesses.



Why Enforcement

The primary goal of parking enforcement is to produce a "culture of compliance" in which residents and visitors park legally, supporting a well-managed parking system in which residents and visitors park legally.



ENFORCEMENT DIVISION

Enforcement Logistics

The PBOT Parking Enforcement Division contributes to PBOT’s overall mission by enforcing Title 16 (Parking and Traffic) of the City’s Code.

- **Area Covered: 45 square miles**
- **Primary Focus Areas:**
 - 18 Area Parking Permit (APP) Zones
 - Time-Limited Areas
 - 17,000 Metered Stalls
- **Additional areas of responsibility:**
 - Meter coin collections
 - Responding to abandoned vehicle complaints
 - Booting of scofflaw vehicles
 - Responding to public complaints of illegal parking
 - Posting of reserved and temporary parking permits

- Annual Budget (2017): \$7,000,000
- Organization:

OFFICE POSITIONS	FIELD POSITIONS
<ul style="list-style-type: none">• 1 Enforcement Division Manager• 2 Administrative Support• 1 Assistant Business Systems Analyst• 4 Supervisors• 4 Dispatch	<ul style="list-style-type: none">• 2 Delineators (meter bagging)• 8 Abandoned Auto Officers• 17 Scooter Beat Officers• 13 Bike Beat Officers• 2 Meter Collections Officers• 21 Walking Beat Officers• 4 Swing Shift Officers
Staff Count: 12	Staff Count: 67

Citation Processing

The Division issues between 200,000 and 250,000 citations annually. In addition, parking enforcement officers (PEOs) have discretion to issue a warning instead of a citation. Between August 2016 and August 2017, officers issued 215,227 citations and 87,293 warnings (302,520 total enforcement actions). *Table 7-1* summarizes the breakdown of these citations, highlighting the top 8 operational infractions and the percentage of total enforcement actions taken during the year.

Unlike other major cities, in Portland, citation processing, adjudication, and collection are the primary responsibility of County Courts. Multnomah County Courts receives 50% revenue of all paid citations, with the City receiving the remaining 50%. As a result of this process, after the initial citation is issued, the Court maintains the primary database for recording subsequent transactions involving noticing, adjudication, payments, and collection efforts, limiting real-time availability of data.



TABLE 7-1: INFRACTIONS SUMMARY

DESCRIPTION	PERCENT OF TOTAL ENFORCEMENT ACTIONS
No Meter Receipt	21%
Overtime Meter*	18%
Loading Zone	7%
Overtime Parking	4%
Area Permit Required	4%
Improper Display, Meter Receipt	4%
No Parking Anytime	3%
Prohibited Time	1%
Other Parking Infractions	15%
Other (Non-Parking)	23%
	100%

*This violation includes either vehicles in a meter space with an expired receipt or a vehicle which was timed by the PEO and found to have exceeded the time limit.

ENFORCEMENT RESPONSIBILITIES

Patrol Duties

All Division staff are based Downtown and must travel to their assigned enforcement areas, or “beats,” at the beginning and end of each shift. PEOs issue citations using a handheld device with printing capabilities. The following sections summarize the main responsibilities of the Division. Beats are assigned each morning, and supervisors may instruct PEOs to concentrate on certain areas or locations based on complaints, violation history, and time since an area was last patrolled.

METER ENFORCEMENT

Meter enforcement is performed on foot in the Downtown and by bike officers in the Northwest and the Central Eastside Industrial District.

By policy, PEOs are able to reticket vehicles for a separate infraction. That is, if a vehicle is cited for non-payment and then is observed again after the time limit has again been exceeded, it can again be cited for a time-limit violation. This is a policy followed by many major cities.

TIME LIMIT ENFORCEMENT IN UNMETERED AREAS

PEOs will patrol a given blockface, recording the plates of each vehicle in their handheld device. They will then time their subsequent passes so they can identify those vehicles that have violated the posted time limit by re-entering the vehicle’s plates. The handheld will indicate if the plate was previously entered and, if so, will show the time of the initial entry and the valve stem positions of a front and rear tire.

Enforcement of unmetered time limits is very difficult, particularly when there is a mix of time limits on a single block. If a block has a mix of time limits (15-minutes, 30-minutes, 2-hours, etc.), it is very difficult to check the shorter time-limited spaces properly because the required passes (e.g., every 35 minutes) serve very little value in enforcing the majority of spaces on the block.

AREA PARKING PERMIT ZONES

PBOT administers an area parking permit (APP) program comprising 18 zones which support both residential and business permits as well as time-limited parking for visitors.

While none of the regulations in individual zones are particularly hard to enforce, the variations across zones do require PEOs to learn each zone’s unique restrictions and mindfully apply that knowledge to the zone they are patrolling. Most of the City’s APP zones are patrolled by bike officers, although some that are farther from Downtown are covered by officers on scooters.

BOOTING

PBOT began booting scofflaw vehicles in September 2016. Boot eligibility is reached when a plate has \$500 in outstanding parking citation or 6 open, delinquent citations. The Court provides PBOT with a “Hot List” (i.e., boot eligible plates) once a week. Booted vehicles are left on the street for a period of up to 36 hours; if still not redeemed, PBOT calls for the tow vendor.

RESPONSE TO COMPLAINTS

Much of the outlying area scooter patrol is complaint-based. Complaints can range from blocked driveways, blocked mailboxes, vehicles blocking fire hydrants, to vehicles parked the wrong way.

Non-Patrol Duties Performed by PEOs

Other non-patrol duties performed by PEOs include:

- Dispatch**
 - Receipt, logging, and forwarding of complaints, including blocked driveways, abandoned/prohibited vehicles, and time-limit infractions.
- Abandoned and Prohibited Vehicle Claims**
 - PBOT enforcement may cite oversized vehicles (such as motorhomes), which are prohibited from extended parking (beyond 8 hours while loading and unloading) on residential streets
 - Abandoned vehicle complaints have increased by 80% over the last 3-years (27,000 complaints in 2016).
- Delineation (Formerly meter bagging)**
 - Posting of temporary signage so others will not park in spaces that have been reserved temporarily for a fee. This workload has increased by 13% over the past two years. The permitting for the temporary signage is through the PBOT Permit Center.
- Meter Collections**
 - Two PEOs per day are assigned (on a rotating basis) to meter collections three days per week, every week, and available on call to respond to a non-functioning meter that requires the coinage to be removed.

PERFORMANCE MANAGEMENT

Performance Measurement

There are several types of data, largely derived from periodic street surveys, which can be used to evaluate the performance of enforcement organizations.

Occupancy rates and turnover/average parking duration rates are generally considered “passive indictors.” That is, when districts are exhibiting the desired levels of occupancy and turnover, it can be assumed that enforcement is reasonably effective. If occupancy rates higher than desired and turnover is lower than desired, low levels of enforcement may be a contributing factor.

It is also critical to look at other more active measures that relate directly to enforcement performance. The two indicators presented below are generally measured in the same report.

Violation Rate: Defined as the percentage of unique vehicles surveyed which are found to be parked in violation of the prevailing regulation:

$$\text{VIOLATION RATE} = \frac{\text{Unique Vehicles in Violation}}{\text{Unique Vehicles Observed}}$$

This type of data can be enhanced by also differentiating among legally parked vehicles by category, such a “paid legal” and “unpaid legal” (including vehicles with disabled placards or official business/government plates). Such data is helpful in situations in which vehicles may be legally parked while still increasing occupancy rates.

Capture Rate: Defined as the percentage of unique violations which are cited or issued a warning:

$$\text{CAPTURE RATE} = \frac{\text{Unique Vehicles Cited or Issued Warning}}{\text{Unique Vehicles in Violation}}$$

Violation and capture rate studies should be carried out for a valid sample of each type of enforcement beat at a minimum of once a year, although it has not been done in the past with regularity.

Goals

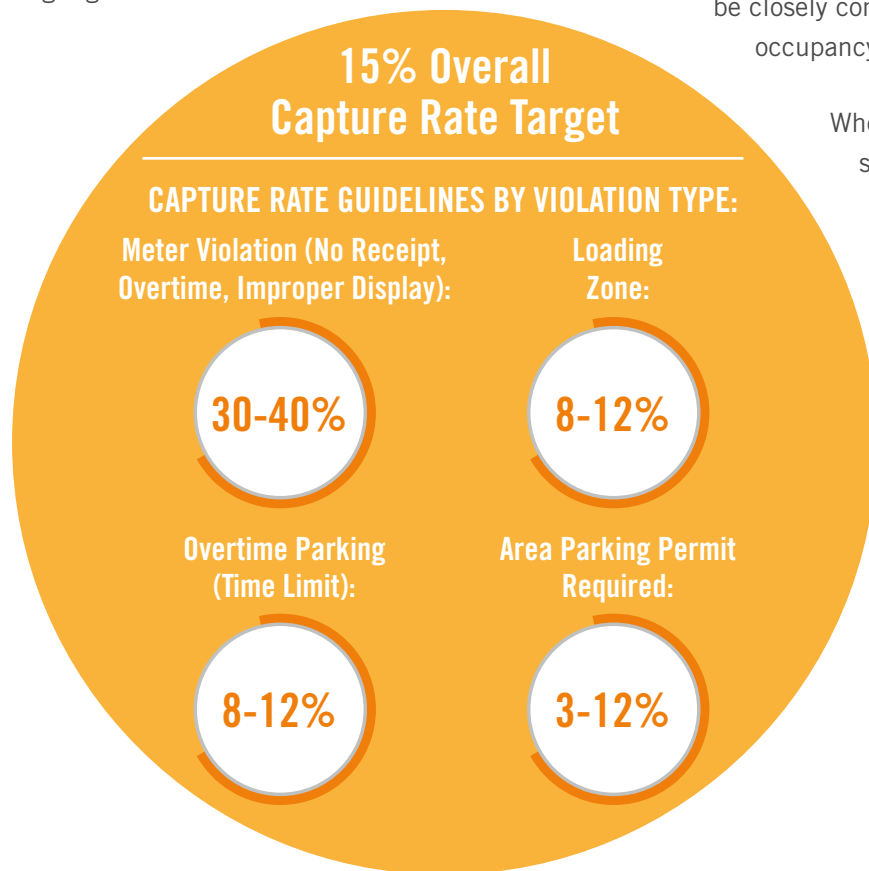
VIOLATION RATE

Where there are no universal parking enforcement standards, it is generally agreed that parking violation rates should be below 10%, with the expectation that the rate will be lower in more densely parked and patrolled areas. In those areas, PBOT management should seek violation rates more in the 5-9% range.

CAPTURE RATE

Some of the most effective enforcement programs in the nation rarely cite one in five violations (20%), and many perform at a much lower level. PBOT should seek to achieve a 15% capture rate. This goal can be adjusted as appropriate if new enforcement tools are deployed or enforcement responsibilities added.

Capture rates can vary considerably based on the size of the enforcement beat, method of patrol, and regulation category. Smaller enforcement beats patrolled by officers on foot (as is common in many of the downtown metered areas) should yield capture rates of 30-40%. Larger beats with a mix of regulations and patrolled by scooter might only produce capture rates of 5-10%. Given this variability, no specific target capture rates have been established for each individual regulation category. However, the following capture rate guidelines are provided for context relative to the overall 15% capture rate target goal:



DATA COLLECTION

To the extent practical, the Enforcement Division should endeavor to align its enforcement beats with other PBOT-designated parking areas, such as meter districts and APP zones, wherever it does not conflict with enforcement operational practices and goals. In some cases, such as the Downtown, this would mean that many enforcement beats might fall within one meter district. In less concentrated areas, one or more time limit or APP zones could fall within a single beat. The benefit of such an effort is that violation and capture rates on a beat or multiple beat level could be closely compared with parking indicators such as occupancy and turnover.

Whether PBOT uses internal staff or outside support to conduct annual data collection, the effort should be budgeted annually and designed to allow for year-to-year comparisons¹. Performance-based parking management requires consistent data in order to track progress and make adjustments over time.

¹ Potential resource for survey design: Joseph P. Sciulli and Duke J. Hanson, "Parking Surveys and Studies," in *Parking 101, a Parking Primer*, published by the International Parking Institute