



DESMAN

# Winooski Parking Management Plan

Pre-Meeting Parking Data  
and Survey Results

April Project Meeting

April 28, 2021

# Pre-Meeting Data

- Summary of Observed Parking Demand
- Survey Results





## **Parking Observations**

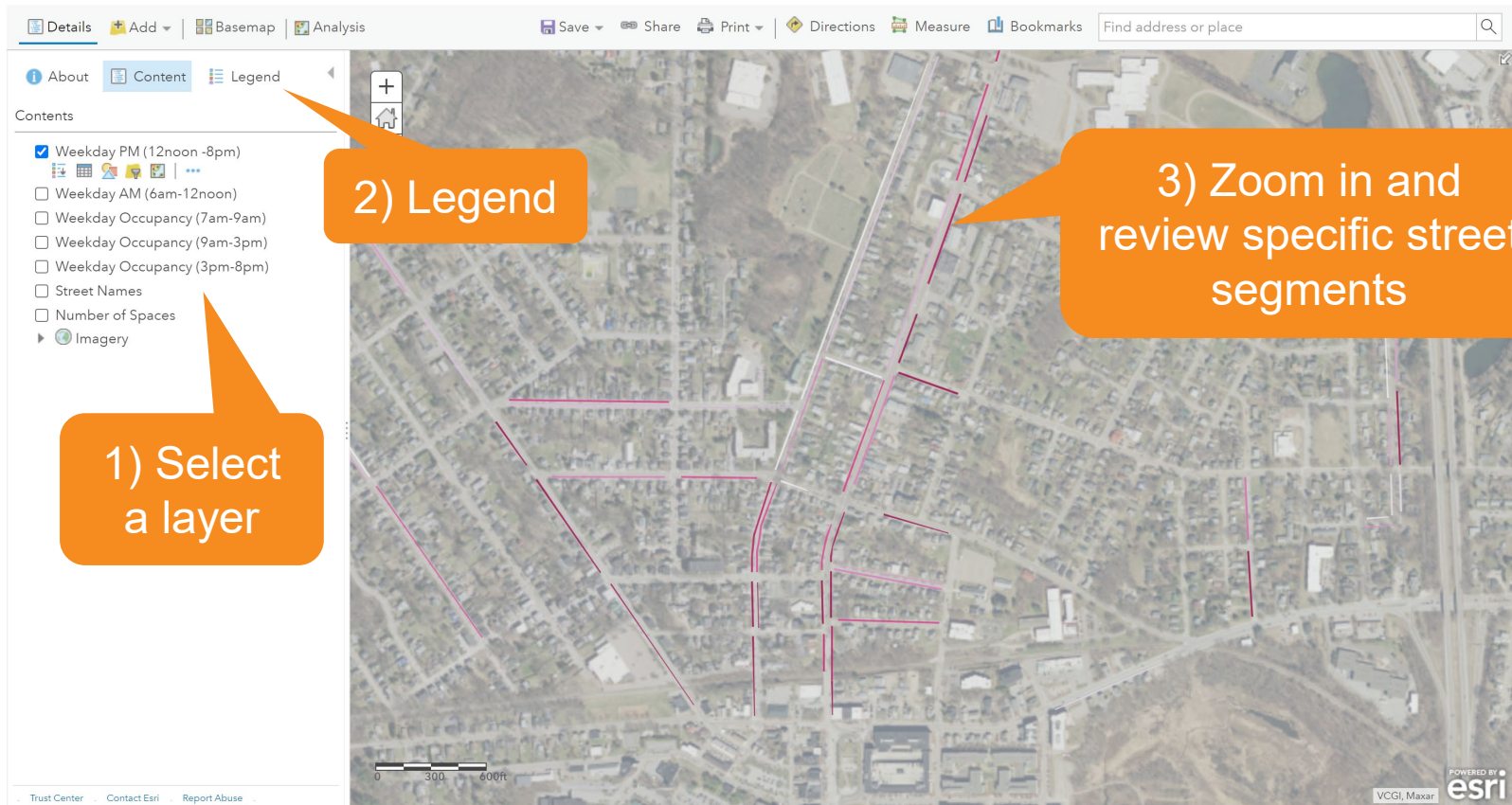
# Parking Observations

- 1,222 on-street observations.
  - 978 weekday
  - 244 weekend.
  - Between Nov 16, 2020 and April 6, 2021
- 609 off-street observations. Most streets have at least 1 observation of demand for each property.



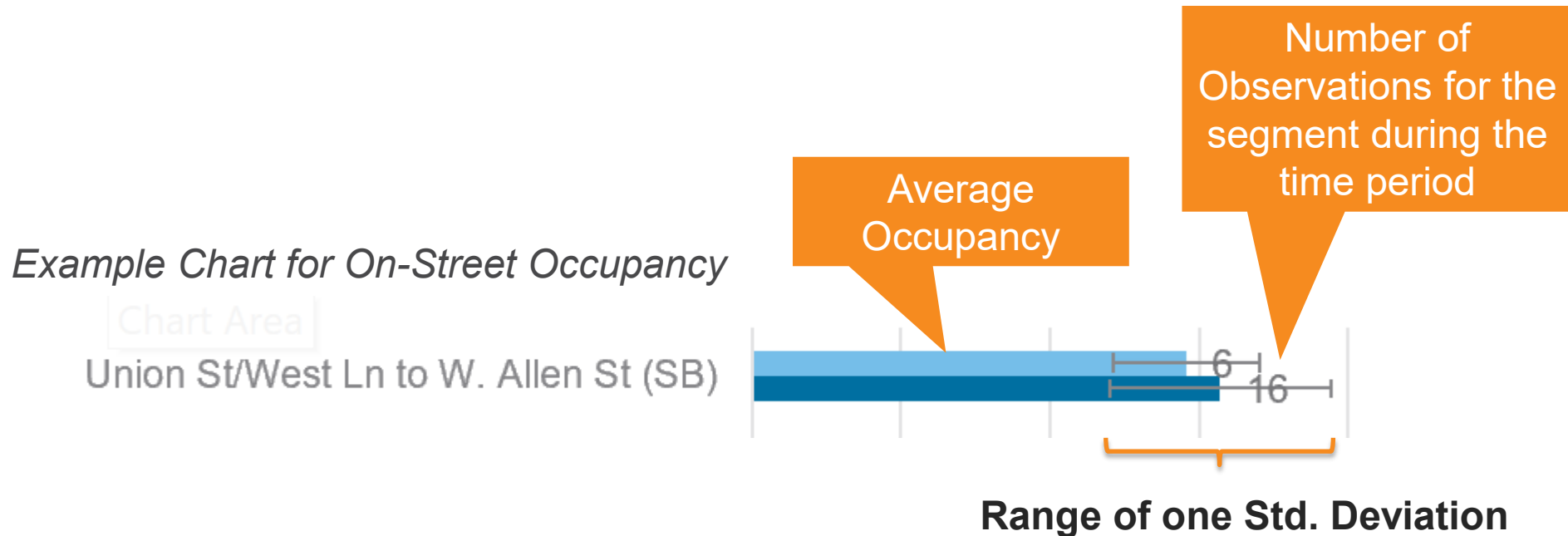
# Parking Observations

ArcGIS Online Parking Occupancy Map  
<https://arcg.is/10qvvt0>



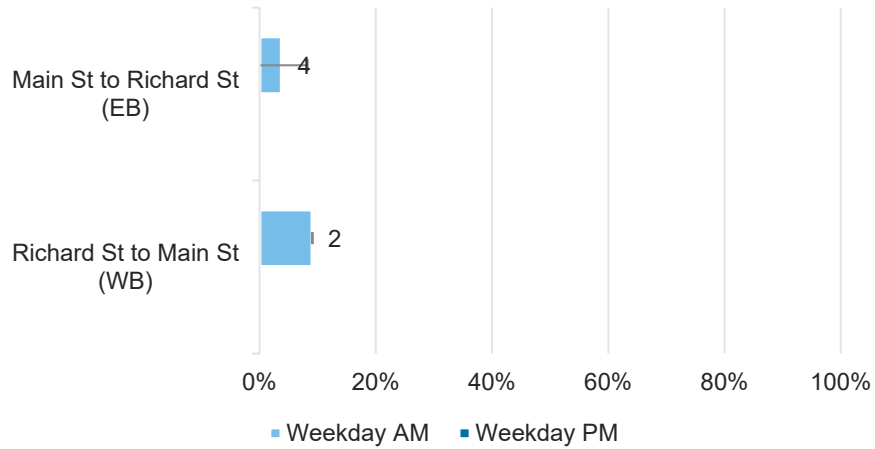
# Parking Observations

Each street with two or more segments are summarized for an AM (6am-12noon) and a PM (12noon -8pm) period in the following charts.



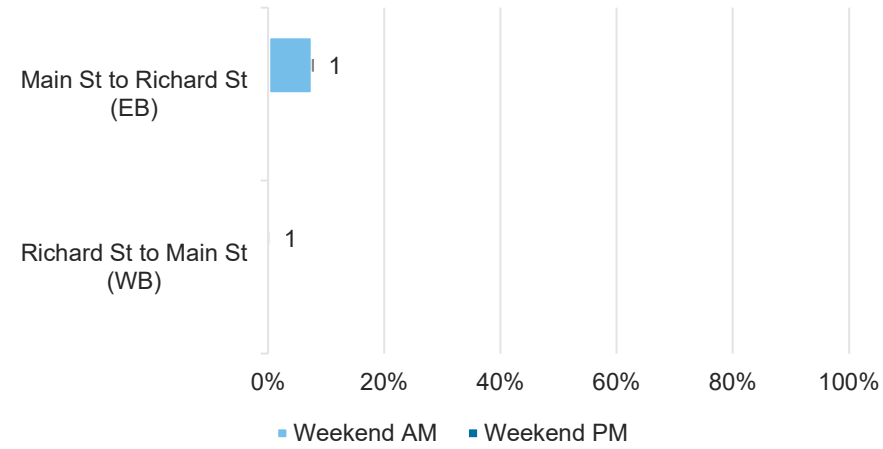
# Bellevue Street

Bellevue (weekday)



% Occupancy

Bellevue (weekend)

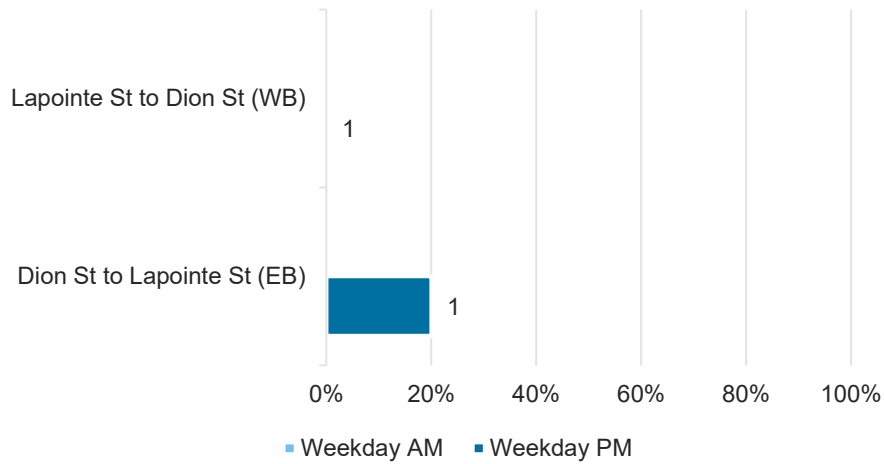


% Occupancy



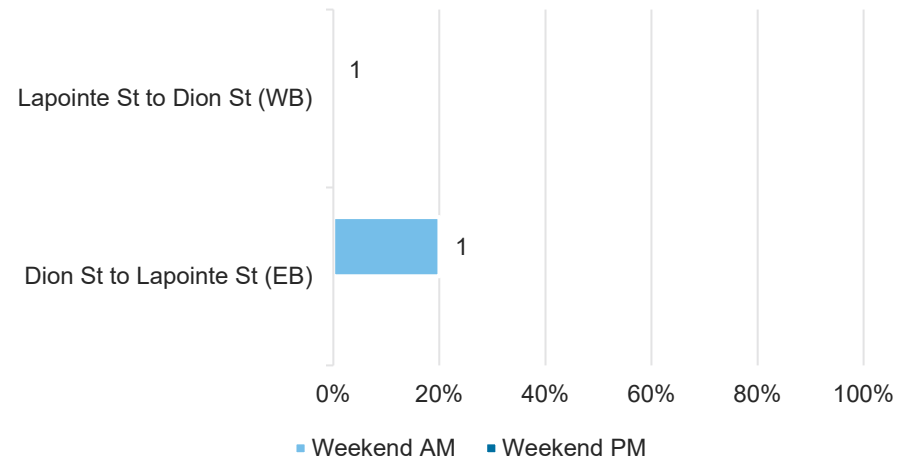
# Corrine Street

Corrine Street (weekday)



% Occupancy

Corrine Street (weekend)



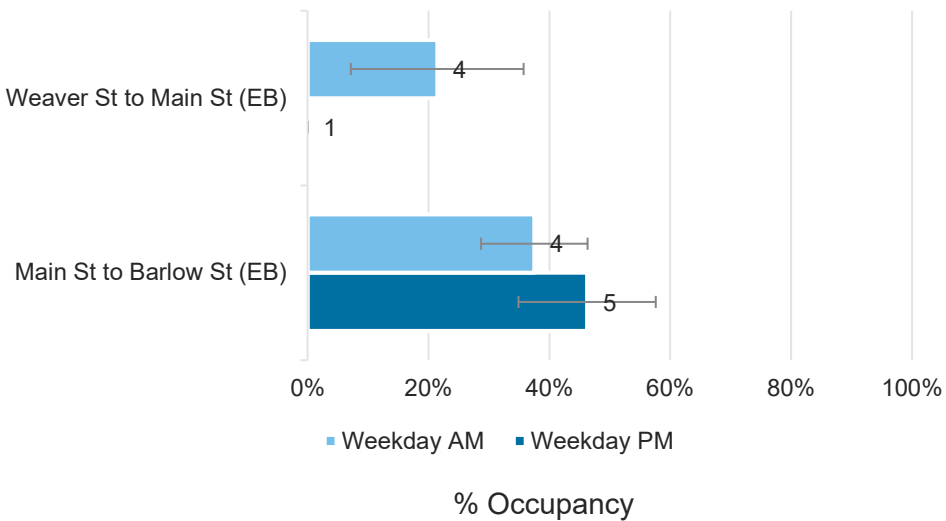
% Occupancy





# East Spring Street

E Spring Street (weekday)

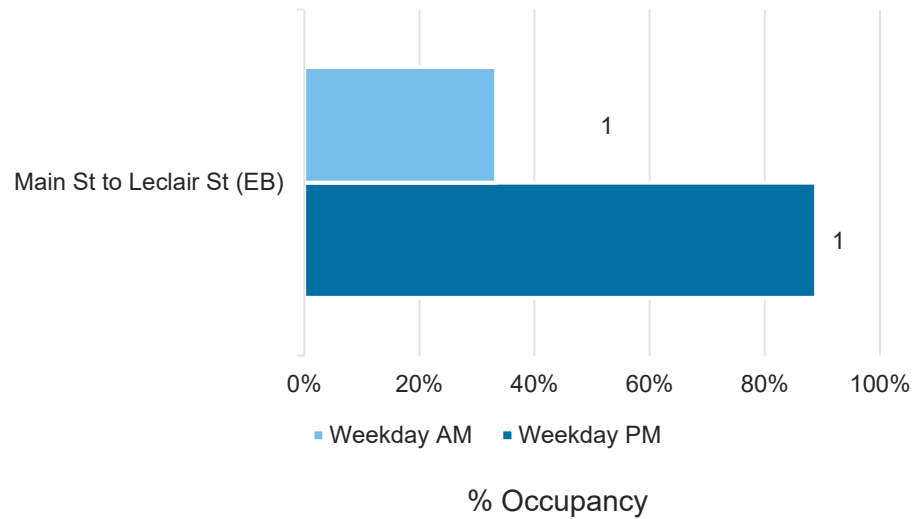


E Spring Street (weekend)

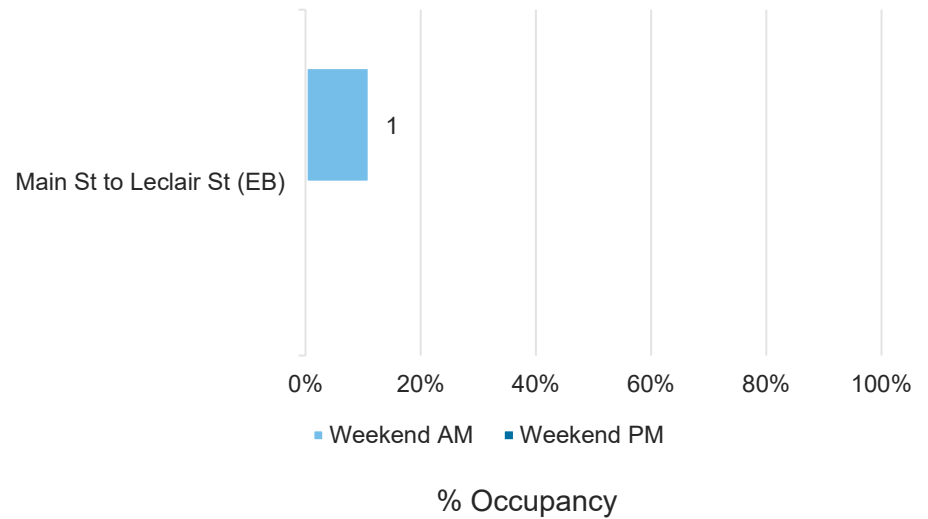


# Lafountain Street

Lafountain Street (weekday)

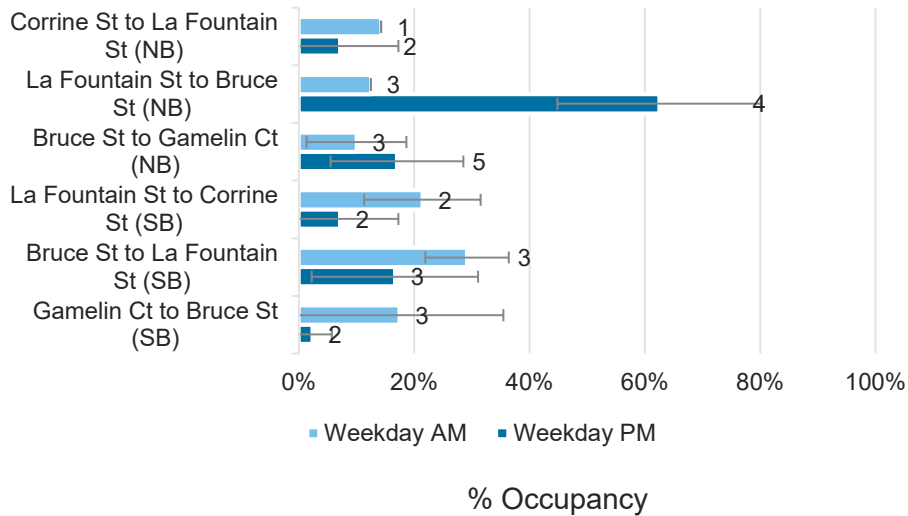


Lafountain Street (weekend)

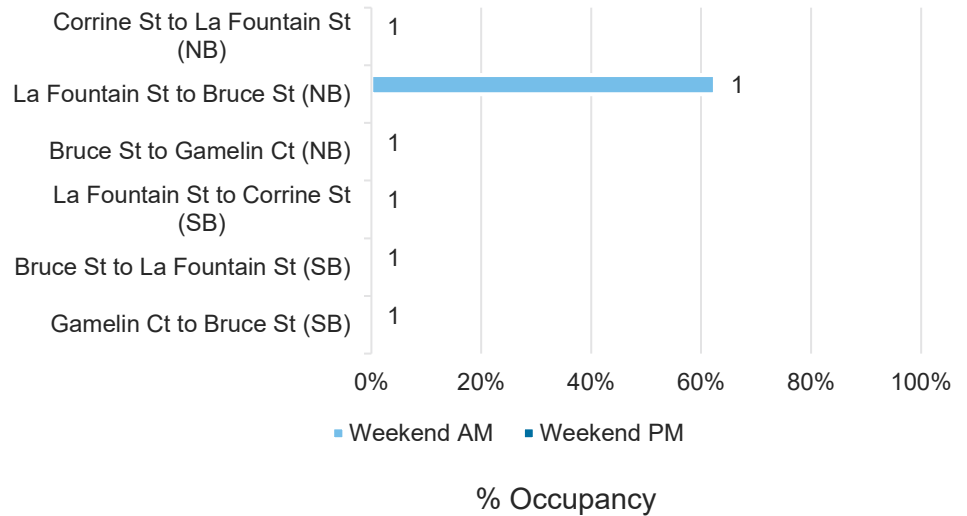


# Lapointe Street

Lapointe Street (weekday)

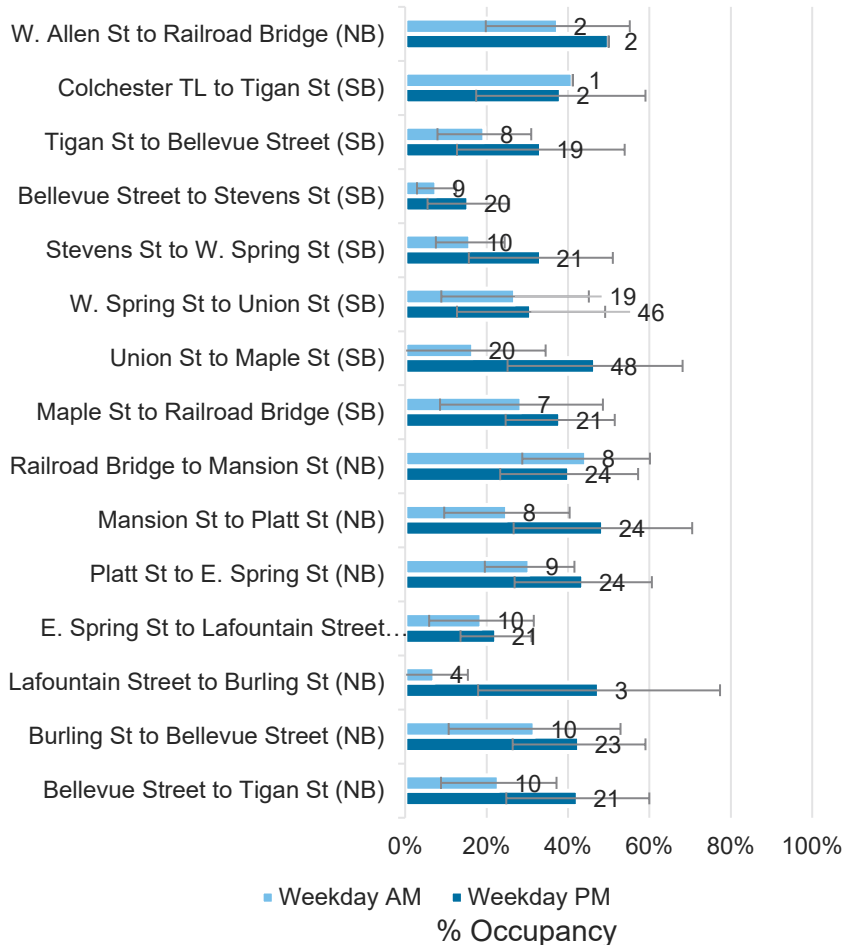


Lapointe Street (weekend)

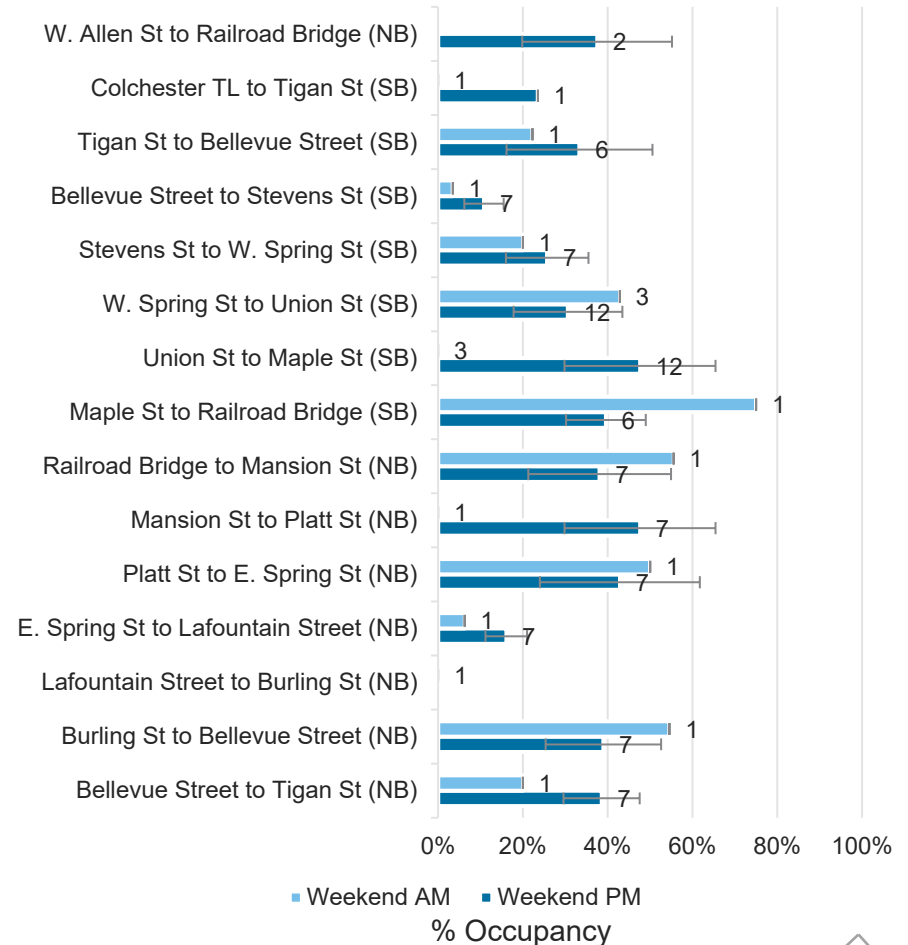


# Main Street

Main Street (weekday)

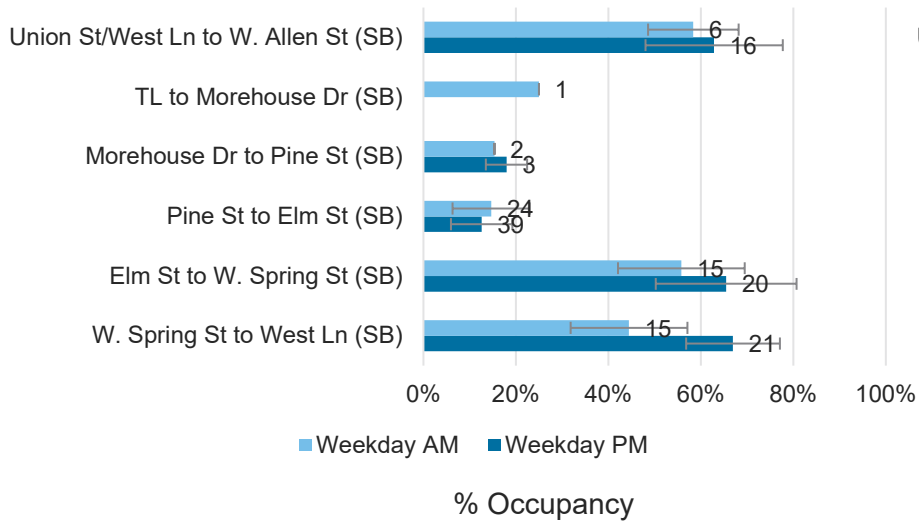


Main Street (weekend)

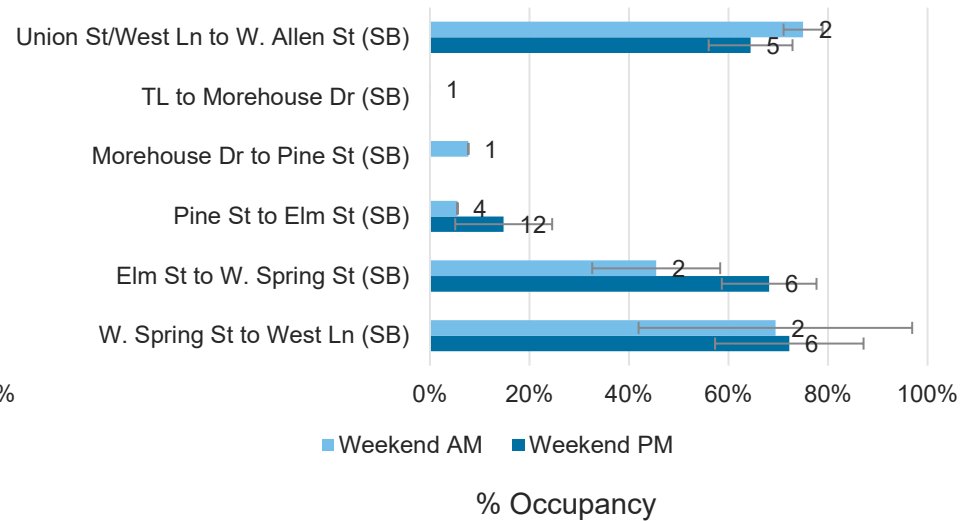


# Malletts Bay Avenue

Malletts Bay Avenue (weekday)

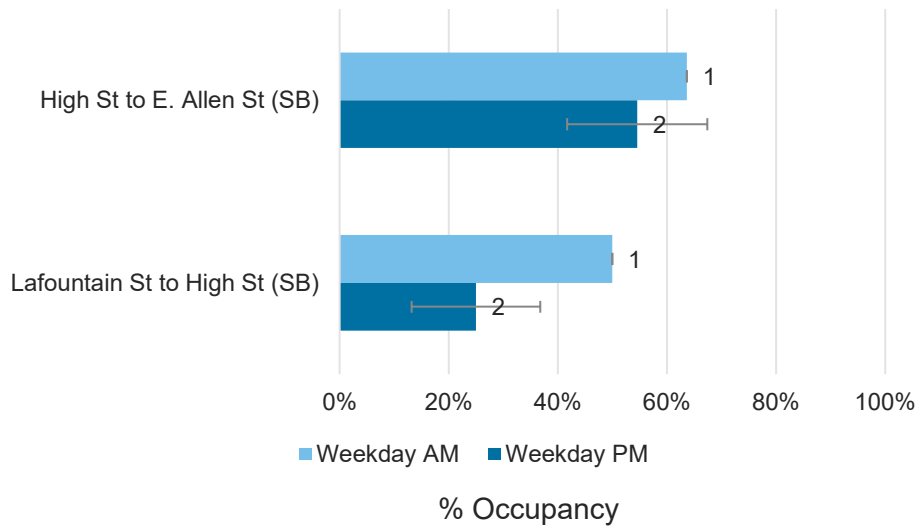


Malletts Bay Avenue (weekend)

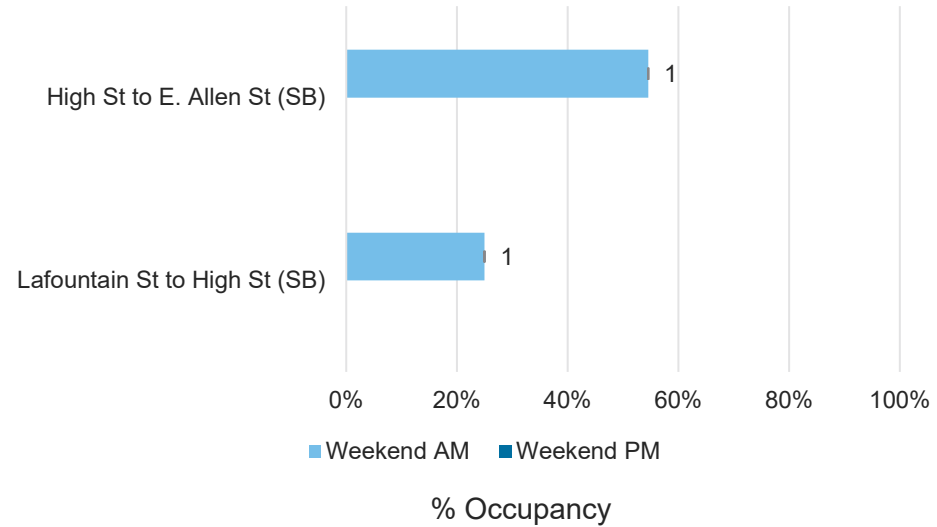


# Manseau Street

Manseau Street (weekday)

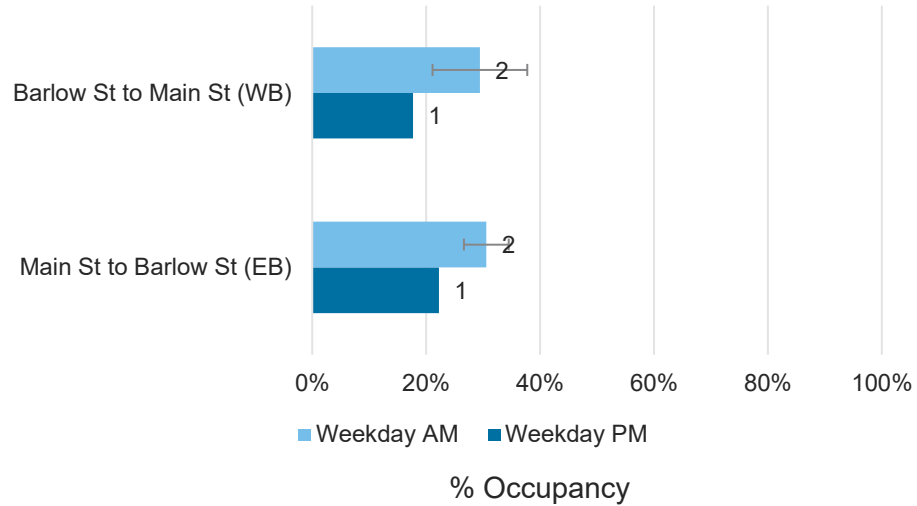


Manseau Street (weekend)

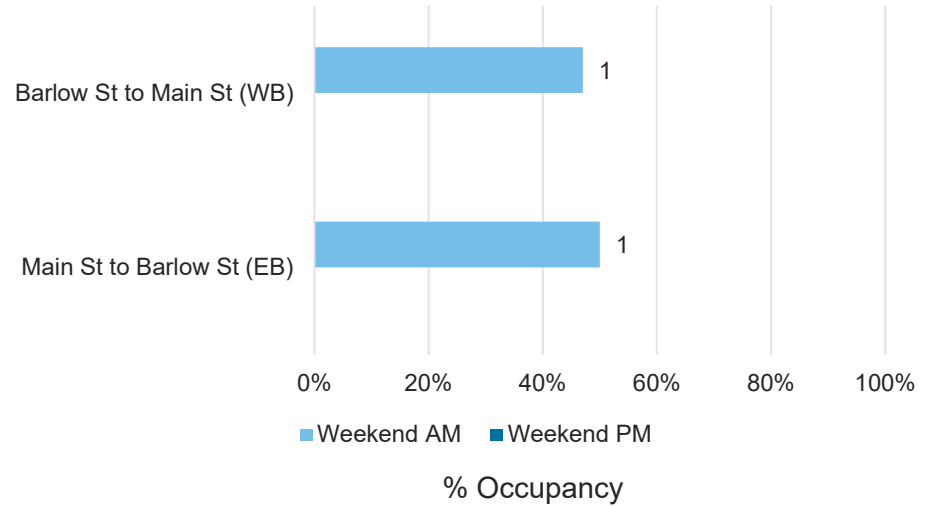


# Platt Street

Platt Street (weekday)

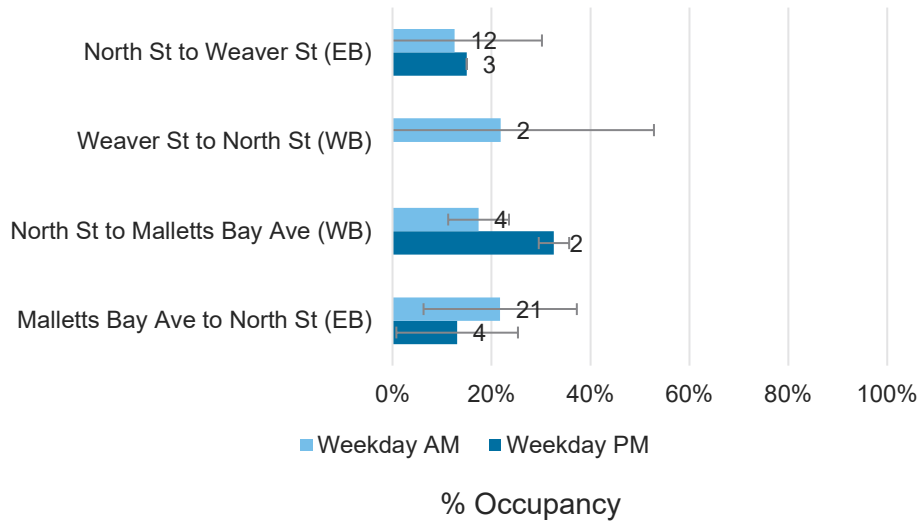


Platt Street (weekend)

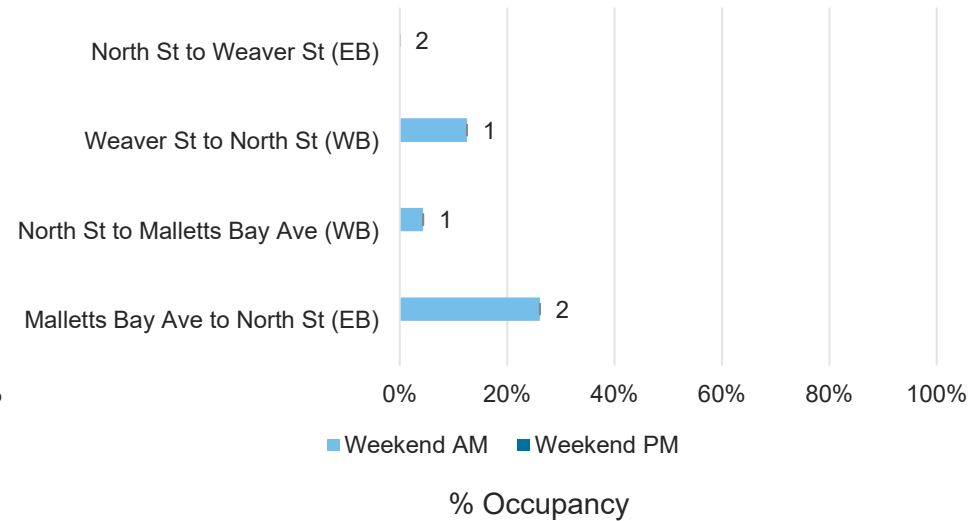


# St. Peter Street

St. Peter Street (weekday)



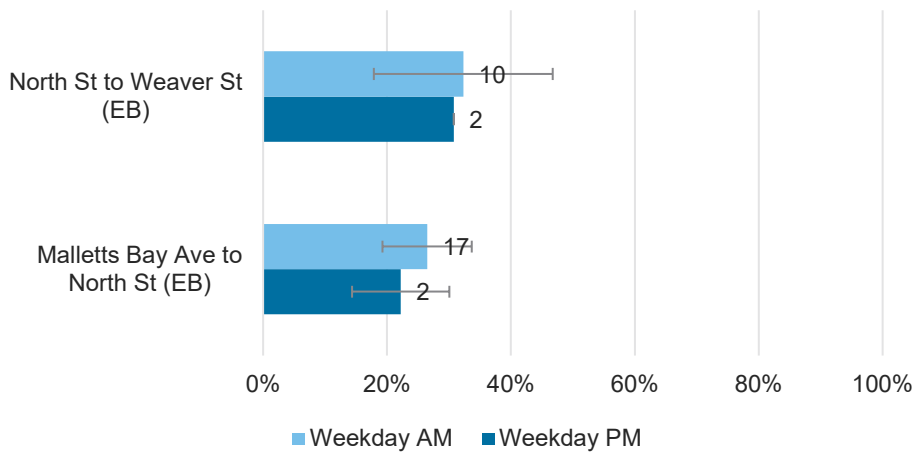
St. Peter Street (weekend)





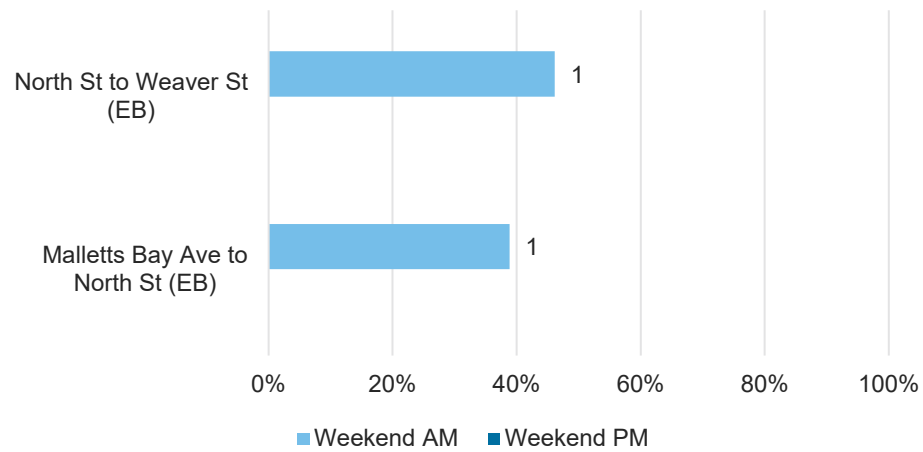
# West Spring Street

W Spring Street (weekday)



% Occupancy

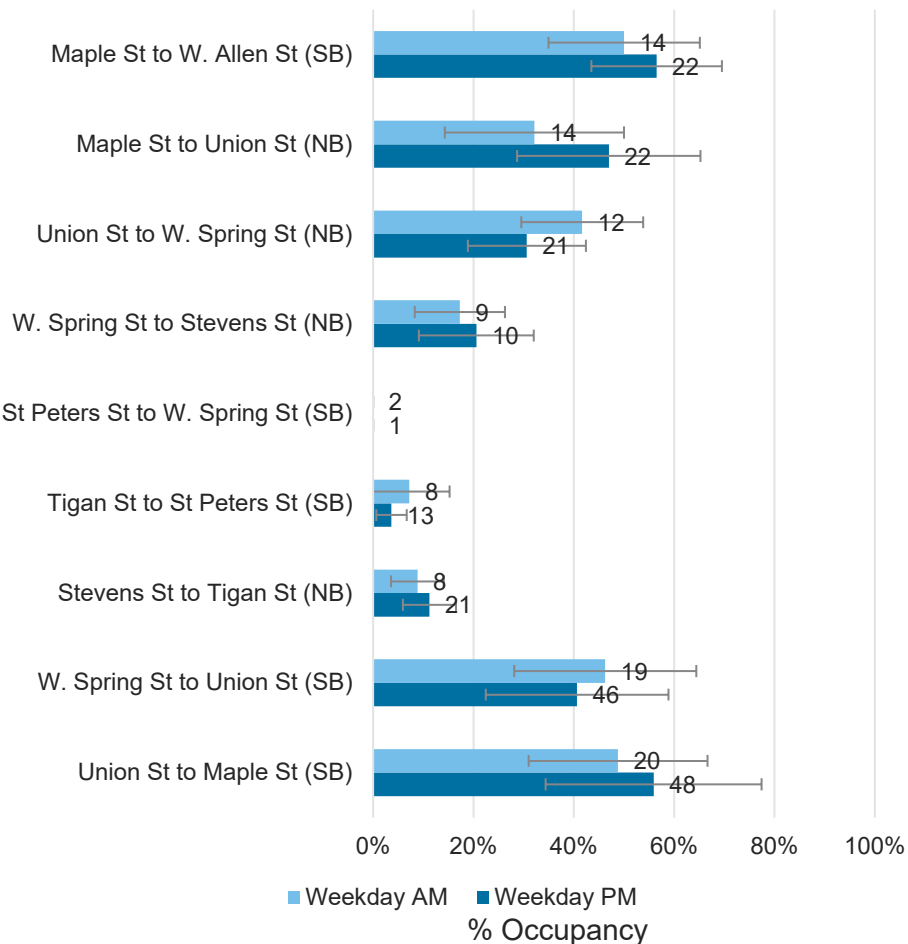
W Spring Street (weekday)



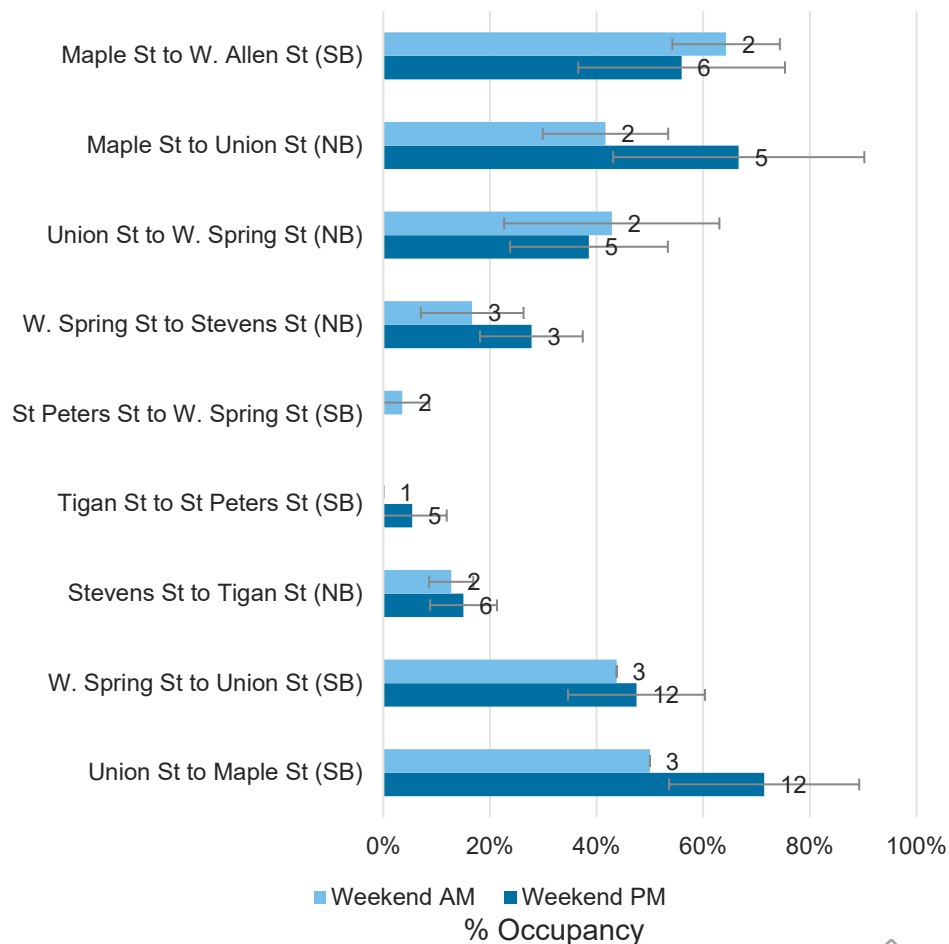
% Occupancy

# Weaver Street

## Weaver Street (weekday)

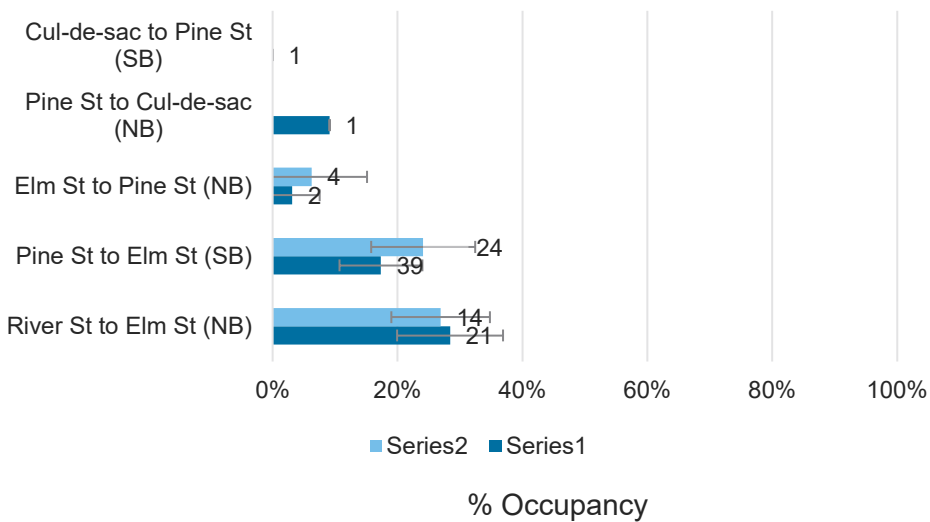


## Weaver Street (weekend)

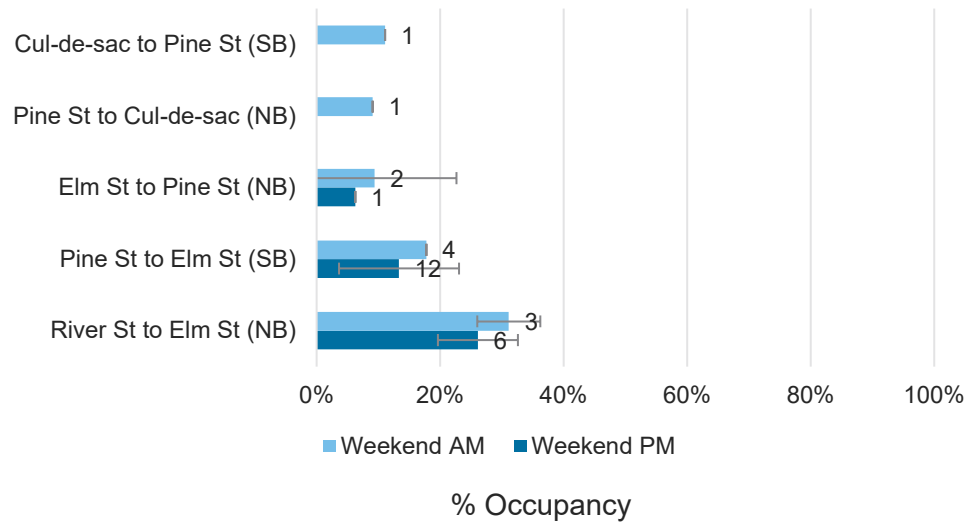


# West Street

West Street (weekday)



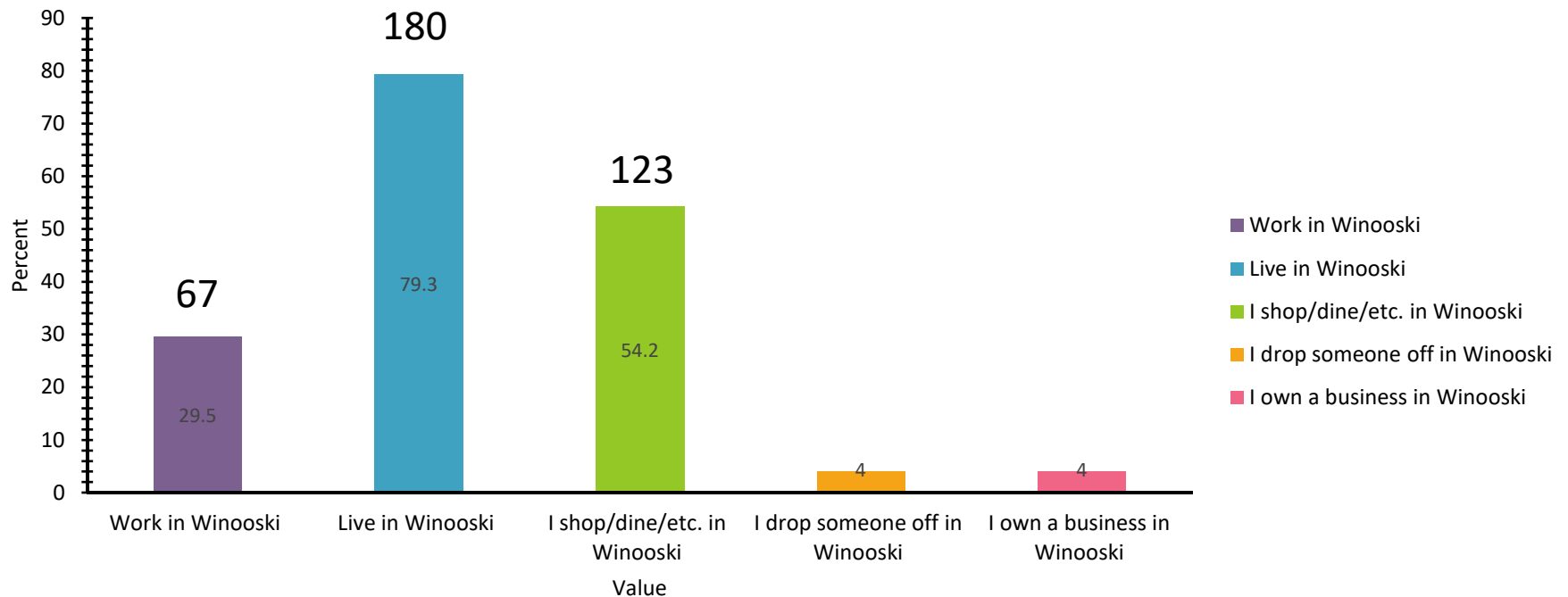
West Street (weekend)





## **Survey & Data**

## 1. Why do you park in Winooski? (all that apply)



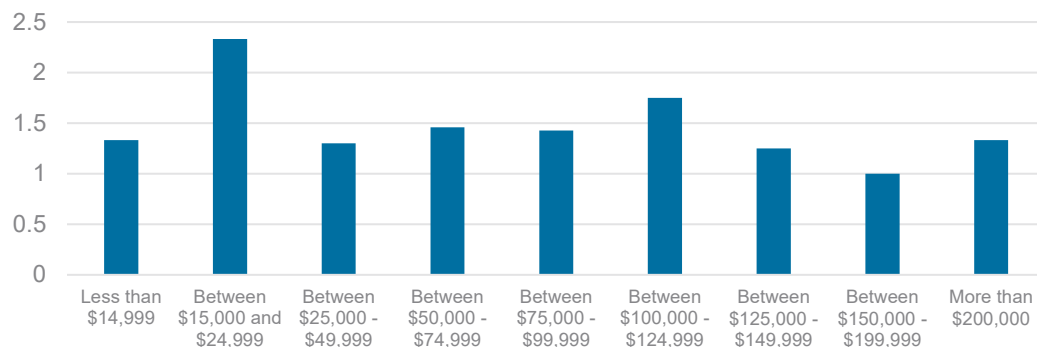
227 respondents

29 respondents Live and Work in Winooski  
(12.7% of sample compared to 8.2% ACS)

# Vehicle Ownership

Vehicles Available	ACS 2019	Survey	Survey Representation (<100% is under-represented, >100% is over-represented)
0 veh	15.5%	7.3%	47.1%
1 veh	45.2%	42.5%	94.0%
2 veh	31.3%	39.7%	126.8%
3+ veh	8.00%	10.5%	131.3%

Reported veh per HH by Income Bracket



Average veh per HH in survey  
(179 responses) = 1.55











	Autos per Household
City of Winooski, VT	1.63 (range 1.51 – 1.79)
Chittenden, VT	1.84
Vermont	1.93

Source: Center of Neighborhood Technology 2021 using ACS data



# Winooski Residents

## What is your approximate annual household income

Value		Percent	Count
Less than \$14,999		6.0%	6
Between \$15,000 and \$24,999		3.0%	3
Between \$25,000 - \$49,999		10.0%	10
Between \$50,000 - \$74,999		24.0%	24
Between \$75,000 - \$99,999		14.0%	14
Between \$100,000 - \$124,999		16.0%	16
Between \$125,000 - \$149,999		4.0%	4
Between \$150,000 - \$199,999		6.0%	6
More than \$200,000		4.0%	4
Prefer not to answer		13.0%	13
Totals			100

# Income (Survey vs. ACS)

Household Annual Income	2019 ACS (5-yr)	Survey	Survey Representation (<100% is under-represented, >100% is over-represented)
Less than \$14,999	12.3%	6%	49%
Between \$15,000 and \$24,999	9.6%	3%	31%
Between \$25,000 - \$49,999	21.6%	10%	46%
Between \$50,000 - \$74,999	17.3%	24%	139%
Between \$100,000 - \$124,999	11.1%	14%	126%
Between \$125,000 - \$149,999	19.4%	20%	103%
Between \$150,000 - \$199,999	5.8%	6%	103%
More than \$200,000	2.9%	4%	138%

Source: ACSST5Y2019.S1901





# Survey Fit

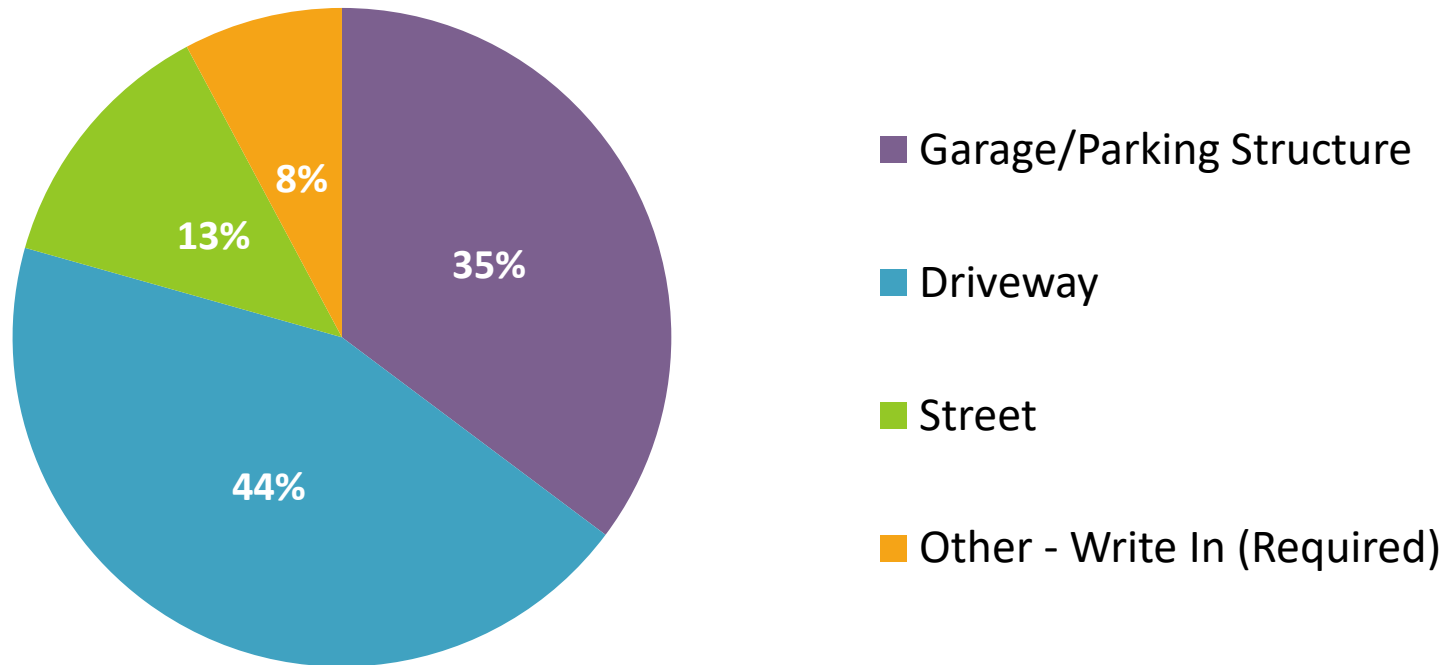
- Web based, convenience sample over represents vehicle owners and higher income residents. Although average vehicle ownership is in the range of the available census data.
- Remains a valuable source for insights used in this study.





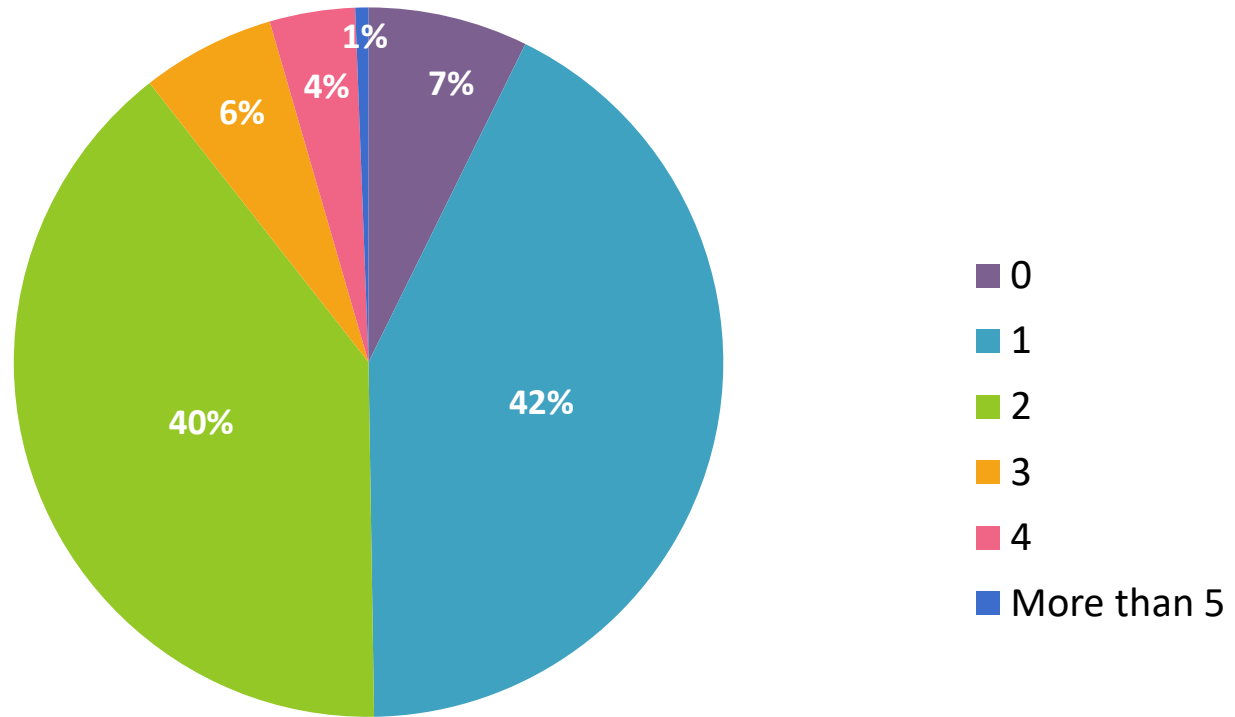
# Survey Results

3. When the vehicle is 'home', where do You park your vehicle most of the time?



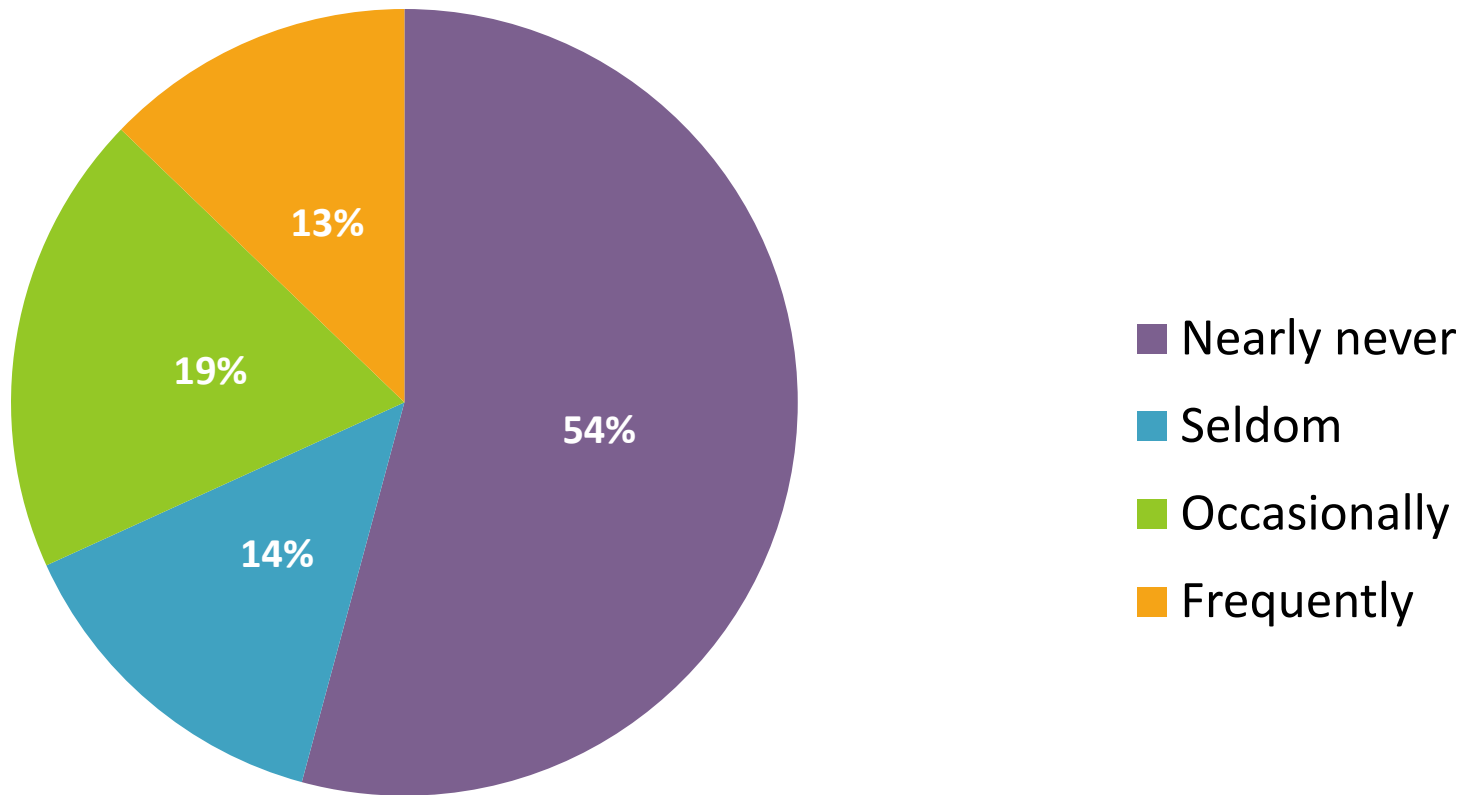
Source: Winooski City PMP Survey

5.How many vehicles does Your household typically need to find parking for?



Average Veh per HH in survey  
(179 responses) = 1.55

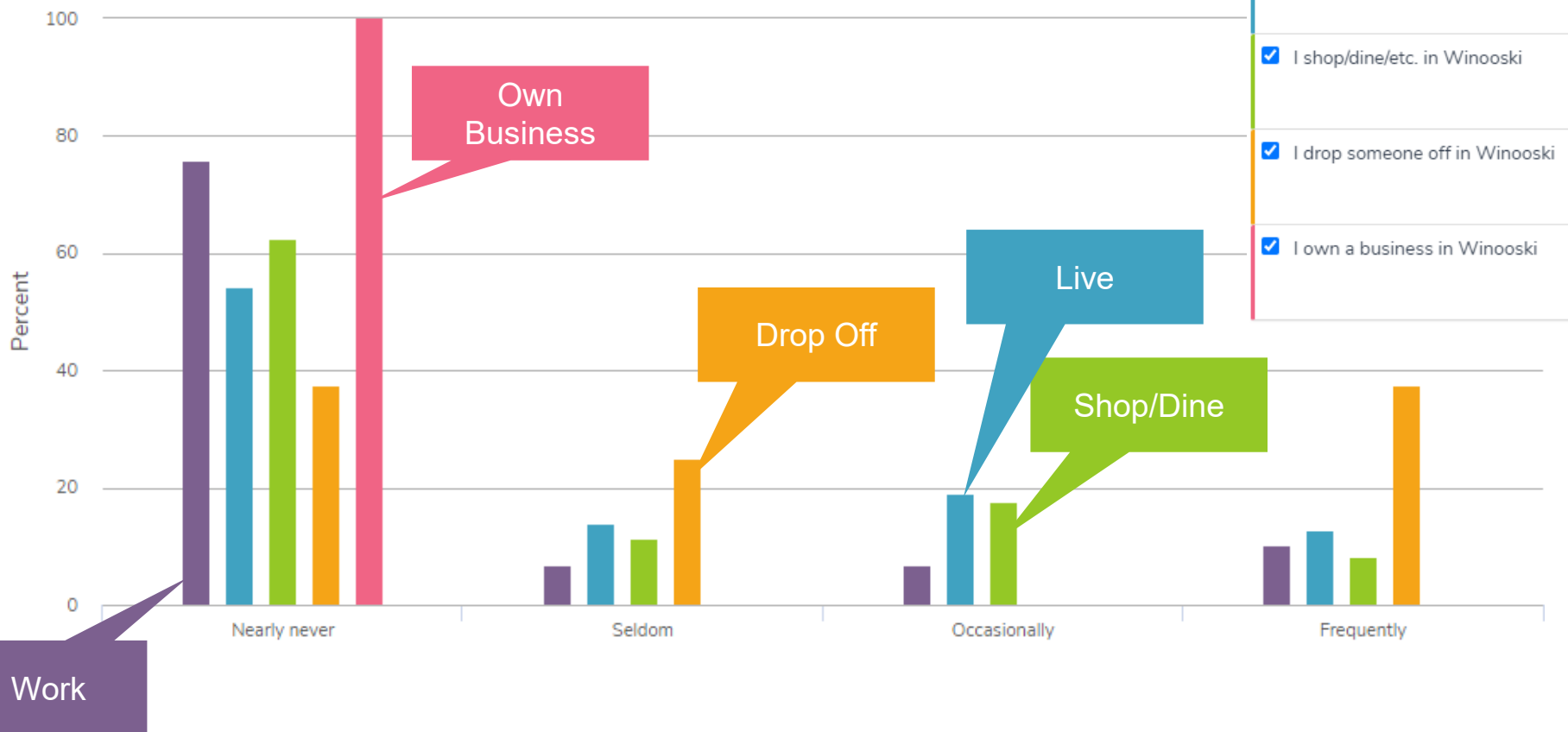
8.How often do you find it difficult to park in your desired location close to your home?



Source: Winooski City PMP Survey

# Residents who also work, shop, dine, or own a business

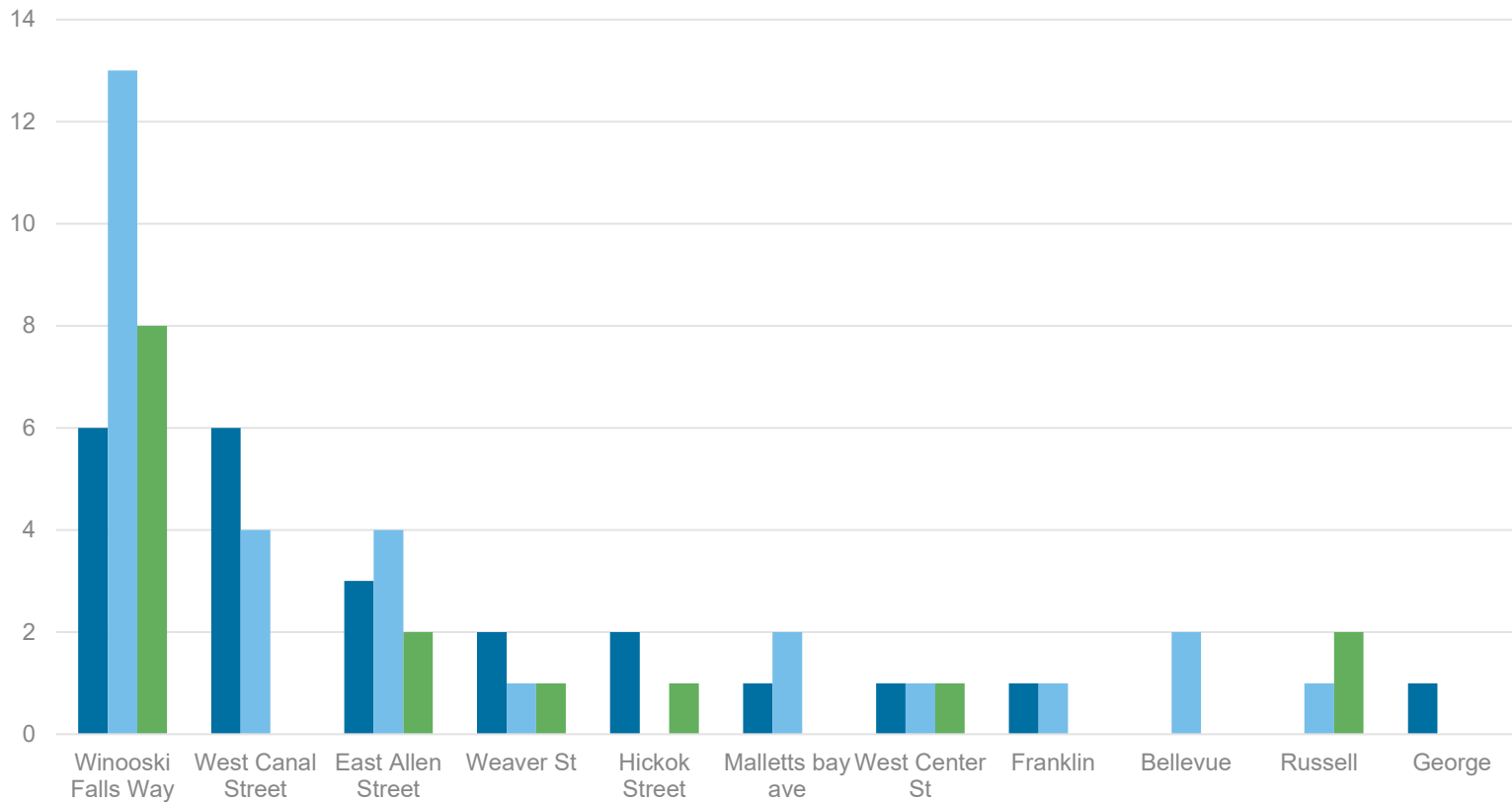
8. How often do you find it difficult to park in your desired location close to your home?



# Most Frequently Identified Streets

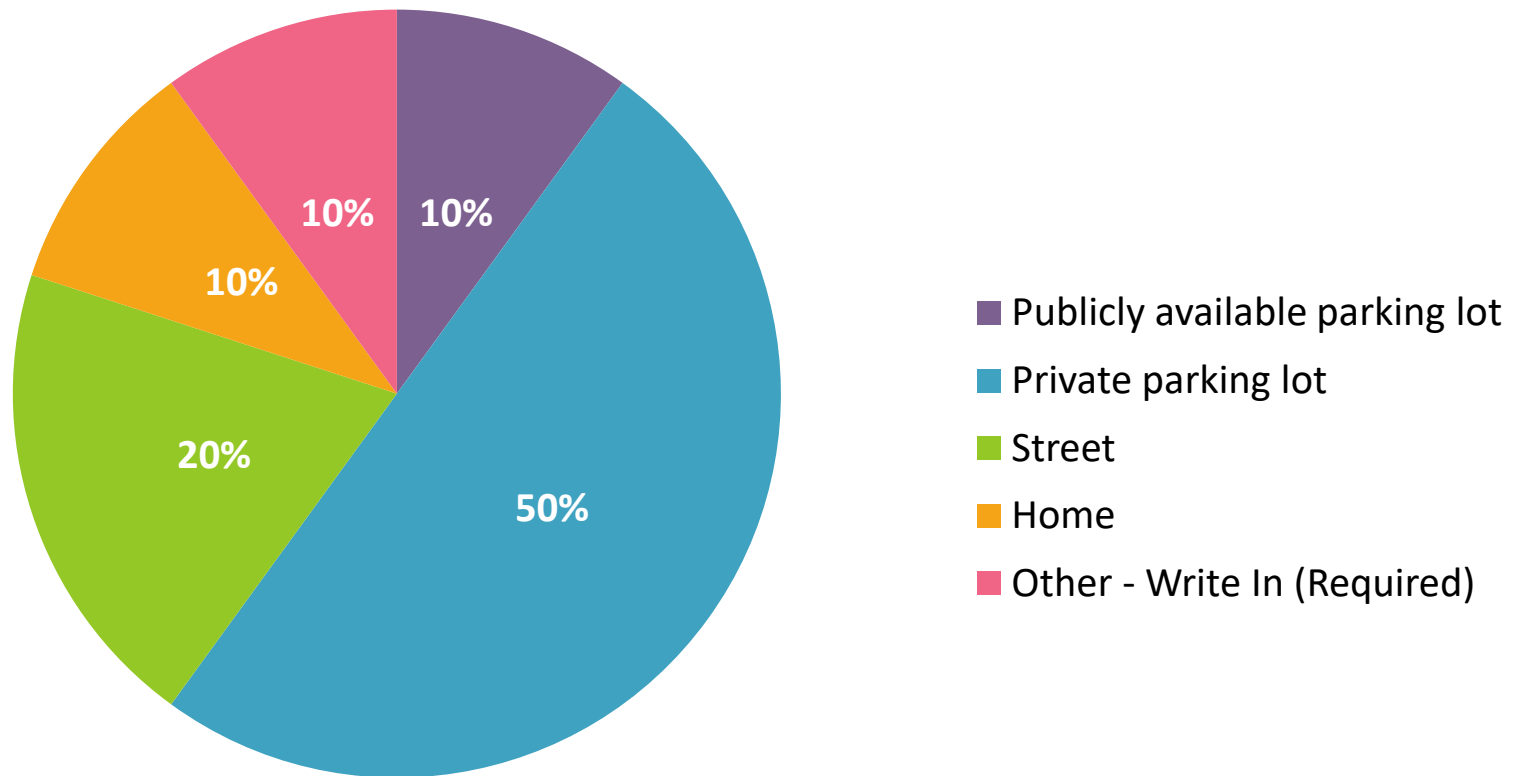
Streets with the Most Identified Parking Issues  
(number of times mentioned by severity)

■ Frequent ■ Occassional ■ Seldom



## Employees in Winooski

16. When at work where do You park your vehicle most of the time?








Source: Winooski City PMP Survey



# Employees of Winooski

## 17.How many days a week do you require parking in Winooski

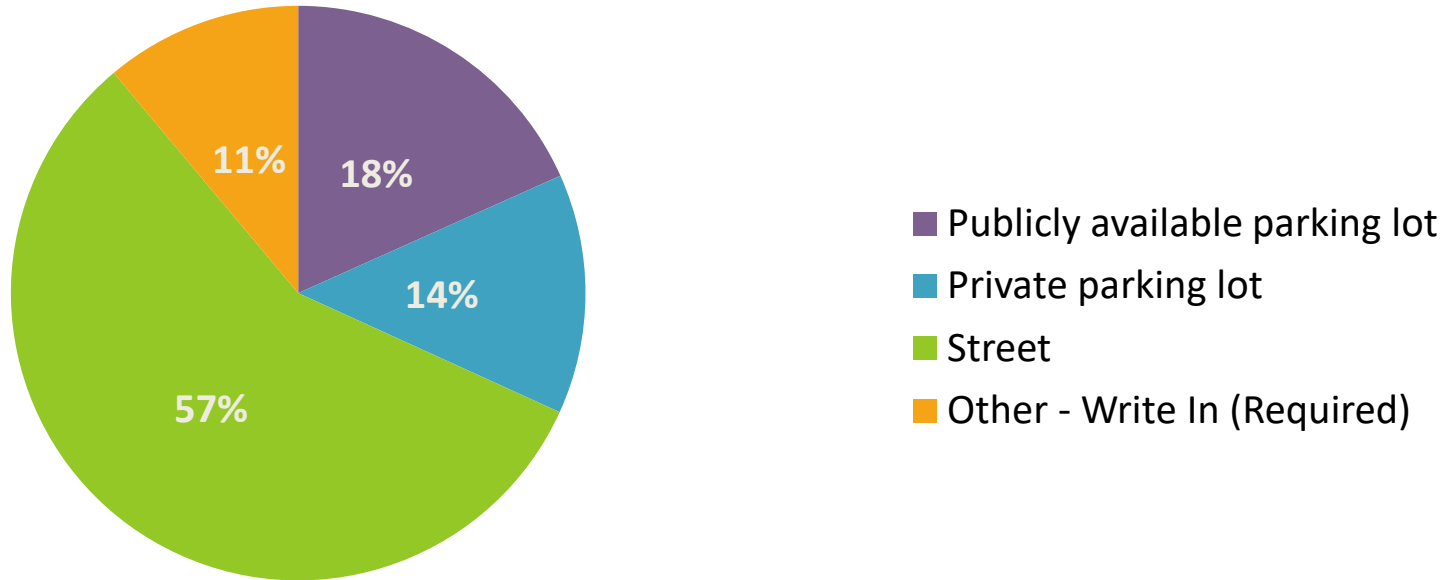
Value		Percent	Count
1		20.0%	2
2		10.0%	1
3		20.0%	2
5		30.0%	3
7		20.0%	2
Totals			10



## **Shopping and Dining**

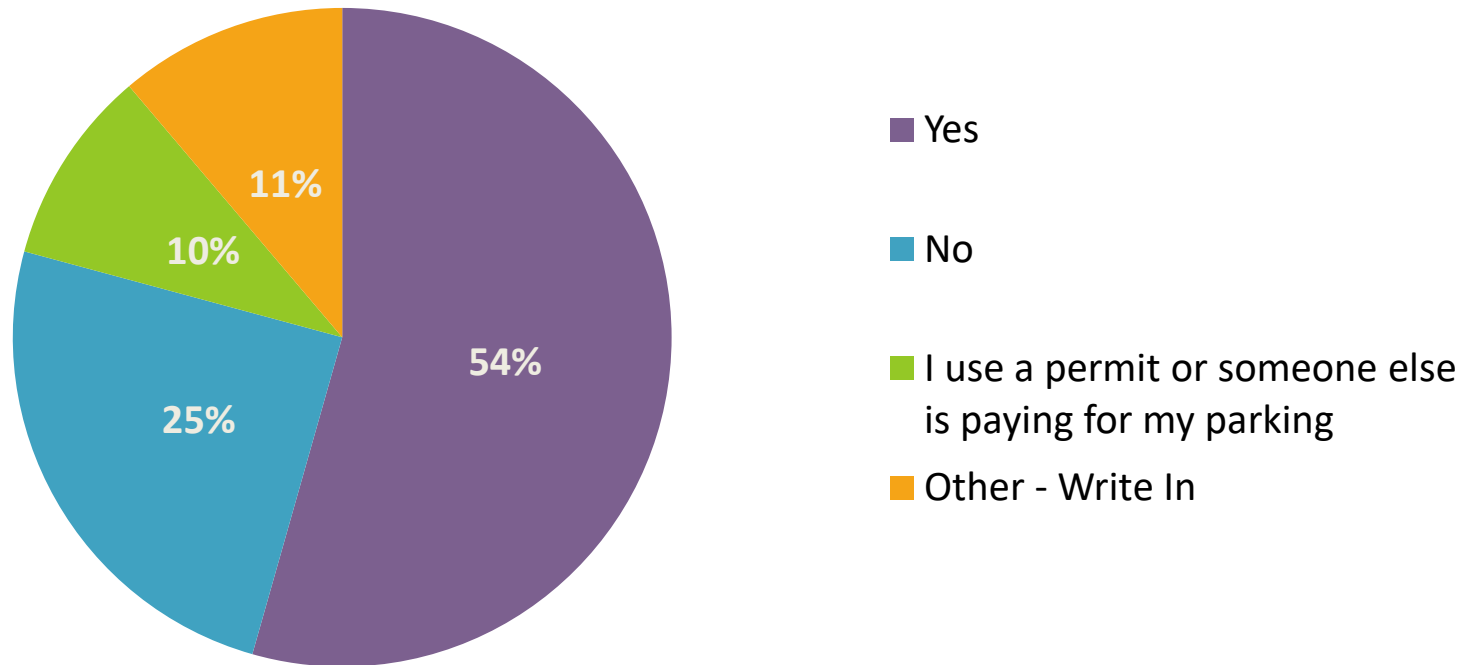
## Shopping and Dining

24. Where do You park your vehicle most of the time?



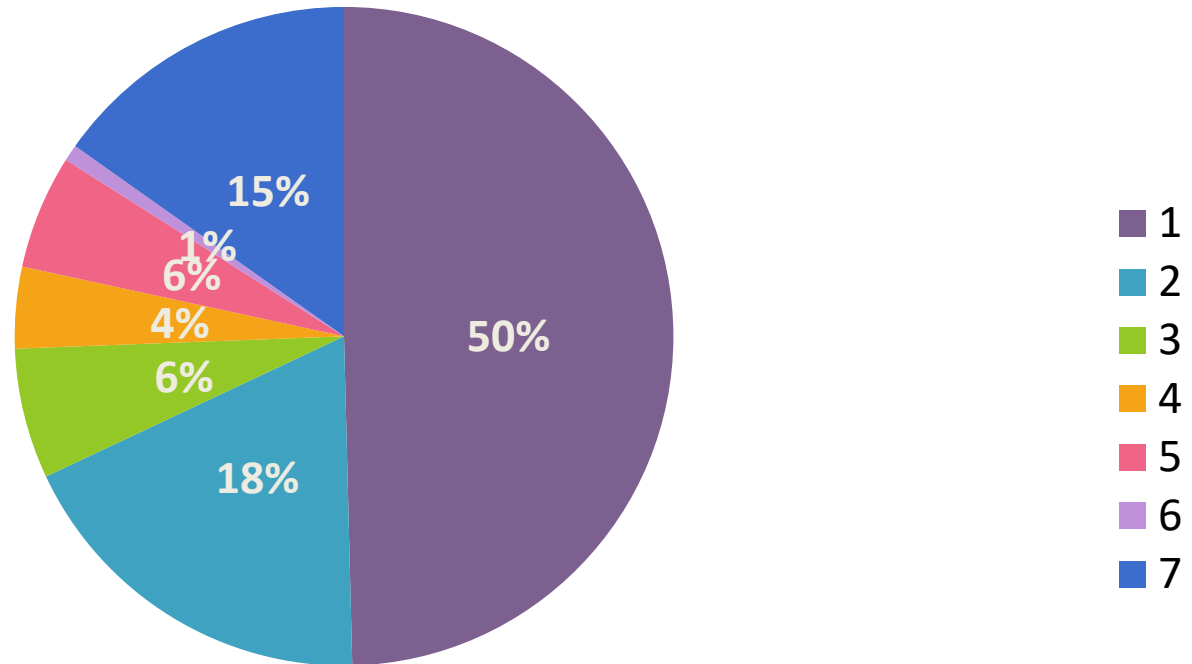
Value		Percent	Count
Publicly available parking lot	<div><div></div></div>	18.3%	23
Private parking lot	<div><div></div></div>	13.5%	17
Street	<div><div></div></div>	57.1%	72
Other - Write In (Required)	<div><div></div></div>	11.1%	14
<b>Totals</b>			<b>126</b>

## 25. Do you pay for your parking when you come?



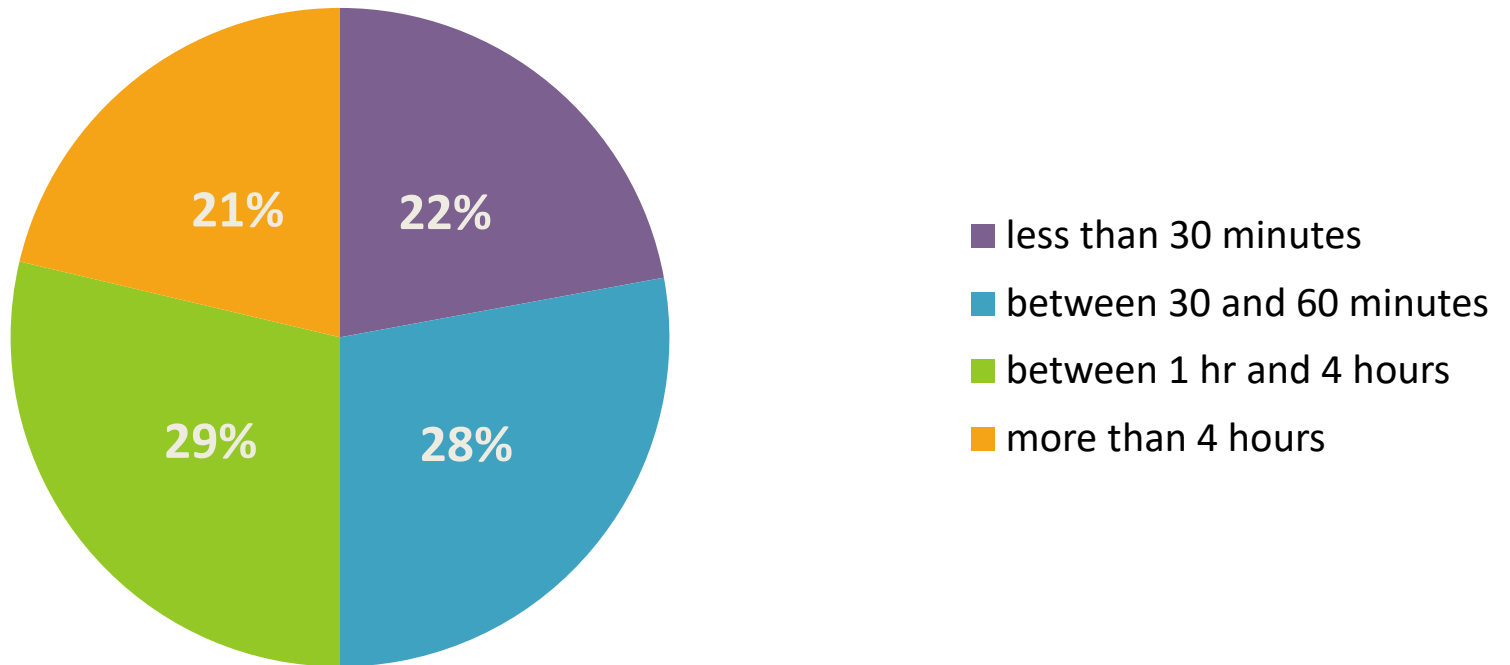
Source: Winooski City PMP Survey

## 26.How many days a week do you require parking in Winooski



Source: Winooski City PMP Survey

## 27. How long are you typically here for (and require parking?)



Source: Winooski City PMP Survey



# COVID Effects

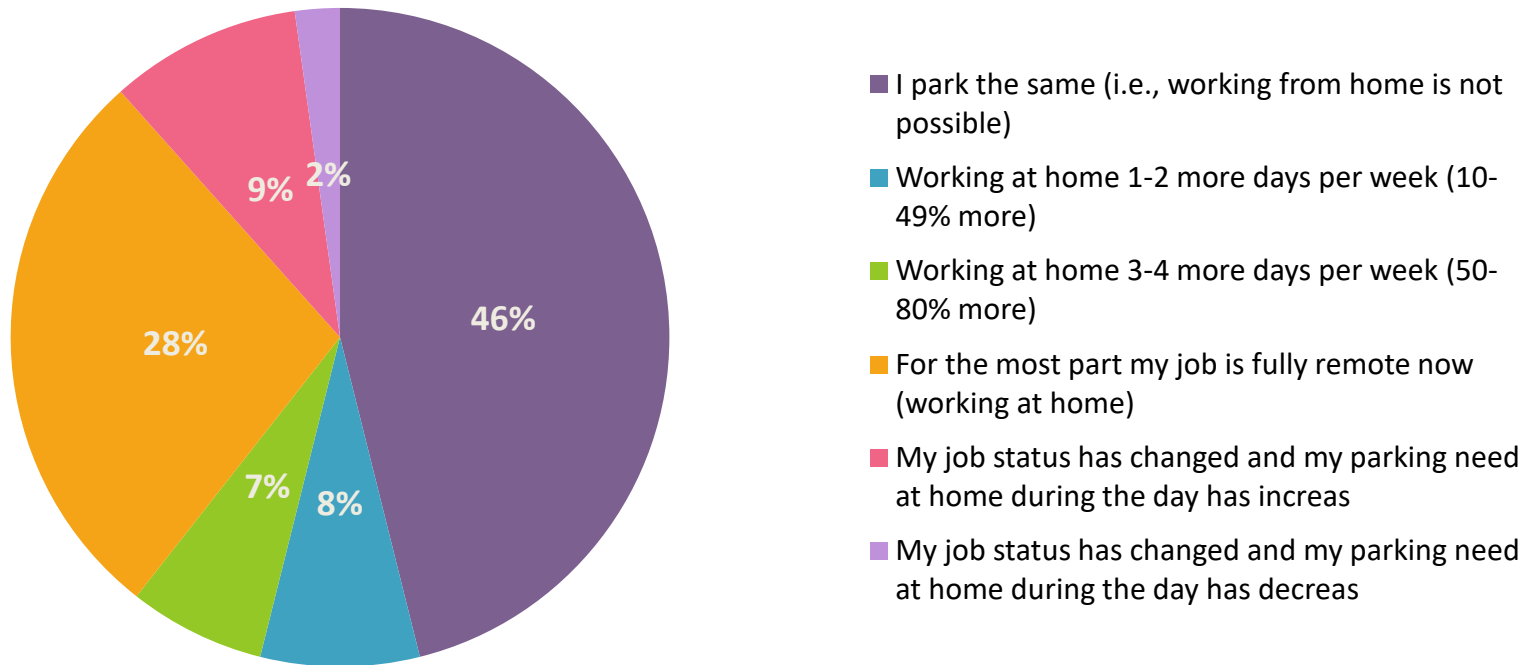


# Survey Differences



# Residents of Winooski

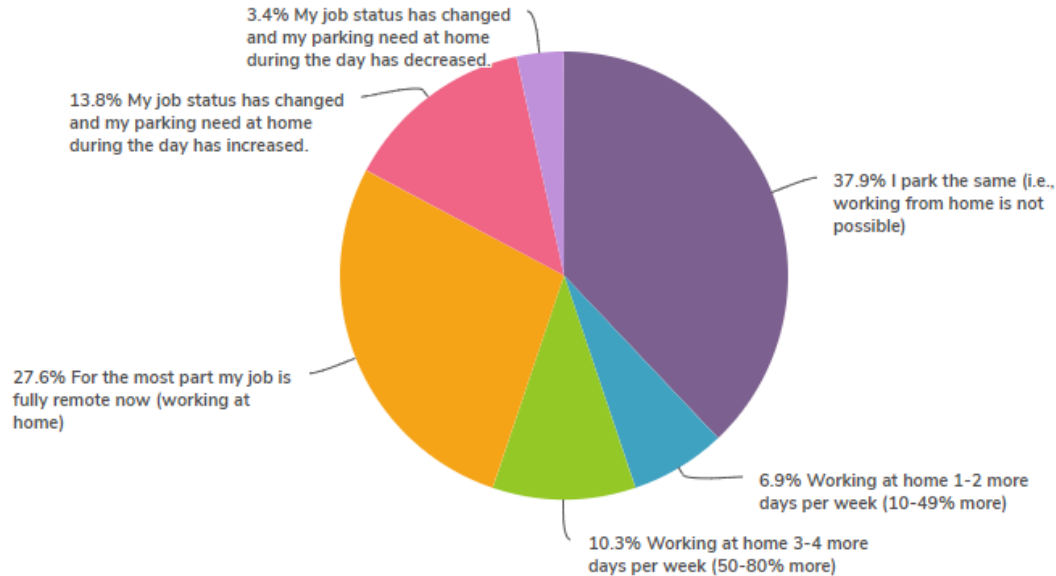
## 9.How do your current home parking needs compare to 2019 (pre-COVID)?



Source: Winooski City PMP Survey

# Residents who work in Winooski

9. How do your current home parking needs compare to 2019 (pre-COVID)?



Value		Percent	Responses
I park the same (i.e., working from home is not possible)	<div><div></div></div>	37.9%	11
Working at home 1-2 more days per week (10-49% more)	<div><div></div></div>	6.9%	2
Working at home 3-4 more days per week (50-80% more)	<div><div></div></div>	10.3%	3
For the most part my job is fully remote now (working at home)	<div><div></div></div>	27.6%	8
My job status has changed and my parking need at home during the day has increased.	<div><div></div></div>	13.8%	4
My job status has changed and my parking need at home during the day has decreased.	<div><div></div></div>	3.4%	1

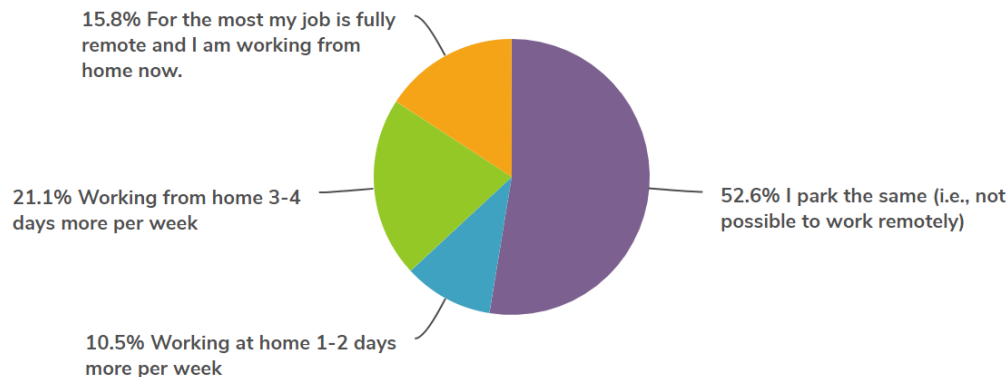






Source: Winooski City PMP Survey

Totals: 29

# Workers who Don't Live in Winooski

*How does your current parking behavior compare to 2019 (pre-COVID)?*



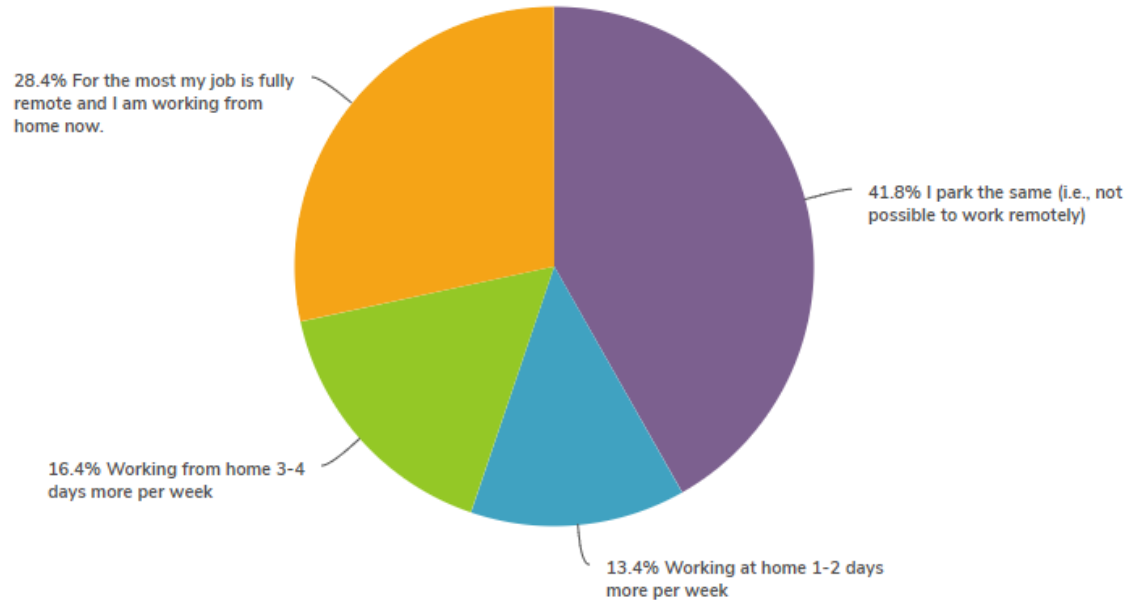
Value		Percent	Responses
I park the same (i.e., not possible to work remotely)		52.6%	10
Working at home 1-2 days more per week		10.5%	2
Working from home 3-4 days more per week		21.1%	4
For the most my job is fully remote and I am working from home now.		15.8%	3

Totals: 19



# All workers in Winooski

*How does your current parking behavior compare to 2019 (pre-COVID)?*



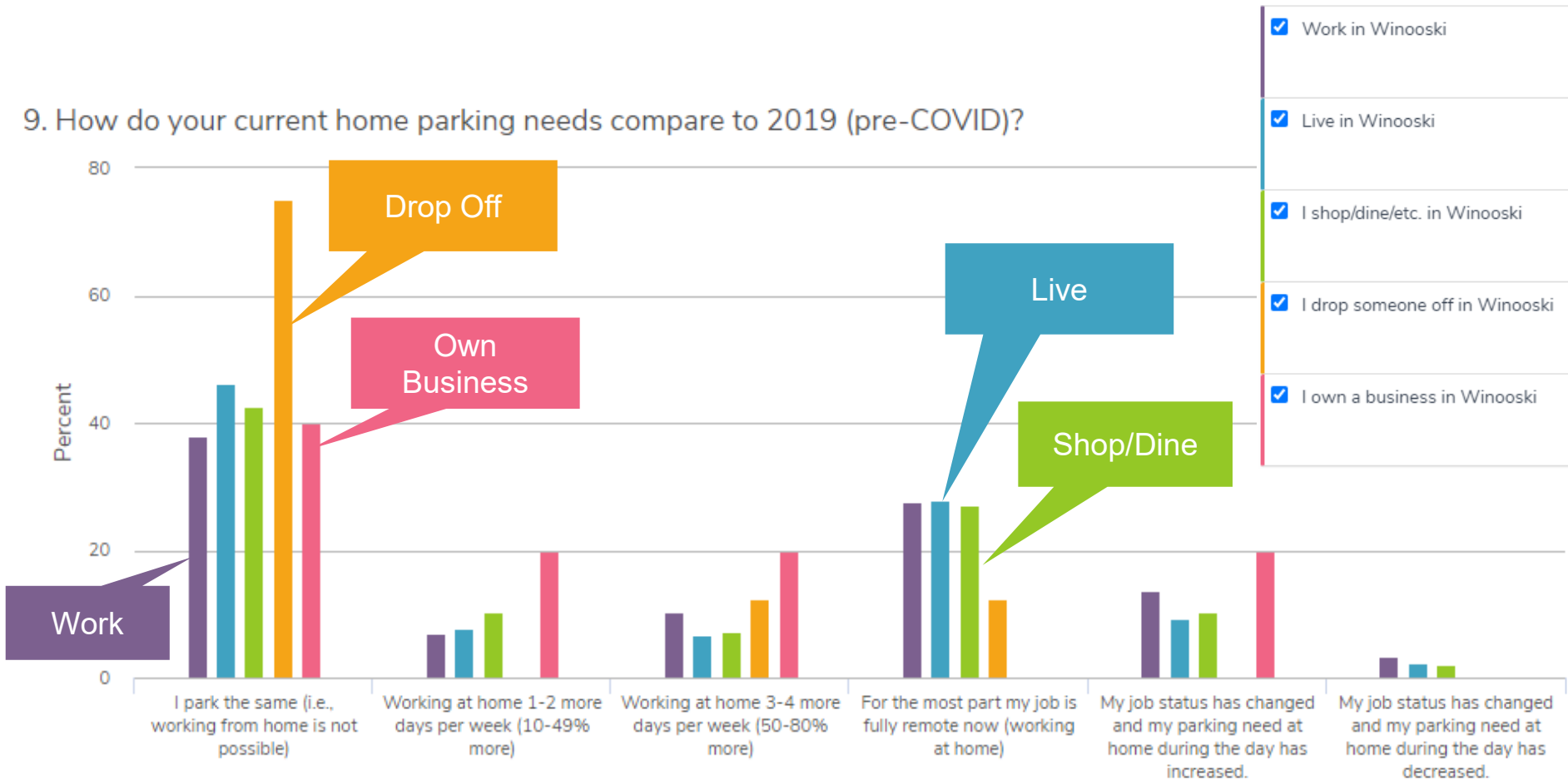
Value		Percent	Responses
I park the same (i.e., not possible to work remotely)	<div><div></div></div>	41.8%	28
Working at home 1-2 days more per week	<div><div></div></div>	13.4%	9
Working from home 3-4 days more per week	<div><div></div></div>	16.4%	11
For the most my job is fully remote and I am working from home now.	<div><div></div></div>	28.4%	19

Totals: 67



# Residents who also work, shop, dine, or own a business

9. How do your current home parking needs compare to 2019 (pre-COVID)?









Source: Winooski City PMP Survey



# Business Owners of Winooski

22.Can we better understand how COVID has affected your business's parking needs?  
Classify your business type

Value		Percent	Count
Food related - take out oriented		22.2%	2
Food related - sit down and spend time		11.1%	1
Manufacturing		11.1%	1
Institutional and Educational		11.1%	1
Office		22.2%	2
Retail		22.2%	2
Totals			9

# Business Owners of Winooski

23.How would you characterize the changes that COVID-19 has caused in your parking needs?

	Significant increase		Modest increase		Slight increase		No change		Slight decrease		Modest decrease		Significant decrease		Responses
	Row %	Count	Row %	Count	Row %	Count	Row %	Count	Row %	Count	Row %	Count	Row %	Count	
Long-term parking (>1hr) for employees and customers	0.0%	0	0.0%	0	0.0%	0	28.6%	2	42.9%	3	4.3%	1	14.3%	1	7
Short-term parking (<30 min)	14.3%	1	0.0%	0	0.0%	0	57.1%	4	14.3%	1	0.0%	0	14.3%	1	7
Totals							14								

Slight decrease or no change in parking demand for majority (5 of 7 respondents) of business owners



# Occupancy Differences



# Weaver Street: Pre-Covid (18 May 2018) vs Pandemic

## Southbound Direction

Southbound Direction: Parked Vehicles on the West Side of Weaver St	8:00 AM	9:30 AM	11:30 AM	1:30 PM	3:30 PM	5:30 PM	7:30 PM
St. Peter St to So Cemetery Driveway	15%	3%	5%	2%	0%	0%	0%
W. Spring St to St. Peter St	0%	0%	7%	7%	14%	7%	7%
Union St to W. Spring St	38%	19%	13%	6%	25%	31%	31%
Maple St to Union St	57%	14%	29%	14%	43%	29%	71%
Maple Street to W. Allen St	36%	29%	36%	71%	57%	86%	93%

	AM				PM			
	AM pre-covid (wed)	AM Covid	% More for Covid	Veh.	PM pre-covid (wed)	PM Covid	% More for Covid	Veh.
St. Peter St to So Cemetery Driveway	8%	7%	-1%	-0.5	0%	4%	4%	2.1
W. Spring St to St. Peter St	2%	0%	-2%	-0.3	9%	0	-9%	-1.3
Union St to W. Spring St	23%	46%	23%	3.7	23%	42%	19%	3
Maple St to Union St	33%	49%	16%	1.1	39%	57%	18%	1.2
Maple Street to W. Allen St	33%	50%	17%	2.3	77%	56%	-21%	-2.9
<b>Averages</b>	<b>20%</b>	<b>30%</b>	<b>10%</b>	<b>-</b>	<b>30%</b>	<b>32%</b>	<b>2%</b>	<b>-</b>
<b>Sum</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>6.3</b>				<b>2.2</b>

*n = 127 Observations during pandemic*



# Weaver Street: Pre-Covid (18 May 2018) vs Pandemic

## Northbound Direction

Northbound Direction: Parked Vehicles on the East Side of Weaver St	8:00 AM	9:30 AM	11:30 AM	1:30 PM	3:30 PM	5:30 PM	7:30 PM
Stevens to Tigan	16%	4%	8%	14%	12%	18%	16%
W. Spring St to Stevens St	72%	6%	39%	6%	6%	17%	11%
Union St to W. Spring St	7%	14%	36%	14%	21%	21%	36%
Maple St to Union St	33%	0%	17%	17%	17%	33%	67%

	AM				PM			
	AM pre-covid (wed)	AM Covid	% More for Covid	Veh.	PM pre-covid (wed)	PM Covid	% More for Covid	Veh.
Stevens to Tigan	9%	9%	0%	-0.1	15%	11%	-3%	-1.7
W. Spring St to Stevens St	39%	17%	-22%	-3.9	10%	22%	12%	2.2
Union St to W. Spring St	19%	42%	23%	3.2	23%	32%	9%	1.2
Maple St to Union St	17%	32%	15%	0.9	33%	49%	16%	0.9
<b>Averages</b>	21%	25%	4%	-	20%	29%	8%	-
<b>Sum</b>	-	-	-	<b>0.1</b>				<b>2.7</b>

*n = 118 Observations during pandemic*



# COVID Effects Summary

- 52% of residential seeing some degree of increased demand during workday. (e.g., same vehicle ownership and need to park at night).
- 36% of employees who DON'T live in Winooski are currently working remote. However, only 20% of employees typically park on the street.
- Slight decrease or no change in parking demand for majority of business owners (5 of 7 responses)
- 58% of all employees have reduced parking needs pre-COVID
- Weaver Street (nearly 100% residential) saw a slight increase in occupancy during pandemic across 245 observations.
  - Southbound dir: 10% during AM and 2% during PM
  - Northbound dir: 4% during AM and 8% during PM

Bottom line: Observations are within margins of error and are not substantially different from pre-covid observations.





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