

FAST STOP Parking Pilot

Findings report June 2022



PBOT
PORTLAND BUREAU OF TRANSPORTATION

PARKING OPERATIONS & POLICY

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FAST STOP Parking Pilot

Prior to the Covid-19 Pandemic, the need for short-term parking and loading at the curb was increasing at a rapid pace and PBOT was starting to study this growing need. This need expanded greatly during the pandemic, especially as dining shifted from in-person to takeout and delivery. As COVID recovery happens, there will likely be continued need for short term pick up and drop off parking spaces. PBOT does not have clear policy guidance for how to allocate and manage space between competing demands or how to mitigate conflicts between different users of the public curb.

PBOT embarked on a small pilot to examine the need for short-term parking needs in different parts of the city.

The FAST STOP Pilot was started with the intention of:

- Understanding the demand for the curb in different areas.
- Developing policy on competing short-term demands and safety impacts.



Pilot Background

To study this need for short-term curb access, PBOT installed 16 new parking zones in five different study areas. These new zones were placed to test before rolling them out Citywide. The study areas included spaces on or near N. Mississippi Avenue near N Failing, NW 23rd at Savier, SE Stark at SE 80th, SW Harvey Milk and 11th, and SE Division from 30th to 36th Avenue.

This study was conducted during the 2021 COVID-19 pandemic and the conditions on the street were in- flux due to the Healthy Business response to support local businesses during the pandemic. Also due to the COVID-19 pandemic, people's habits and behaviors related to transportation and shopping and dining were very different and changed during the course of the pilot study. It was not possible to control for those external and dynamic forces during this pilot study. The sample size (hours and study days) is small due to the limitations of data collection and budget constraints.


The pilot goal was to provide a convenient and reliable parking space for:

- Customers picking up take-out food at restaurants.
- Drivers working for any number of food or retail delivery services to park and collect/drop off their products.
- Drivers dropping off or picking up passengers, either private vehicles or private-for-hire ride sharing vehicles (E.g. Taxi, Uber, Lyft)
- Anyone needing to park for 5 minutes or less.

The potential benefits of these new zones include:

- Increased convenience & access to local businesses=more successful businesses (COVID relief/Business support)
- Reduced circling for a parking space, less driving and traffic congestion, and improved air quality (Climate).
- Reduced double parking and blocked crosswalks and bike lanes and safer streets for all users (Safety)

Do your customers need a place to park near you for just a few minutes?



FAST STOP Pilot Goals

- Understand curb demand: when, where, by whom.
- Develop consistent policy for evaluating, allocating, and managing potential flexible parking spaces that advances climate and equity goals.
- Pilot the draft guidance/rules, requirements, and signage, monitor pilot performance, recommend next steps.
- Improve safety and increase access to businesses.
- Respond to changing community needs.

How will we know we were successful?

- Increase in data and information on curb use.
- Reduced instances of vehicles stopping in lane, blocking the crosswalk, bike lane, etc.
- Increased access to businesses and services.
- Reduced parking search times for short visits (Climate action).
- Higher vehicle turn-over rate (5+ unique vehicles per hour).
- Achieve target average hourly occupancy rate 55-75%.
- Receive positive feedback from people in the area, including residents, business owners, customers, gig-worker drivers, people bicycling or walking nearby, etc.

5 Pilot Study Areas across Portland

Five Study Areas



Criteria for Study Areas

Considerations

- Existing parking management (e.g., current Meter District or APPP areas)
- Future parking management district (e.g., proposed Parking Permit Area)
- Current land use
 - Busy neighborhood commercial, including Healthy Business Permit areas
- Truck loading
- Street classifications, especially --
 - Existing Bike lanes/neighborhood greenways
 - Bus lanes
- Areas where conflicts have been noted by parking control staff, enforcement officers, or Vision Zero staff
- PBOT Equity Matrix

Pilot Study data collection methods

The data being collected required a lot of verification due to the detailed observations each minute, so PBOT primarily used surveyors in the field to collect data. PBOT supplemented this data with private-for-hire ride sharing data. PBOT also gathered information via user and business surveys.

The observations were made on the following days/times:

Pre-implementation

- **May 2021**
 - A Tuesday, Wednesday, or Thursday from 11am-1pm and 6-8pm
 - A weekend evening from 6-8pm
 - A total of 6 hours observed at each location

Post implementation

- **October/November 2021**
 - A Tuesday, Wednesday, or Thursday from 11am-1pm and 6-8pm
 - A weekend evening from 6-8pm
 - A total of 6 hours observed at each location
- Private-for-hire rideshare data was collected on the same days, but we collected 24 hours' worth of data on those days.

The questions sought to answer about the FAST STOPS included:

1. What was the vehicle type (personal vehicle, private-for-hire, commercial, obvious food delivery service)?
2. How long are people parking? Measured by dwell time or length of stay.
3. Trip purpose (if observable).
4. Did the FAST STOP reduce the number of stops in travel lane, bike lane, crosswalk, or blocking a driveway?
5. Did the FAST STOP provide increased access for businesses? Measured by turn-over rate.
6. What time of day is the FAST STOP used most?

Overall Findings

Overall, it is hard to determine if the FAST STOPS were successful by our metrics in aggregate. Like many things related to transportation and parking, the context and land uses are important. Part of what PBOT wanted to study was where do these parking spaces help, and where are they needed most. FAST STOPS were very successful in some areas, and in some not successful at all. This is useful for us to understand the conditions where FAST STOPS are most needed and beneficial in supporting safe streets, cleaner air, and easier business access.

It is also important to note that this pilot was conducted during the Covid-19 pandemic and conditions shifted greatly from month to month depending on the Covid-19 numbers and business activity. Those changes are not reflected in this report but surely impacted people's behavior during the data collection phases. This important point should be kept in mind when reviewing the data.

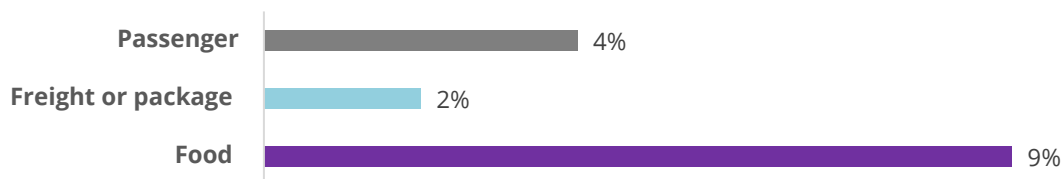
Metrics

Key= Dark blue= performs well, met target. Light blue= Didn't perform well, but almost met target. Pink= Did not perform well, completely missed target.

	Did it reduce vehicles stopping in lane/illegal parking?	Did turnover rate increase?	Did people stay for 5 minutes or less?	Did it meet the target occupancy range (55-75%)?
N Mississippi	Yes, by a 70% decrease	Yes, by 167%	Yes	Yes, 60% occupancy rate
SE Division	Yes, by 65%	No	No	No, 32% occupancy rate
NW 23rd Ave	No, 85% increase	No, but meets target	No but most stays were under 15 minutes	Yes, 61% occupancy rate
SE Stark/Montavilla	No, 14% increase	No	No	Not quite, 50% occupancy rate
Downtown/SW Harvey Milk	Yes, 100% decrease	Yes, 71% increase	Yes, by 3 X	No, 95% occupancy rate

*This table shows data from the chart below and in the appendices. This compares the same spaces in the before and after data collection periods. Please note that the study periods were only one day of 6 hours per day. A very small sample size.

Most common trip purposes (bar chart colors below convey no meaning)



*85% of trips were either in regular private vehicles, or unable to observe trip purpose or vehicle type.

Mississippi Summary



This popular commercial corridor has a mix of shops, restaurants, and nightlife attractions such as Mississippi Pizza and Mississippi Studios. The area is next to historic single-family homes and touches part of the Historic Albina District. The last 20 years this area has seen intense growth and new development including several mixed-use buildings adding density to the popular main street. This area was selected because:

- Land-uses: mixed-use and mix of sizes, lots of restaurants and shops
- Future parking district: a parking management plan was being developed in early 2020, which will begin again in 2022.
- Street classifications: Main-street adjacent to major city Bikeways and has a high frequency bus line along it (Number 4).
- High PBOT equity index score
- High number of Healthy Business permits

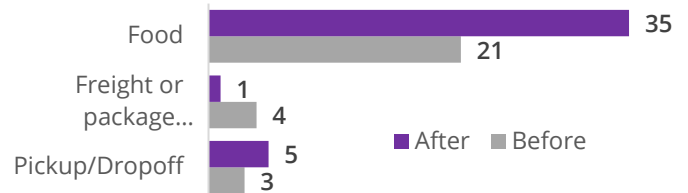
Data Collected

- 307 vehicles/trips were observed in Before period
- 306 vehicles/trips were observed in the After period

Occupancy

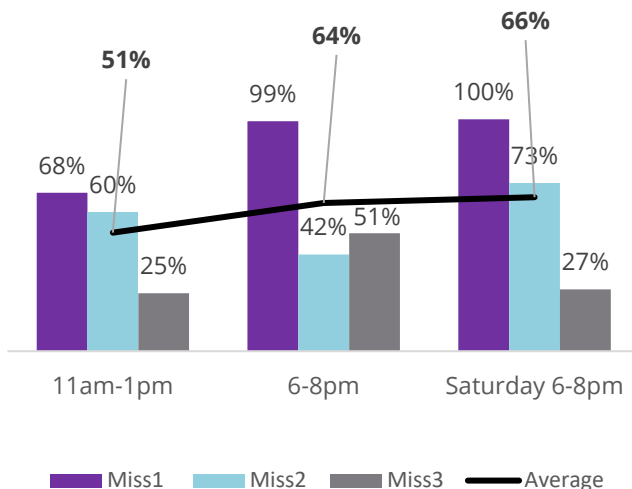
Average On-street parking occupancy	83%
Average FAST STOP space occupancy	60%

Trip Purpose



- 53 % of trips were under 5 minutes
- 76 % of trips were under 15 minutes

Time of day FAST STOP Occupancy



Before & After Comparison

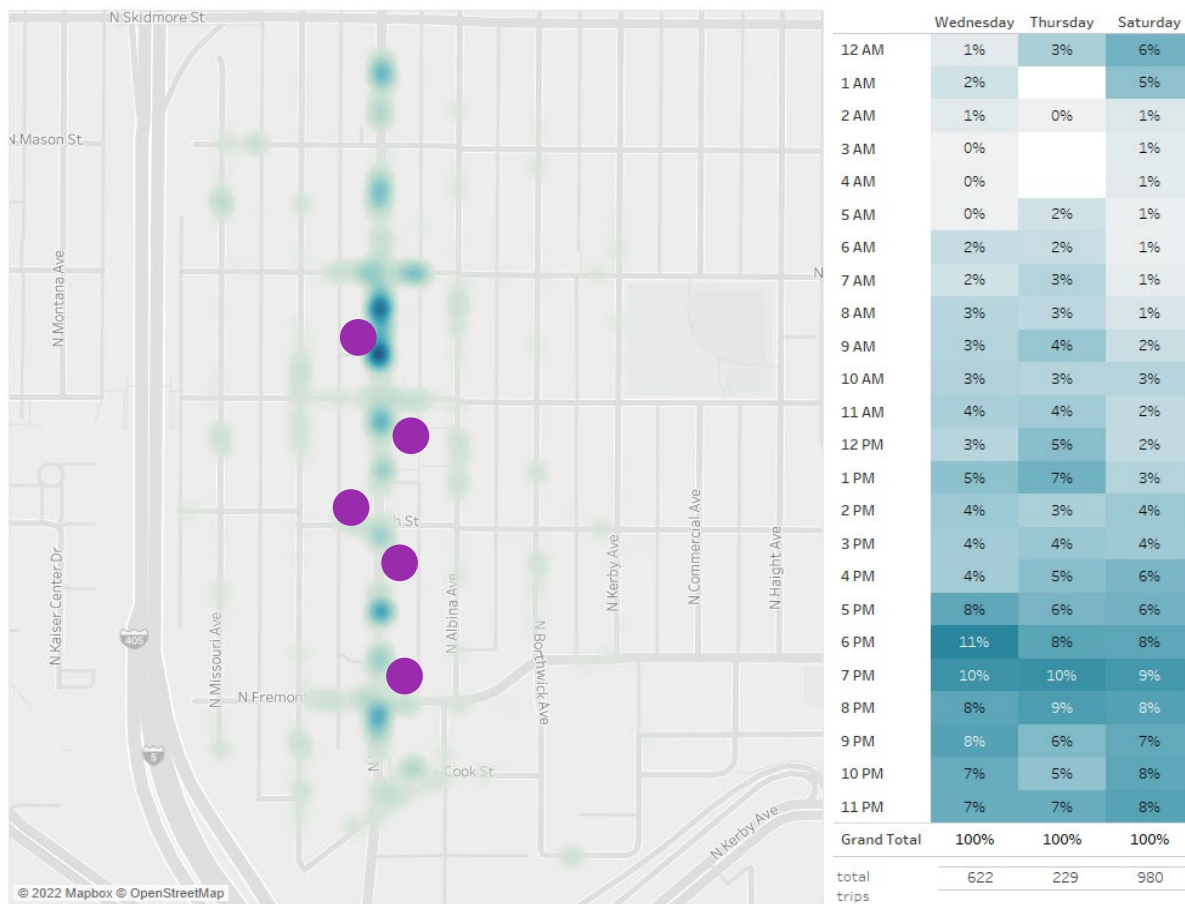
Measure	Before	After	% Change
Change in illegal parking (Stopping in lane, bike lane, crosswalk, driveway, etc.)	57	17	-70%
Increased business access (measured by turn-over rate, or unique vehicle trips per hour)	2.75	7.33	+ 167%
Dwell time (# of stops 5 minutes or less)	3	7.67	+156%

*Graph colors are not intended to convey information

Rideshare trip data

Private-for-hire ride sharing companies shared trip data that started or ended in the study areas on the study dates to cross-reference the passenger loading data and to see what times of day these spaces might be most useful. Below is a heat map showing the concentration of activity, the darker the color, the more trips started or ended in that location. The table shows the time of day that trips were highest.

- The blocks with FAST STOPS get a high concentration of passenger pick-up and drop-offs.
- FAST STOPS would continue to be useful on these blocks for passenger loading.
- The busiest time of day for passenger loading here seems to be between 5pm and midnight on both weekdays and weekends.



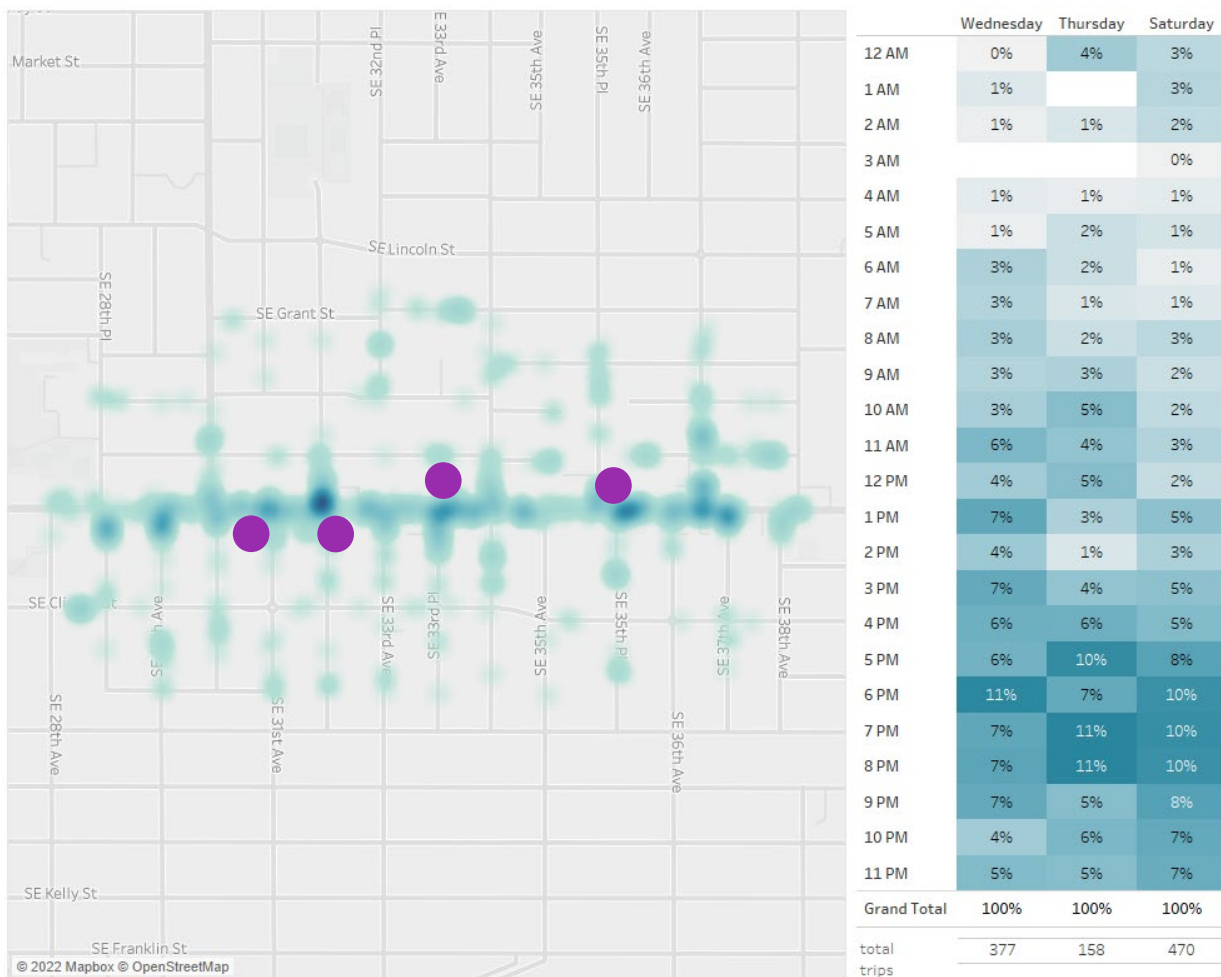
Mississippi Ave Area Findings

Overall, the FAST STOPS on Mississippi Ave seem to be providing the benefits that were intended with this program and are functioning well. After installing the FAST STOPS along Mississippi Ave, the number of illegal parking and stopping decreased and the number of vehicles picking up and dropping off food and passengers increased. The area has a high parking demand overall, but the FAST STOPS met the target occupancy range of 55-75% occupancy. FAST STOPS are a useful tool in helping manage the activity on Mississippi Ave, helping increase access to local businesses while reducing illegal parking and vehicle emissions.

Rideshare trip data

Private-for-hire ride sharing companies shared trip data that started or ended in the study areas on the study dates to cross-reference the passenger loading data and to see what times of day these spaces might be most useful. Below is a heat map showing the concentration of activity. The table shows the time of day that trips were highest.

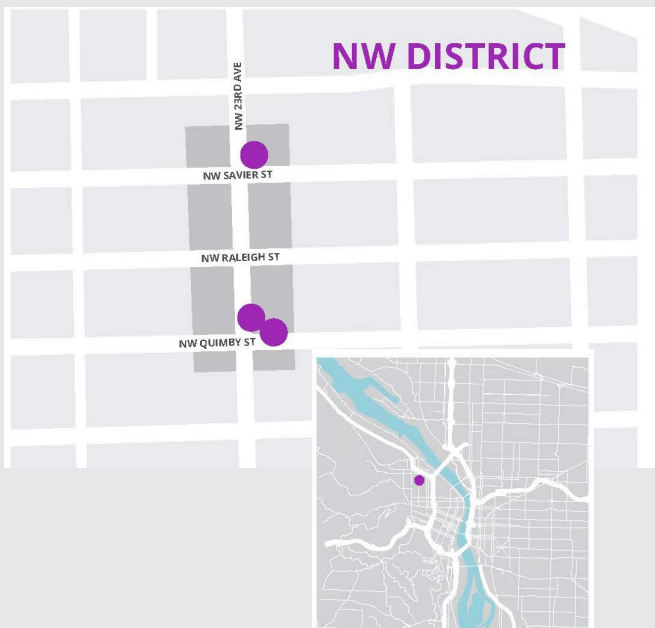
- Some of the blocks with FAST STOPS get a high concentration of passenger pick-up and drop-offs.
- FAST STOPS would continue to be useful on some of these blocks for passenger loading. It appears there is more of a need for passenger loading on other nearby blocks.
- The busiest time of day for passenger loading and unloading appears to be between 5-8pm. This is the same time when the FAST STOPS were the fullest.



Division Findings

FAST STOPS on Division seem to be somewhat useful as there is high parking demand, and they have helped reduce illegal activities. Some of them may need to be moved to different locations to be more effective or useful. They did not meet the target occupancy or turnover rate that was set, however there seems to be promise with them helping reduce illegal parking and stopping while increasing access to local businesses.

NW 23rd Ave



The NW District is one of Portland's oldest mixed-use, popular shopping and dining destination. NW 23rd has been a regional destination for decades and has had the parking headaches that come along with this kind of popularity. It has had innovative parking management techniques since 2015 with a mix of parking permits and meters to manage on-street parking demand. It still has parking issues; perhaps FAST STOPS can help with those.

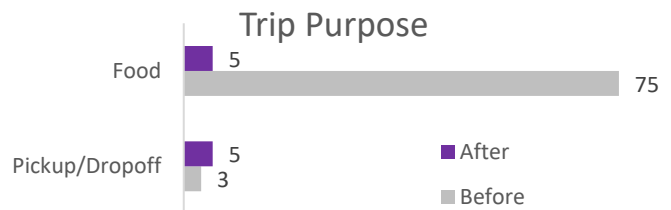
This area was selected because:

- Land-uses: mixed-use and intense concentration of restaurants and shops
- Existing parking district, meters & permits
- Street classifications: Main Street & Civic corridor, on a major city transit route
- Medium PBOT equity index score
- High number of Healthy Business permits

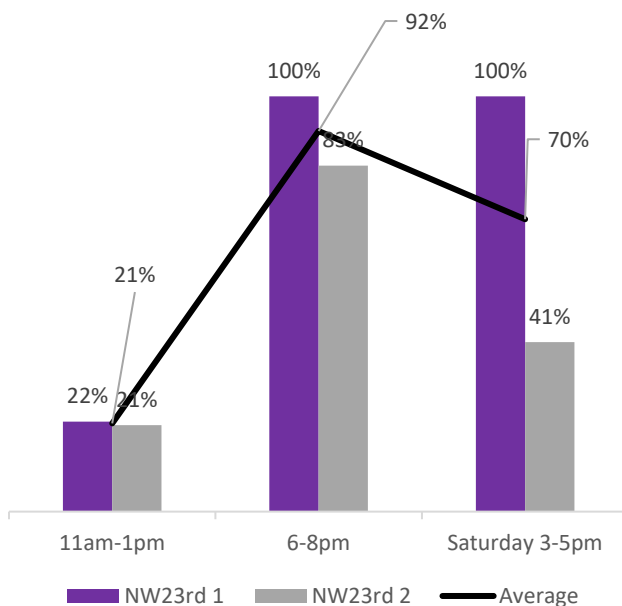
Data Collected

- 197 trips were observed in Before period
- 151 trips were observed in the After period

Average parking occupancy	86%
Average FAST STOP occupancy	61%



Time of Day FAST STOP Occupancy



- 58 % of trips were under 5 minutes
- 81 % of trips were under 15 minutes

Before and After

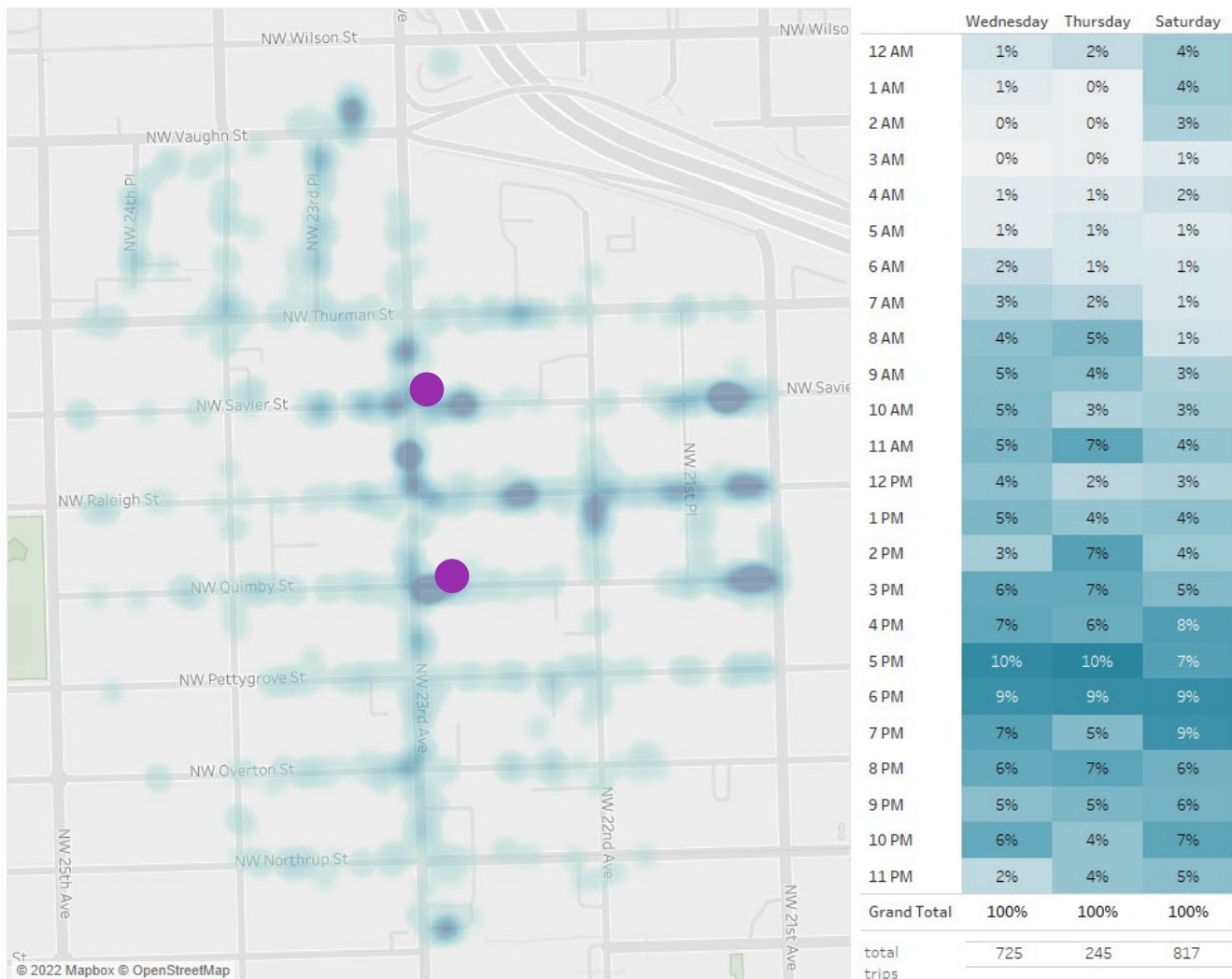
Measure	Before	After	% Change
Change in illegal parking (Stopping in lane, bike lane, crosswalk, driveway, etc.)	13	24	+85%
Increased business access (measured by turn-over rate, or unique vehicle trips per hour)	6.75	6.5	-4%
Dwell time (# of stops 5 minutes or less)	9	7.5	-17%

Rideshare trip data

Private-for-hire ride sharing companies shared trip data that started or ended in the study areas on the study dates to cross-reference the passenger loading data and to see what times of day these spaces might be most useful.

Below is a heat map showing the concentration of activity. The table shows the time of day that trips were highest.

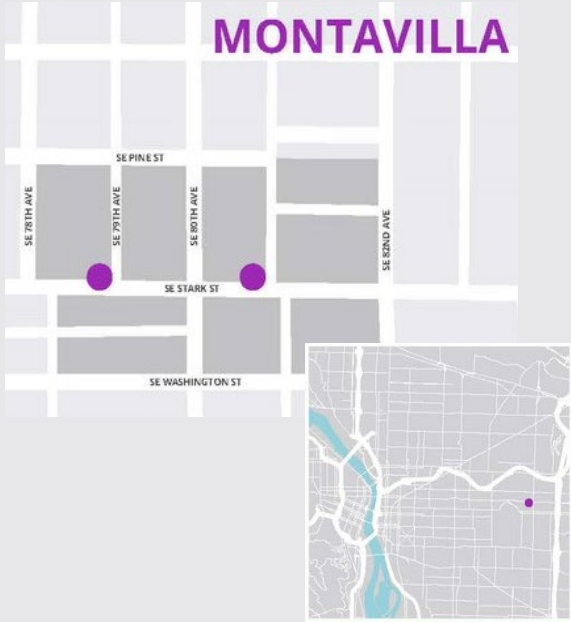
- The blocks with FAST STOPS get a high concentration of passenger pick-up and drop-offs.
- FAST STOPS would continue to be useful on these blocks for passenger loading. The specific location of the existing FAST STOP spaces may need to be adjusted to be more effective.
- There are other nearby blocks that may benefit from a FAST STOP for passenger loading.
- The busiest time of day for passenger loading appears to be between 3 and 9 pm on weekdays and between 4 and 11 pm on Saturdays.



NW 23rd Ave Findings

FAST STOPS on NW 23rd do not appear to be performing as intended, with an increase in illegal parking activity, and decrease in business access and dwell time. Although turnover rate decreased; the spaces still exceeded the goal of 5 unique vehicles per hour, serving on average 7.5 vehicles per hour. The high demand for parking in the area and the high concentration of restaurants and shops are all signs that the area can still benefit from better located FAST STOP spaces.

Montavilla Summary



This neighborhood main street is bustling with great restaurants, bars, and shops, many of which took advantage of the Healthy Business Permits and have outdoor dining in the curb zone. It's adjacent to single family homes and is the furthest east study area. East of 82nd on-street parking is not as in demand due to different land uses and streetscape environment, and presence of more off-street parking.

This area was selected because:

- Land-uses: lots of restaurants and shops adjacent to single family homes.
- Street classifications: Main-street adjacent to city Bikeways, and a bus line
- High PBOT equity index score
- High number of Healthy Business permits

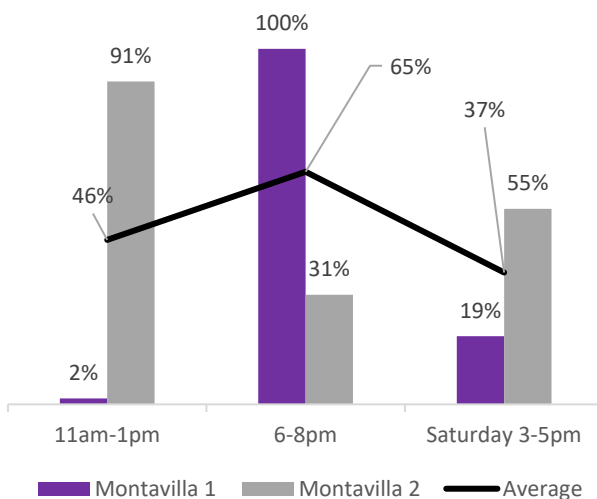
Data Collected

- 176 vehicles/trips were observed in Before period
- 269 vehicles/trips were observed in the After period

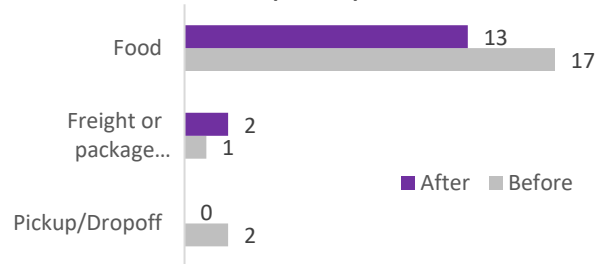
Occupancy

Average On-street parking occupancy	80%
Average FAST STOP space occupancy	50%

Time of Day FAST STOP Occupancy



Trip Purpose



- **42 % of trips were under 5 minutes**
- **50 % of trips were under 15 minutes**

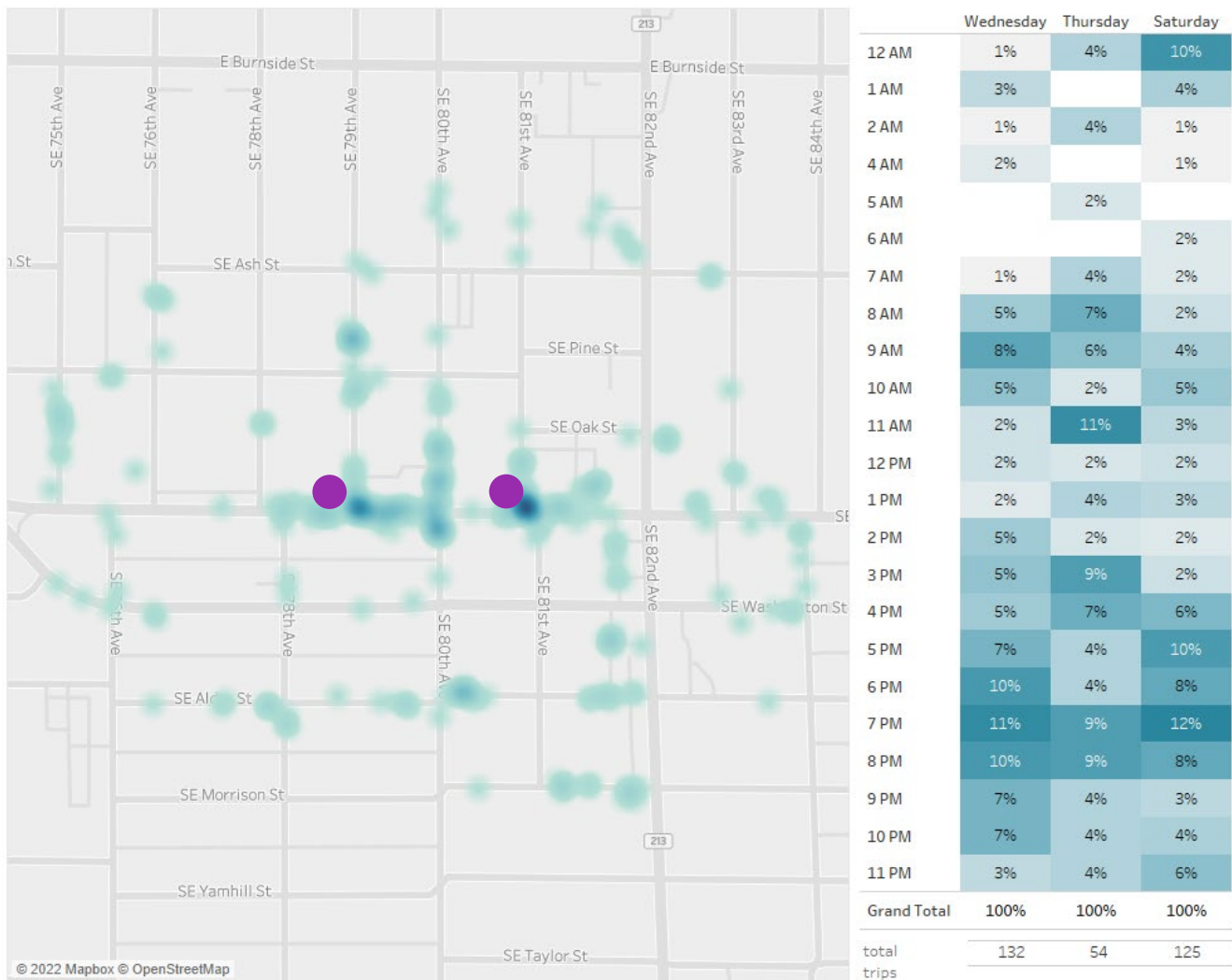
Before & After Comparison

Measure	Before	After	% Change
Change in illegal parking (Stopping in lane, bike lane, crosswalk, driveway, etc.)	7	8	+14%
Increased business access (measured by turn-over rate, or unique vehicle trips per hour)	4.75	3	-37%
Dwell time (# of stops less than 5 minutes or less)	3	2.5	-17%

Rideshare trip data

Private-for-hire ride sharing companies shared trip data that started or ended in the study areas on the study dates to cross-reference the passenger loading data and to see what times of day these spaces might be most useful. Below is a heat map showing the concentration of activity. The table shows the time of day that trips were highest.

- The blocks with FAST STOPS get a high concentration of passenger pick-up and drop-offs. FAST STOPS would continue to be useful on these blocks for passenger loading.
- The busiest time of day for passenger loading appears to be between 4 and 8 pm.



Montavilla Findings

It is not clear how useful FAST STOPS are on SE Stark in Montavilla. They could potentially be more useful if located closer to businesses who need short term turn-over. Perhaps the parking demand is not high enough in this area to really need FAST STOPS. One complicating factor is that there is a high number of the outdoor dining Healthy Business Permits on SE Stark St that could be impacting the overall parking demand. If businesses requested them here, more study and data collection would be needed to determine their effectiveness.

Downtown



This part of downtown has grown in the past ten years with more restaurants and high-end boutiques attracting regional and local customers as well as the growing tourists who visit the city. It's surrounded by a few office towers and small and medium hotels. In addition to several nightlife attractions nearby, this is a 24-hour neighborhood.

This area was selected because:

- Land-uses: Dense mix of businesses, restaurants and shops, offices, hotels, and nightlife.
- Existing metered parking district
- **Street classifications: Downtown** with a bike lane, and Portland Streetcar lines
- Existing 5-minute Healthy Business permits

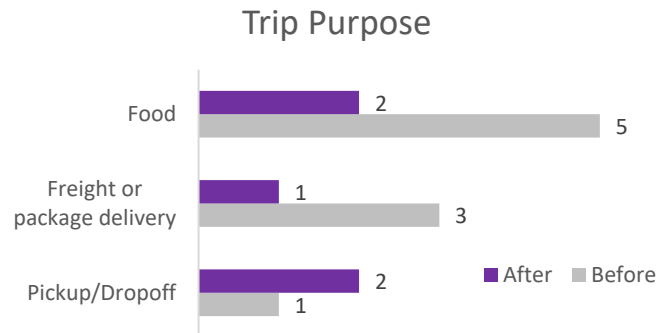
Data Collected

- 130 vehicles/trips were observed in Before period
- 125 vehicles/trips were observed in the After period

Occupancy

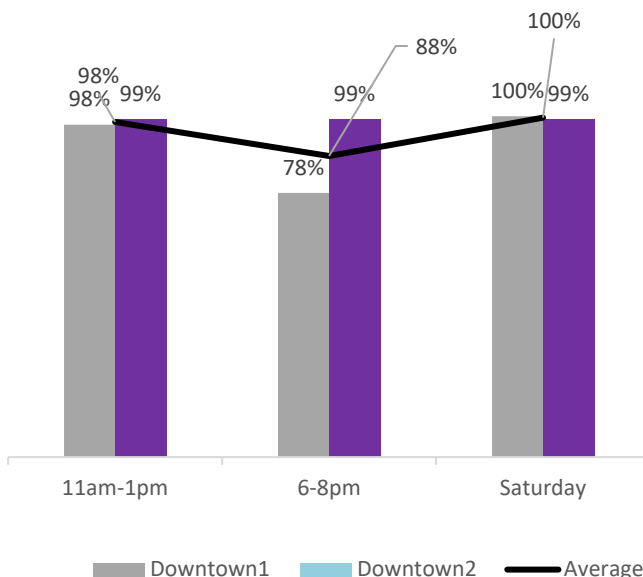
Average On-street Parking Occupancy	90%
Average FAST STOP Occupancy	95%

Most common trip purpose



- **38 % of trips were under 5 minutes**
- **58 % of trips were under 15 minutes**

Time of Day FAST STOP Occupancy



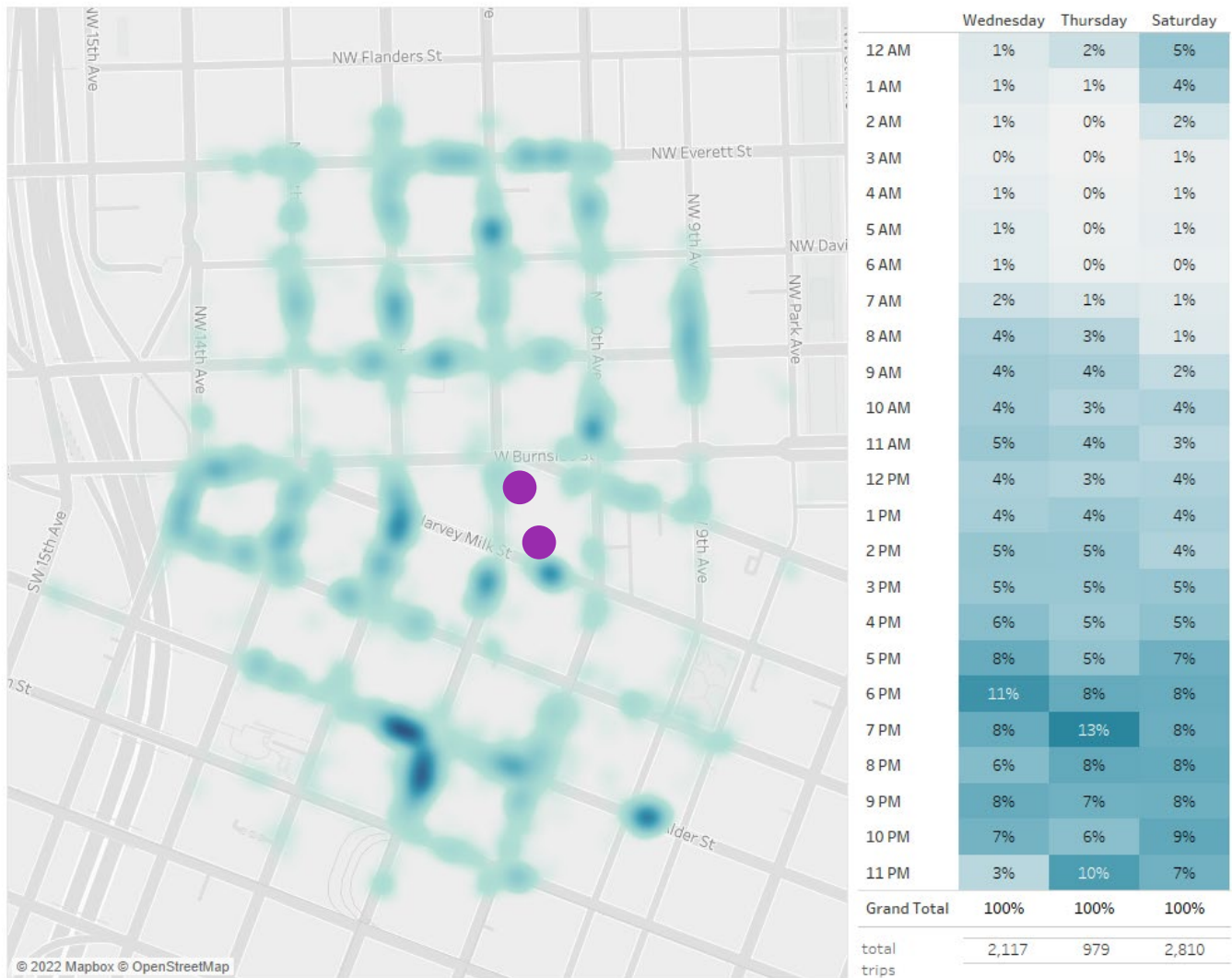
Before & After Comparison

Measure	Before	After	% Change
Change in illegal parking (Stopping in lane, bike lane, crosswalk, driveway, etc.)	10	0	-100%
Increased business access (measured by turn-over rate, or unique vehicle trips per hour)	3.5	6	+71%
Dwell time (# of stops less than 5 minutes or less)	1.5	4.5	+200%

Rideshare trip data

Private-for-hire ride sharing companies shared trip data that started or ended in the study areas on the study dates to cross-reference the passenger loading data and to see what times of day these spaces might be most useful. Below is a heat map showing the concentration of activity. The table shows the time of day that trips were highest.

- The blocks with FAST STOPs get a high concentration of passenger pick-up and drop-offs from.
- Other nearby blocks have even higher concentrations of passenger loading activity where a FAST STOP likely would perform well.
- The busiest time for passenger loading activity appears to be between 5 pm and midnight.



Downtown Findings

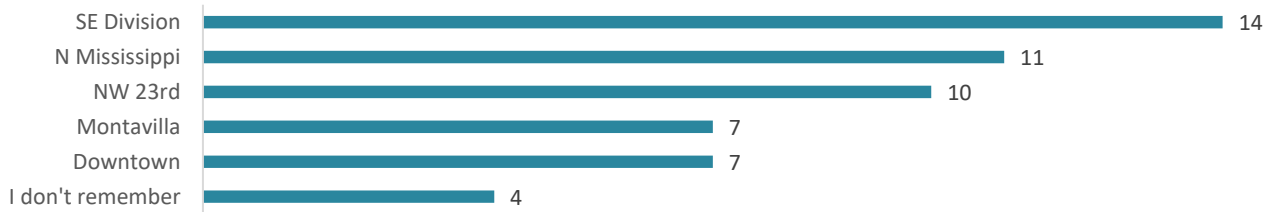
The FAST STOPs in Downtown appear to be providing the benefits that were intended with this program and is functioning relatively well. After installing the FAST STOPs in Downtown, the number of illegal parking and stopping decreased and the number of vehicles using the space increased. FAST STOP parking occupancy exceeded the targeted occupancy range, but this may be due to the high demand for parking in the area in general. Because this is a meter district, locating these should be thoughtfully considered and potentially combined with Truck Loading Zones.

User Feedback

A survey was conducted of users and area businesses in the Fall of 2021 to get qualitative feedback on the FAST STOPs. The response rate was extremely low. Staff attribute this to the low number of spaces in the pilot and the fact that there was not a lot of controversy so little need to weigh in. There were also major world events occurring that likely captured people's attention away from responding to a parking survey.

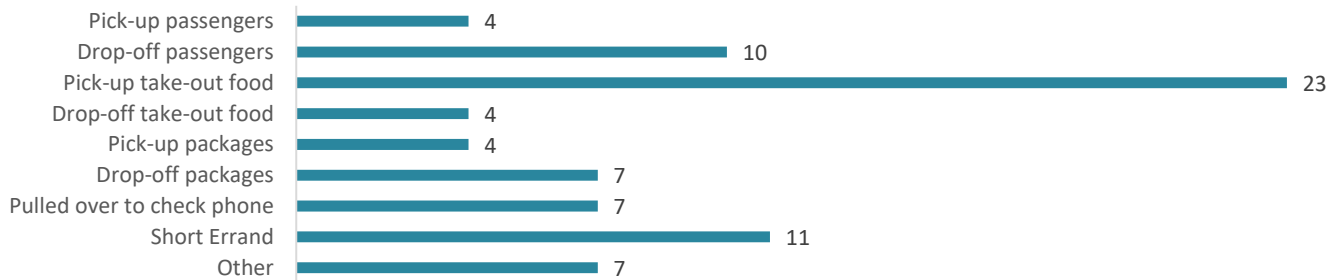
- The survey had 54 valid responses of which, 13 were employees or business owners.

Q: What FAST STOP Location(s) did you use? n=38



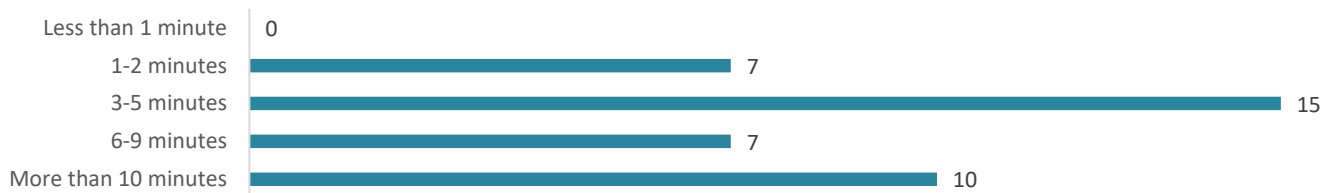
- The FAST STOP locations at SE Division St, N Mississippi Ave, and NW 23rd Ave were the locations used most by respondents.

Q: What was the purpose of your trip when you used a FAST STOP? n=39

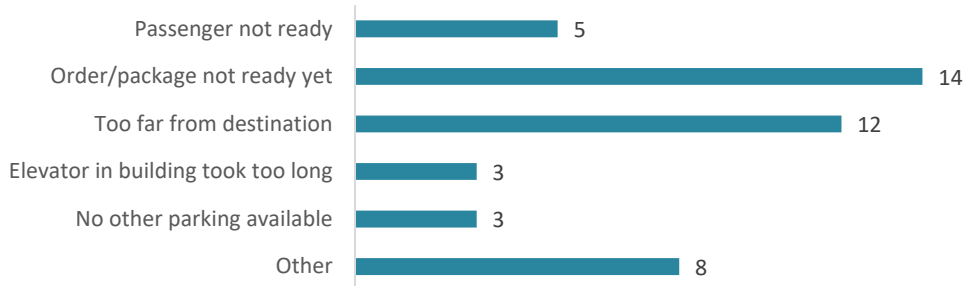


- The most common reasons given for using a FAST STOP space was to pick-up food, complete a short errand such as grabbing coffee or using an ATM, and to drop-off passengers.

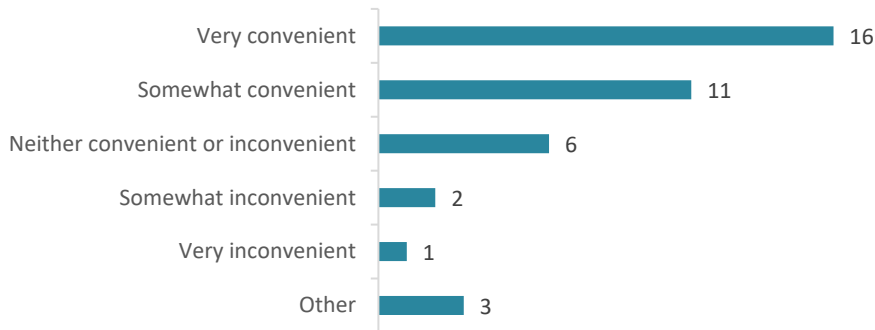
Q: What was the average length of stay when you used a FAST STOP? n=39



- Most respondents reported that their average time parked was between 3 and 5 minutes long.
- The second most reported length of stay was for more than 10 minutes. This is possibly due to high parking demand in the area generally.

Q: What reason(s) did your stay exceed 5 minutes? n=31

- The most common reasons given for parking more than 5 minutes were that their order or package was not ready yet, or that the FAST STOP is too far from their destination.
- As more FAST STOP spaces are installed, less time will need to be spent getting to and from destinations.

Q: Was the FAST STOP location convenient or inconvenient? n=25

- When specifically asked about the convenience of the FAST STOP location, only 8% of respondents stated that the location was somewhat inconvenient.

The survey asked about other things, but the sample size is just too small to determine anything useful from the responses. In the public outreach conducted when we launched the FAST STOP Pilot, people were very receptive and seemed appreciative of the overall concept. There have been several requests for installations along main streets throughout the city, PBOT staff will reach out to those businesses once the next phase is ready to roll out.

NEXT STEPS

The FAST STOPS seem to help improve the function of the streets and businesses in areas with high parking demand like Downtown, N Mississippi, and Division. The goals for these spaces were met in those areas. There is also potential for them being useful in mixed use areas like NW 23rd that have a mix of permits and meters and uses. The original criteria for locating these spaces should continue to work, but more consideration for street seats, plazas and truck loading zone, and meter revenue need to be incorporated into the decision making when deciding to install more FAST STOPS.

Recommendations

- PBOT should consider installing FAST STOPS in busy commercial areas in more areas.
- More study is needed also to determine the impacts in meter districts.
- There should also be a follow up study with longer collection times (24-hours) to really understand the dynamic nature of short-term curb use.
- Combining FAST STOPS with Truck Loading Zones should be a part of the future phase.
- Business associations should be alerted about the new program and work together to come up with a request for them as a group.
- Businesses who had 5-minute Healthy Business permits should consider if they want a permanent FAST STOP.



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