



Washington Avenue Parking & Loading Analysis Broad to Grays Ferry

Updated: 7/29/2020

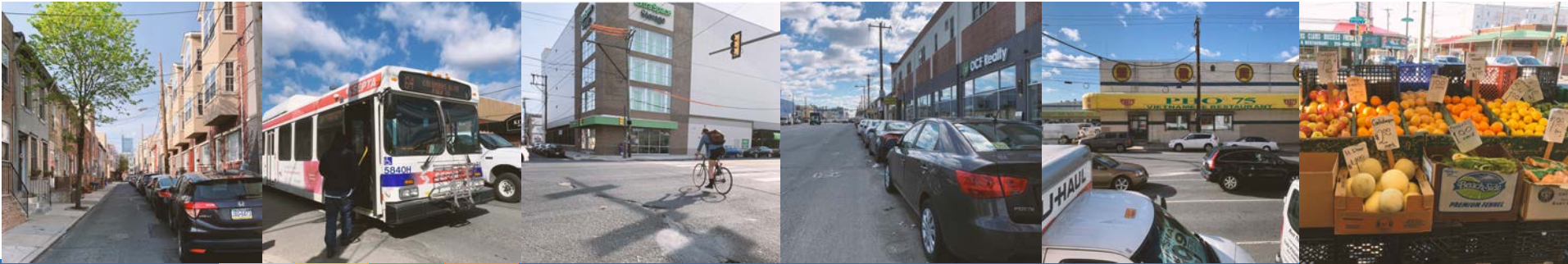
OFFICE OF 
**TRANSPORTATION,
INFRASTRUCTURE
& SUSTAINABILITY**



Project Overview

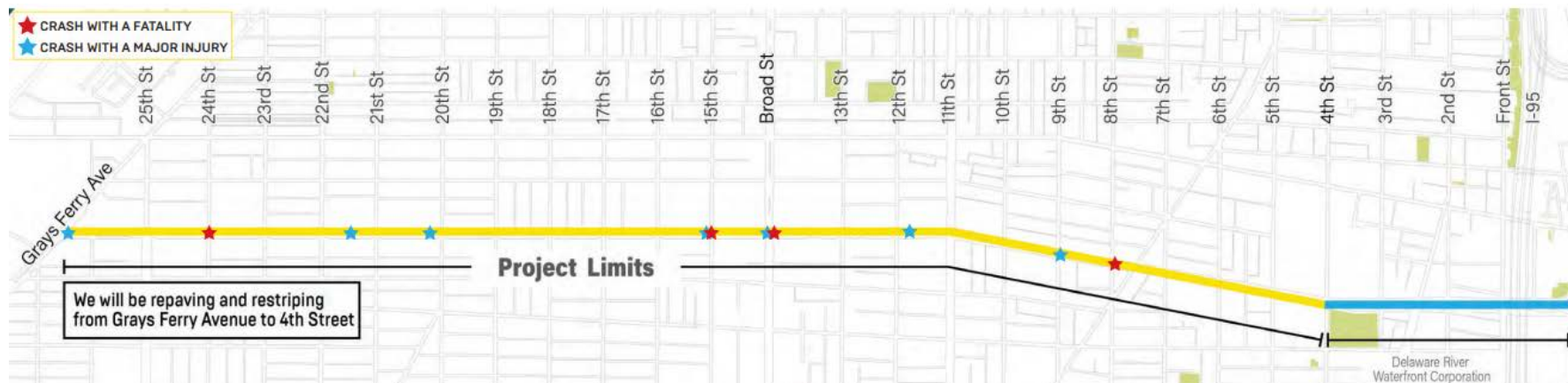
Project Overview

Washington Avenue is scheduled to be repaved in 2021 with committed federal funding, which gives the City the opportunity to improve how it functions for all users.



Project Limits & Crash History

(2012-2017)





How did we get here?

Public Input

- Public meetings and input (2013 – 2015) determine need for more study

Parking & Loading Studies

- East side **parking & operational impact analysis** (2016)
- East side **business loading survey** (2016)
- West side **parking & operational impact analysis** (2019)
- West side **business loading survey** (2019)

Traffic Analyses

- Full-corridor (Grays Ferry to 4th Street) **traffic analysis** (2019)
- Full corridor (Grays Ferry to Columbus) **Origin/Destination Analysis** (2020)



Analysis Key Findings

1. **Businesses** have **unmet loading needs**
2. **Parking** is not serving businesses or residents well
3. Traffic impacted by **double-parking and median parking**
4. Traffic can be improved by **optimizing signal timing**
5. Lane reductions will cause some **increased travel time during rush hours** (5 - 10 seconds a block) when combined with signal optimization
6. During non-rush hours, lane reductions will not increase travel time
7. **Washington Avenue is dangerous**, especially for people walking and biking, HIN



Business Loading Survey

Understanding Business Needs (2016-2019)



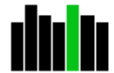
We identified **167 Active businesses**



We visited each business **at least once**



We asked **owners or managers** to **complete a survey**



We got **responses from about 80%** of businesses

Businesses that Responded (West Side Only)

Number	Business Name	Business Address
1	Sprint	1000 Washington Avenue
2	Philly marble tile	1322 Washington Avenue
3	Architictural window corp	1342 Washington Avenue
4	Save a lot	13th & Washington Avenue
5	Fine wine and good spirits	1403 Washington Avenue
6	Construction Mall	1501 Washington Avenue
7	Kerr's Building Materials	1528 Washington Avenue
8	Marble works	1530 Washington Avenue
9	YR Supply	1551 Washington Avenue
10	daltile	1551 Washington Avenue
11	Dunkin donuts	1551 Washington Avenue
12	C&R Building Supply	1600 Washington Avenue
13	A & A Food Corp	1635 Washington Avenue
14	Family Dollar	1700 Washington Avenue
15	Grace and Peace Community Church	1701 Washington Avenue
16	Sherwin Willams	1705 Washington Avenue
17	Diamond mma	1714 Washington Avenue
18	Falcone's Carpet	1714 Washington Avenue
19	Allure	1714 Washington Avenue
20	Bury the Hatchet	1719 Washington Avenue
21	Autozone	1730 Washington Avenue
22	Martabak OK	1801 Washington Avenue
23	Quality's home center	1803 Washington Avenue
24	Ferguson	1821 Washington Avenue
25	Billows electric	1900 Washington Avenue
26	Smart choice kitchen & bath	1900 Washington Avenue
27	YD Hardwood Flooring	1900 Washington Avenue

Number	Business Name	Business Address
28	Metro pcs	1901 Washington Avenue
29	Only You Wedding Warehouse	1901 Washington Avenue
30	A&A International Foods LLC	1913 Washington Avenue
31	Roma aluminum company inc	1924-1936 Washington Avenue
32	OpenBox Athletics	1931 Washington Avenue
33	Off realty	1936 Washington Avenue
34	Colonial Marble and Granite	2000 Washington Avenue
35	Builders FirstSource	2001 Washington Avenue
36	cava building supply	2007 Washington Avenue
37	NextFab	2025 Washington Avenue
38	Caliber collision	2052 Washington Avenue
39	Ivan Supply	2100 Washington Avenue
40	MTO bath and tile	2114 Washington Avenue
41	EXYN TECHNOLOGIES	2118 Washington Avenue
42	vip	2202 Washington Avenue
43	Springfield beer	2206 Washington Avenue
44	Extra space Storage	2300 Washington Avenue
45	US nail supply	2301 Washington Avenue
46	Habitat for Humanity Philadelphia Restore	2318 Washington ave
47	A One Auto	2344 Washington Avenue
48	Kx auto	2429 Washington Avenue
49	Vincent Giordano Corporation	2600 Washington Avenue
50	Target	1020 South Broad Street
51	The Rock School for Dance Education	1101 South Broad Street
52	Insomnia cookies	1420 Carpenter Street
53	Nanson bakery	1600 Carpenter Street

Note: This list includes only those businesses which responded to the survey. Additional outreach has been done since the survey, which includes additional businesses and business organizations.



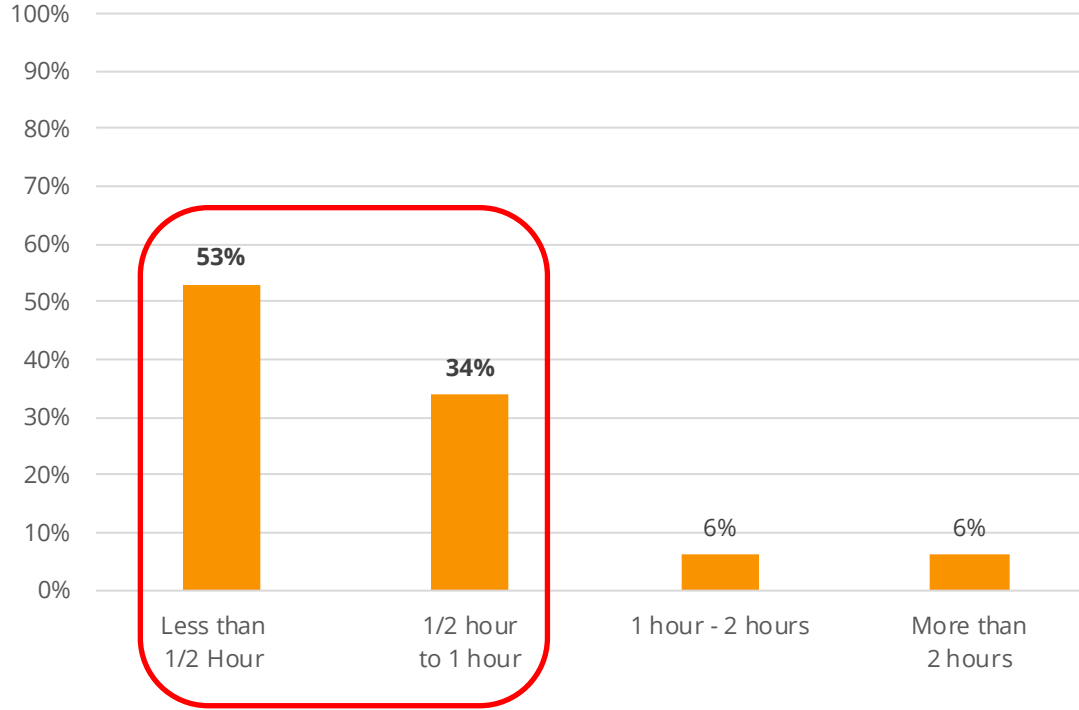
Some of the questions we asked

- Where does your business load and unload?
- Where do you receive your packages?
- Do your deliveries often park in the median of the street?
- Do your deliveries often double-park in the active traffic lane?
- How often do you take deliveries?
- What times of day and days do you take on-street deliveries?
- How long does a standard delivery take?
- What types of vehicles typically load and unload at your business?
- How much flexibility is there in type of vehicle that loads or unloads?
- Does your business get deliveries or pickups from a postal service (e.g. UPS or FedEx)?
- For the space directly in front of your business, what would be your ideal solution?
- Would you be willing to move your business loading to have more convenient parking for your customers?
- Do your customers need special pick-up zones instead of regular parking?



Existing Loading Needs & Practices: Broad to Grays Ferry

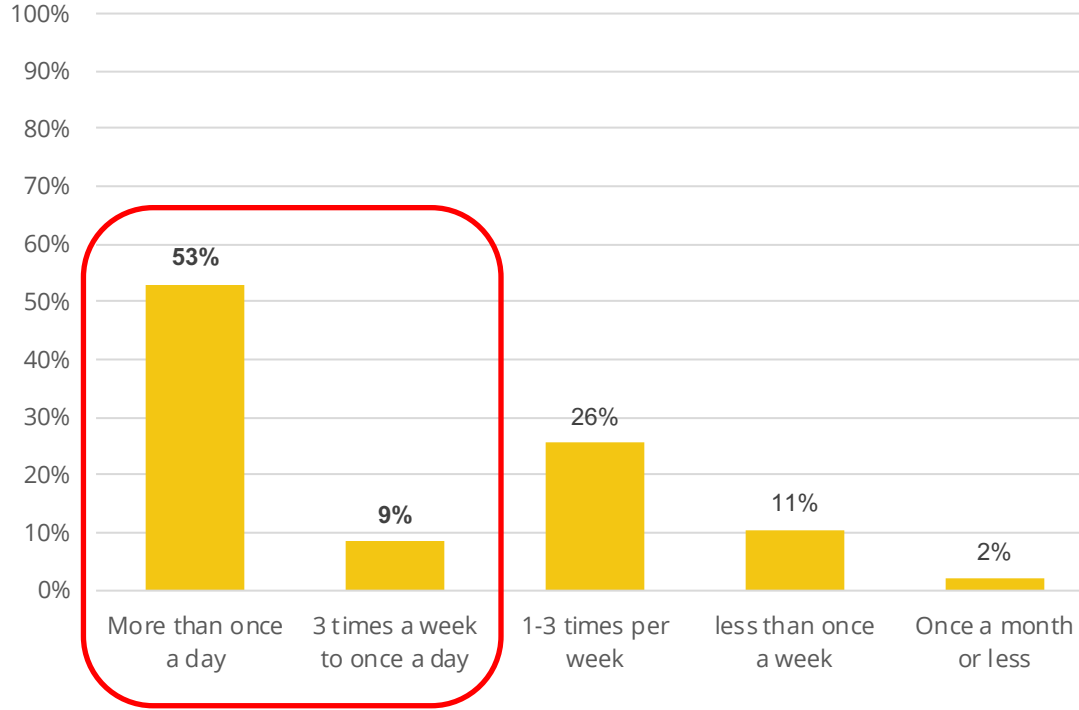
How long does a typical delivery take?



87% of deliveries to respondents take under 1 hour to complete.

Note: 11% of respondents stated that they do not make or receive deliveries/have no loading needs.

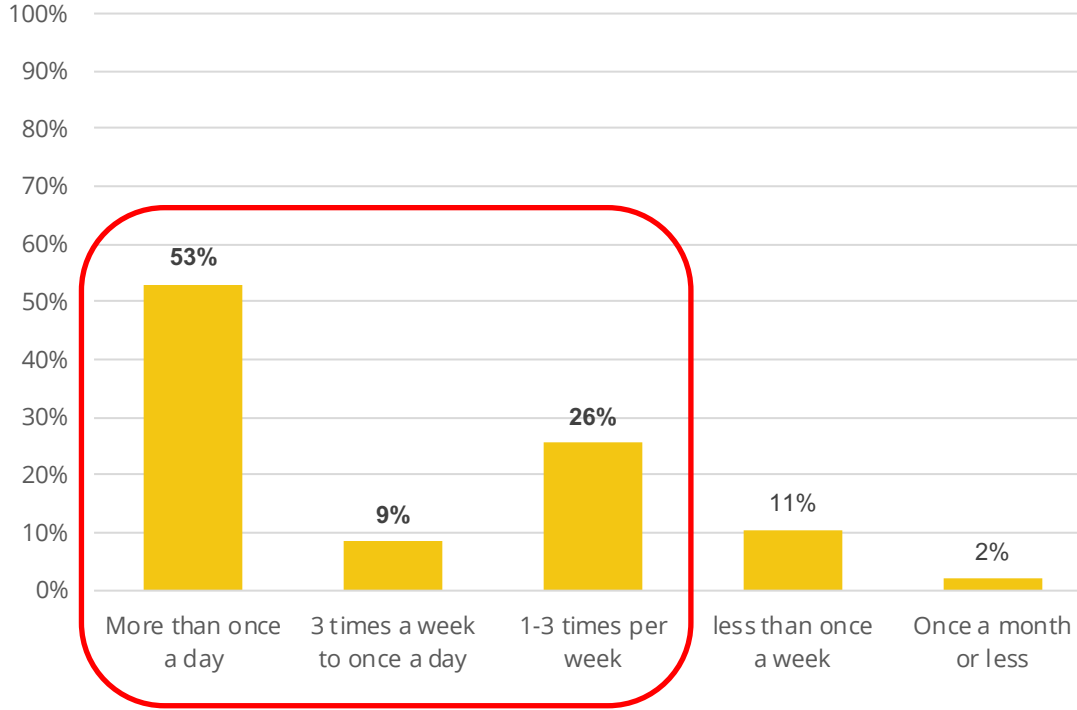
How often do you receive deliveries?



62% of respondents load or unload deliveries at least 3 times a week.

Note: 11% of respondents stated that they do not make or receive deliveries/have no loading needs.

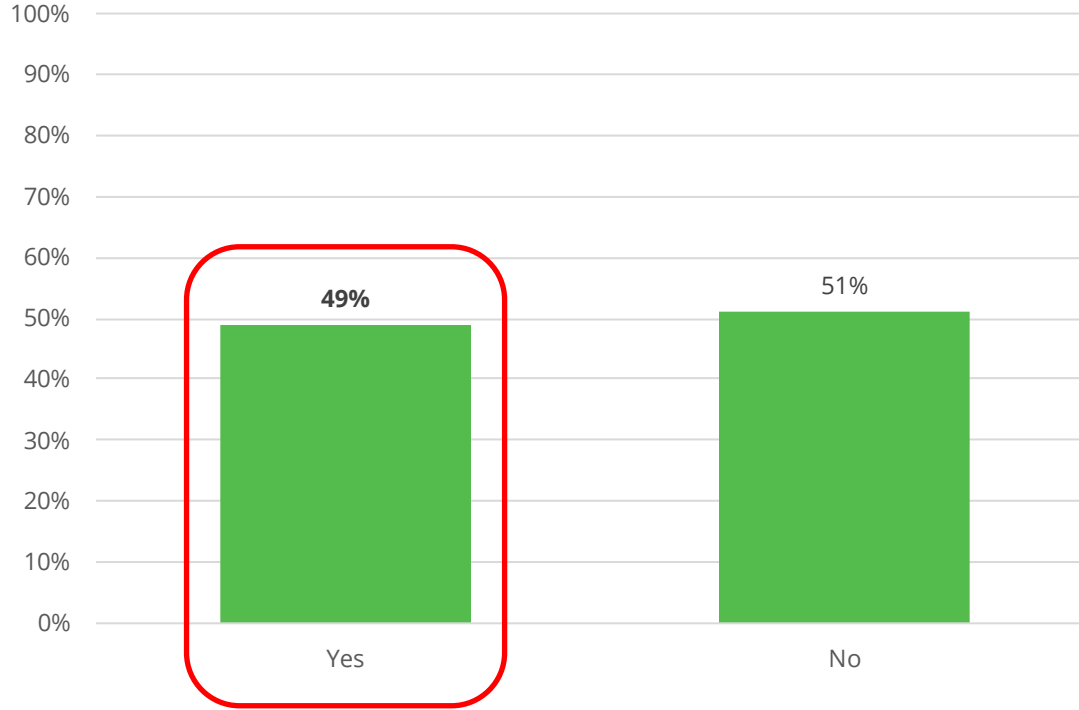
How often do you receive deliveries?



88% of respondents load or unload deliveries at least once a week.

Note: 11% of respondents stated that they do not make or receive deliveries/have no loading needs.

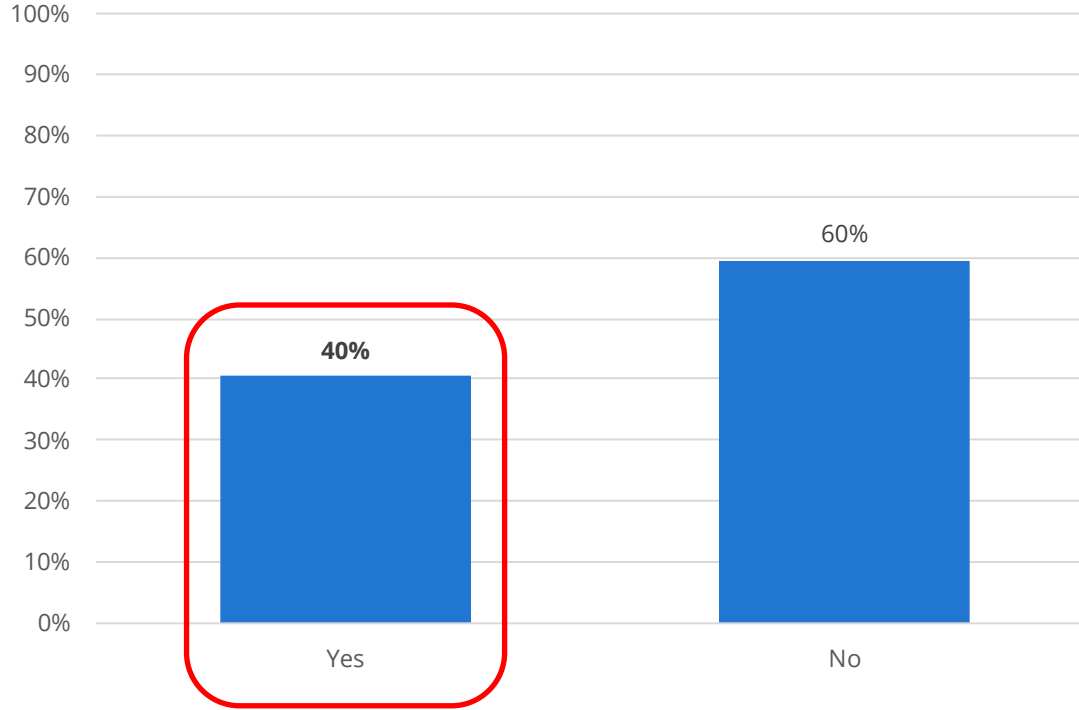
Do your deliveries double park?



49% of respondents stated that their deliveries double-park.

Note: 11% of respondents stated that they do not make or receive deliveries/have no loading needs.

Do your deliveries park in the median?

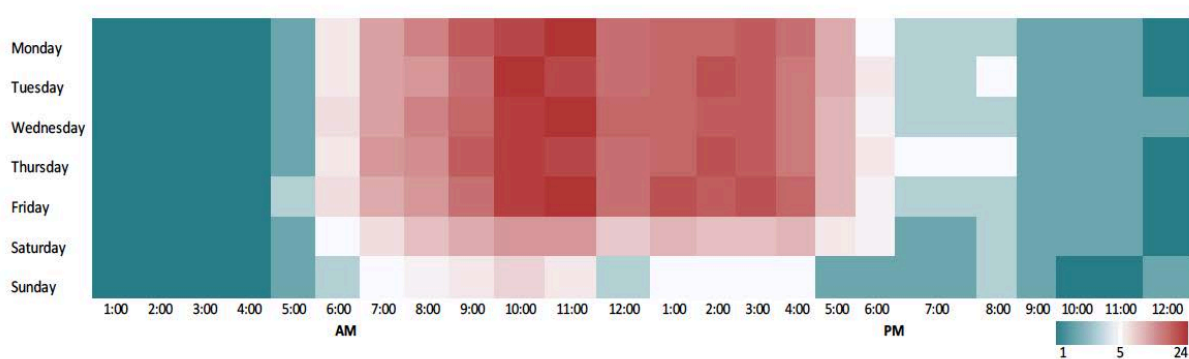


40% of respondents stated that their deliveries park in the median.

Note: 11% of respondents stated that they do not make or receive deliveries/have no loading needs.

What times of day do you typically load/unload?

Figure 2.5: Survey Responses - What time of day and days do you take on-street deliveries?

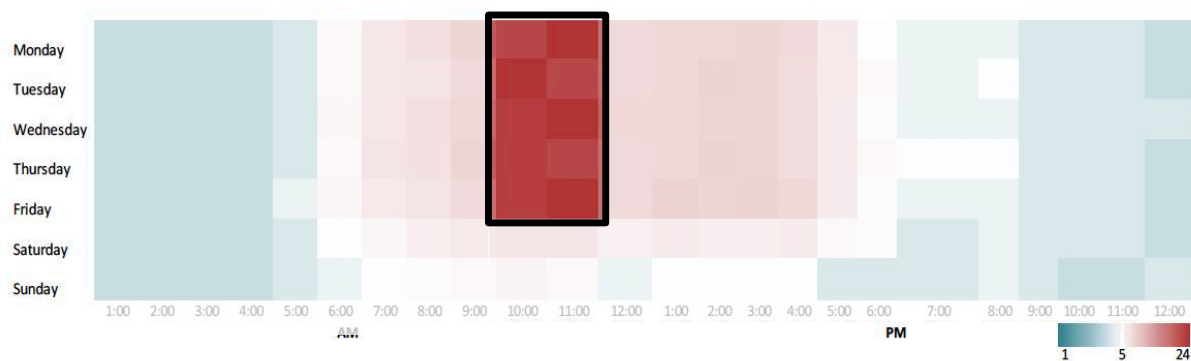


Source: Econsult Solutions (2019)

Note: 11% of respondents stated that they do not make or receive deliveries/have no loading needs.

What times of day do you typically load/unload?

Figure 2.5: Survey Responses - What time of day and days do you take on-street deliveries?



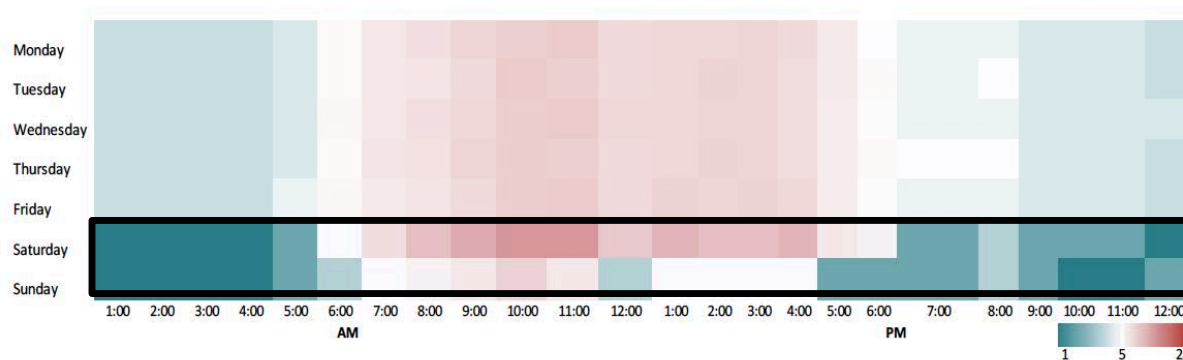
Source: Econsult Solutions (2019)

Deliveries are concentrated around 10:30am to 12:30pm on weekdays.

Note: 11% of respondents stated that they do not make or receive deliveries/have no loading needs.

What times of day do you typically load/unload?

Figure 2.5: Survey Responses - What time of day and days do you take on-street deliveries?



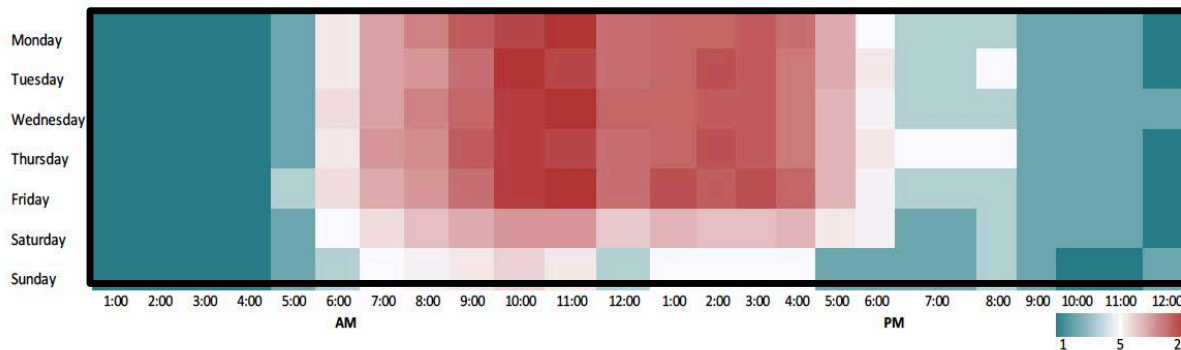
Source: Econsult Solutions (2019)

43% of businesses with loading needs receive deliveries on the weekends.

Note: 11% of respondents stated that they do not make or receive deliveries/have no loading needs.

What times of day do you typically load/unload?

Figure 2.5: Survey Responses - What time of day and days do you take on-street deliveries?



Source: Econsult Solutions (2019)

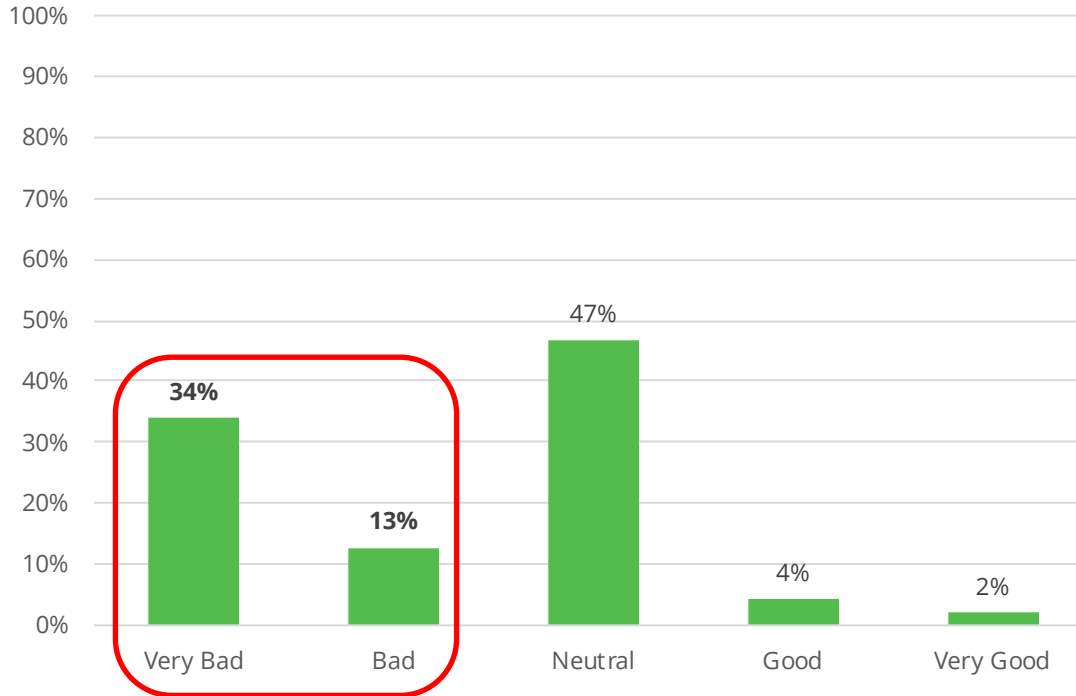
Every hour time slot in the 168-hour work week has at least one business that receives deliveries during that time.

Note: 11% of respondents stated that they do not make or receive deliveries/have no loading needs.



Business Preferences for Future Changes: Broad to Columbus

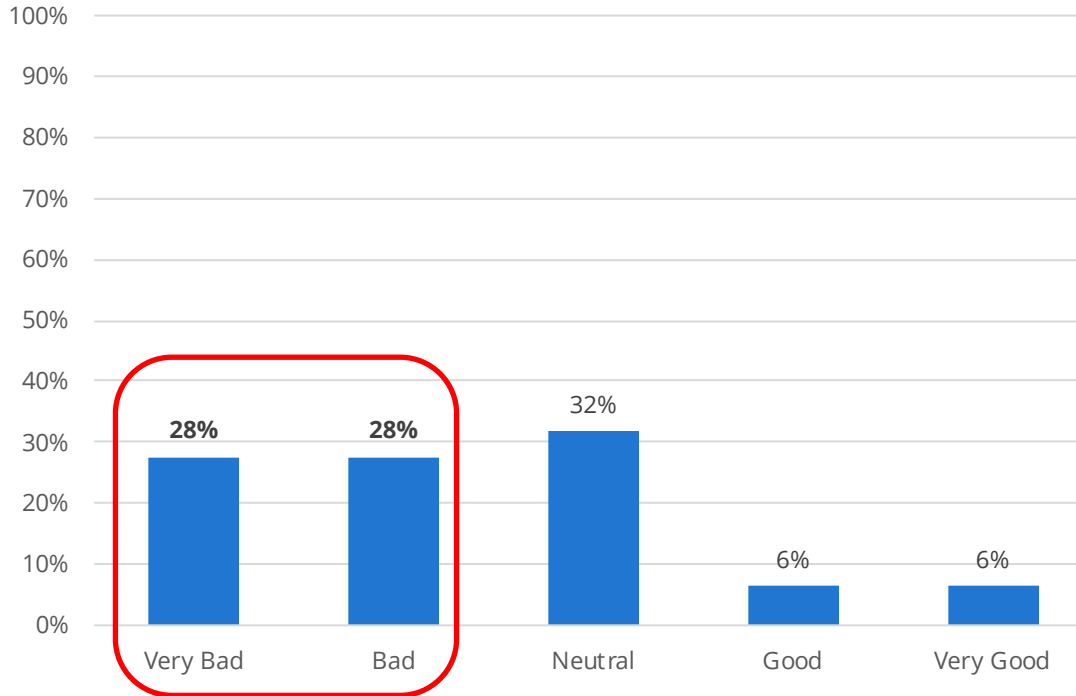
As a loading solution, double parking is...



47% of businesses stated that double parking was a Very Bad or Bad solution to their loading needs, and only 6% said it was good or very good.

Note: 11% of respondents stated that they do not make or receive deliveries/have no loading needs.

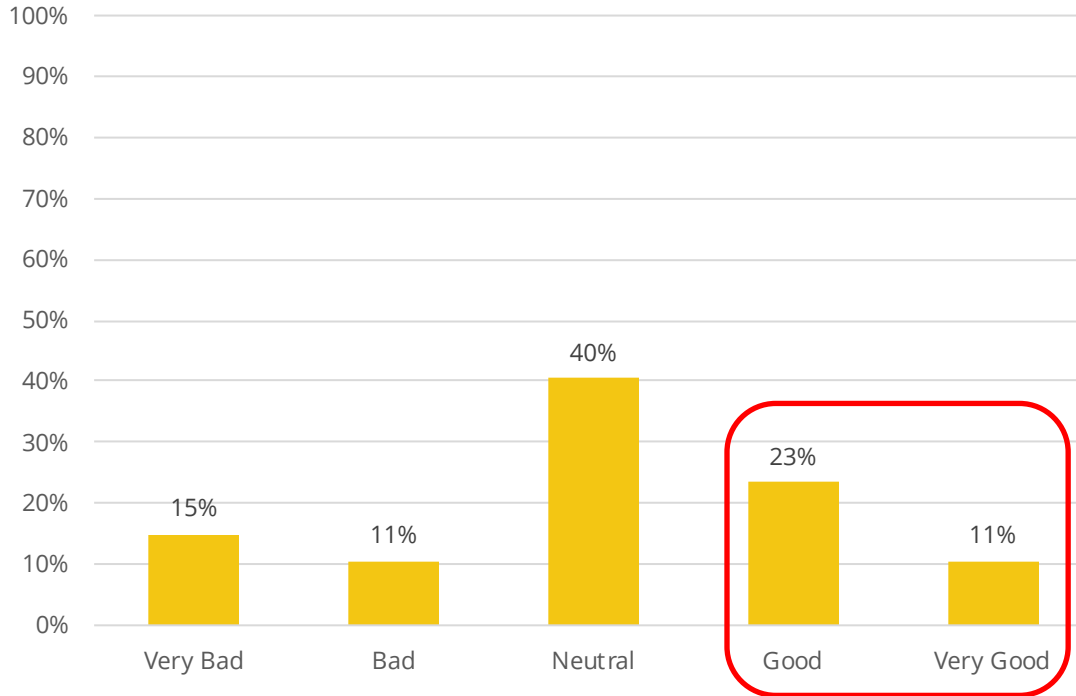
As a loading solution, median parking is...



56% of businesses stated that median parking was a Very Bad or Bad solution to their loading needs, and only 12% said it was good or very good.

Note: 11% of respondents stated that they do not make or receive deliveries/have no loading needs.

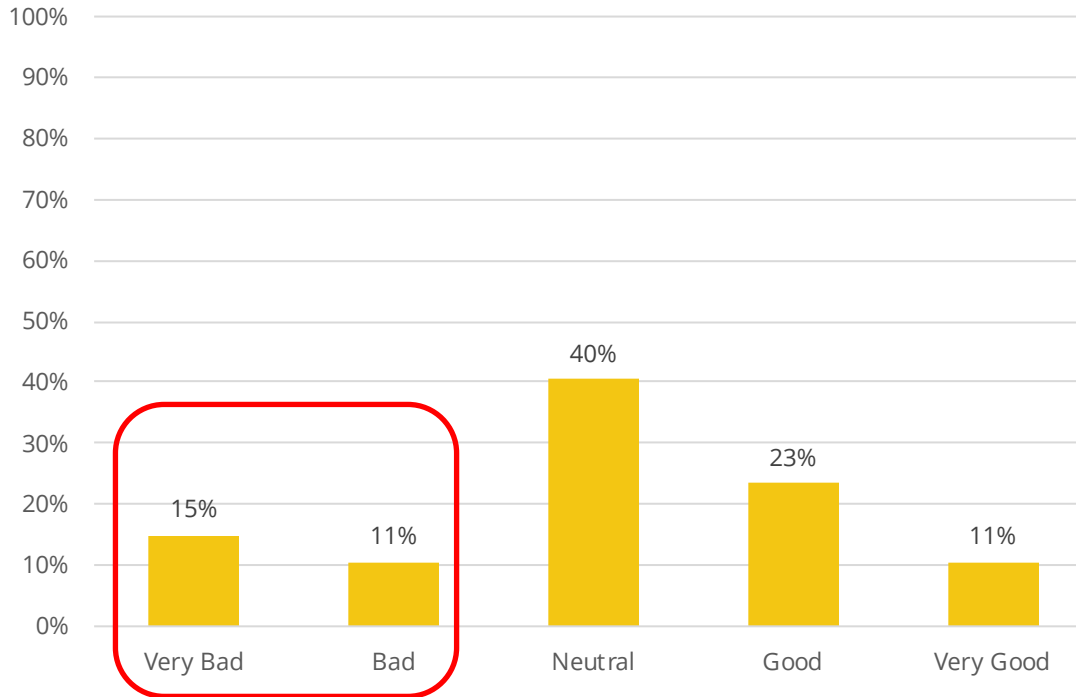
As a loading solution, curbside parking is...



34% of businesses stated that curbside loading was a Good or Very Good solution to their loading needs.

Note: 11% of respondents stated that they do not make or receive deliveries/have no loading needs.

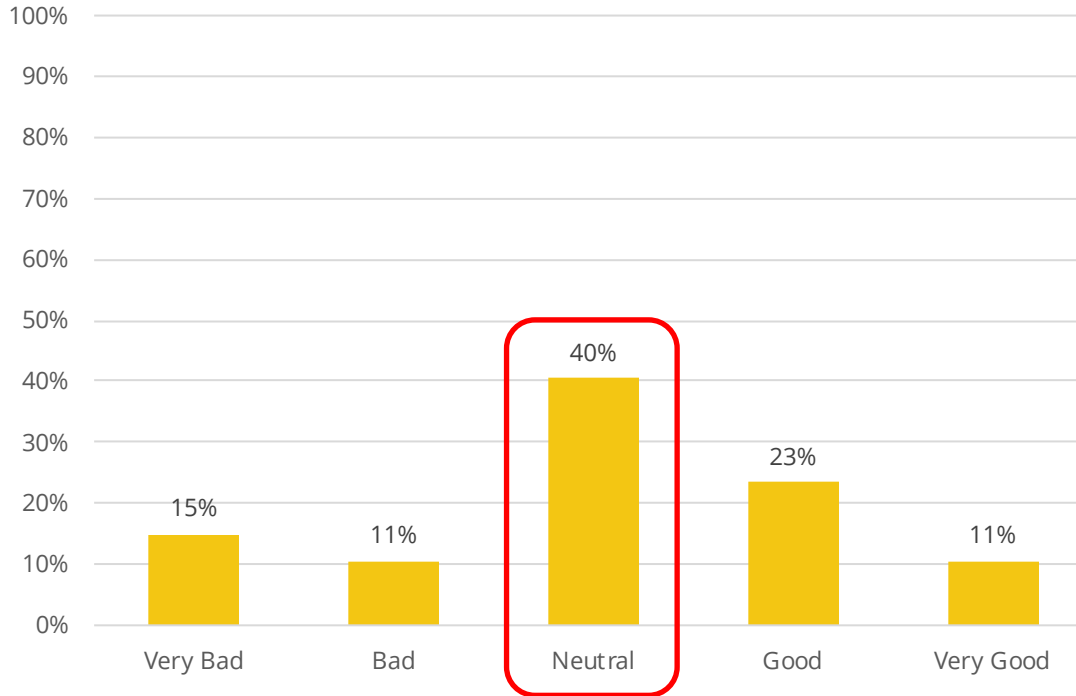
As a loading solution, curbside parking is...



34% of businesses stated that curbside loading was a Good or Very Good solution to their loading needs. **But another 26% said it was a Very Bad or Bad solution.**

Note: 11% of respondents stated that they do not make or receive deliveries/have no loading needs.

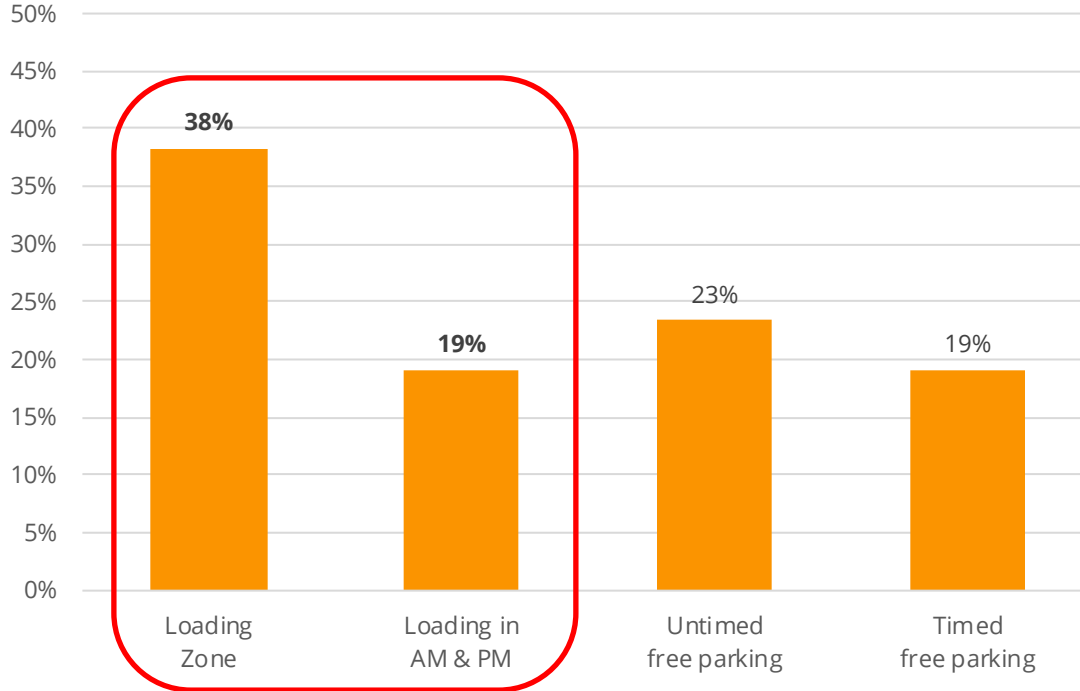
As a loading solution, curbside parking is...



34% of businesses stated that curbside loading was a Good or Very Good solution to their loading needs. But another 26% said it was a Very Bad or Bad solution. **And a full 40% were neutral about it as a solution.**

Note: 11% of respondents stated that they do not make or receive deliveries/have no loading needs.

But when asked what they want out front...



57% of businesses said they would prefer some type of curbside loading in front of their businesses even though many seemed skeptical of curbside loading as a good solution for their business.

Note: 11% of respondents stated that they do not make or receive deliveries/have no loading needs.



Why this discrepancy?

The survey results about loading solutions indicate that **businesses are skeptical of all possible loading configurations** – curbside, median, or double-parking – as they exist today. But their response to the question “What would you prefer directly outside your business?” **reveals a belief that curbside loading could work, if it was placed, regulated, and timed appropriately.**

It’s possible that this future is hard to imagine because of the way Washington Avenue’s parking and loading function today, which might explain the 40% of respondents who felt neutral about curbside loading as a viable solution.



Observed Parking & Loading Behavior: Broad to Grays Ferry

Inefficient Parking Turnover



Expected:

2-3 hours on a commercial corridor



Observed:

2.5 hours on the 2500 block (*lowest*)
8.6 hours on the 1400 block (*highest*)



Double-Parking



Sidewalk Parking



Median Parking

Insufficient Loading Spaces



The average duration for vehicles double parking, median parking, or parking in restricted spaces was almost **always under an hour, and often as short as 15 minutes or less.**



Why turnover is important:

- Business customers cannot find parking, which means **they might double-park, park in the median, or simply choose not to shop along Washington Avenue.**
- Businesses cannot load or unload at the curb, which means **trucks and other large vehicles might double-park or park in the median. This causes traffic flow issues and sight line issues.**
- Near-neighbors cannot use parking on Washington Avenue in the evening as overflow when cars never move from their spaces. This **can create parking pressure in neighborhoods around Washington Avenue.**



The Goal:

Balance the needs and desires of individual businesses with overall corridor functionality to make parking and loading operations work for everyone on Washington Avenue.

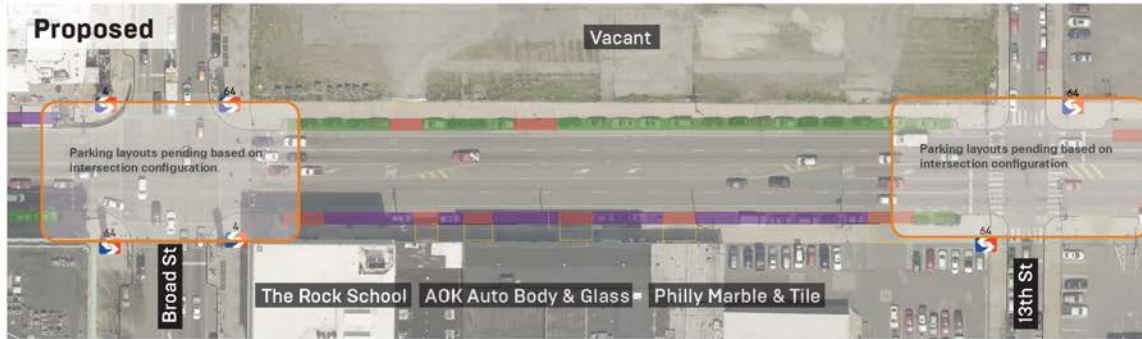


West Side Block by Block Proposals

1300 Block Existing & Proposed



-  Untimed parking
-  Timed parking
-  Loading
-  Disabled parking
-  No parking
-  Driveway
-  SEPTA bus stop



-  Untimed parking
-  Timed parking
-  Loading
-  Disabled parking
-  No parking
-  Driveway
-  SEPTA bus stop

1300 Block Proposed - Rationale

Survey respondents:

Philly Marble & Tile
Architectural Window Corp.
The Rock School
Save-A-Lot

All the businesses on this block currently use the spaces out front for loading, unloading, and/or vehicle storage. The Rock School has painted the curb in front of their building yellow and puts cones out during student pick-up and drop-off. **We propose to formalize the loading activities that are already occurring, with timed loading zones that switch to parking during off-hours.**



Note: This list includes only those businesses which responded to the survey. Additional outreach has been done since the survey, which includes additional businesses and business organizations.

1400 Block Existing & Proposed



1400 Block Proposed - Rationale

Survey respondents:

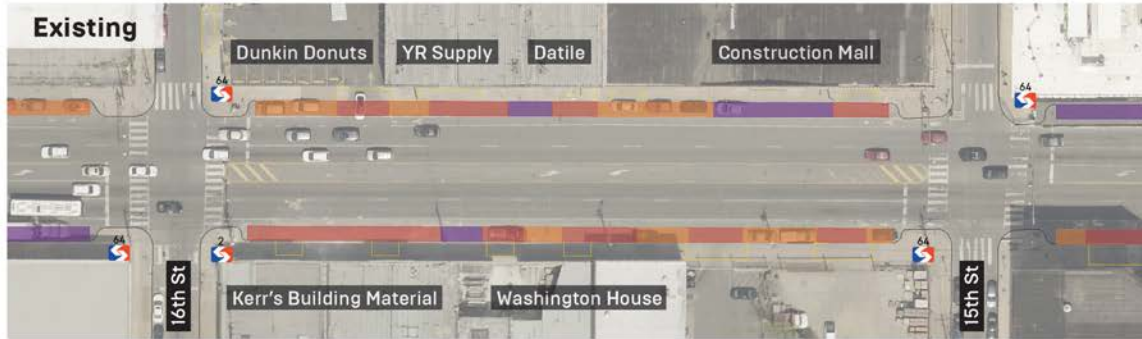
Fine Wine & Good Spirits
Insomnia Cookies (Carpenter Street)
Target (Broad Street)

No changes are proposed to the north side of the street, which is already entirely loading for businesses located in Lincoln Square. **Timed parking is proposed for the south side of the street (2 hour or 4 hour). The Marine Club condominiums will be required to store their dumpsters somewhere other than the parking lane.**

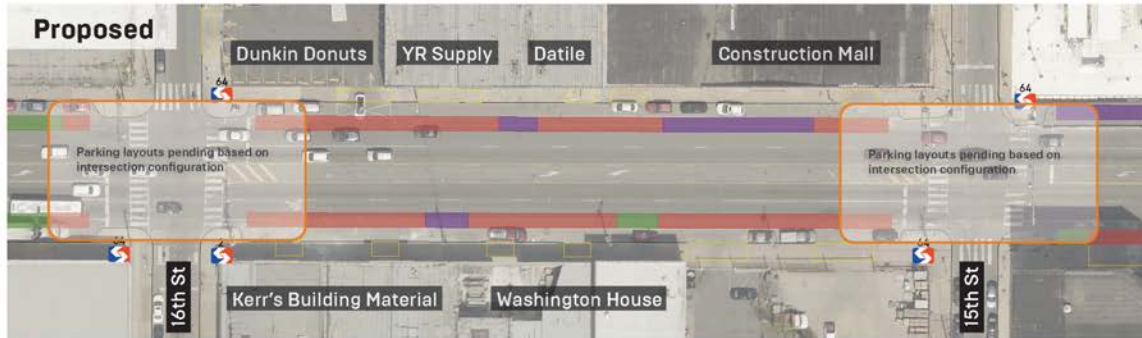
Note: This list includes only those businesses which responded to the survey. Additional outreach has been done since the survey, which includes additional businesses and business organizations.



1500 Block Existing & Proposed



-  Untimed parking
-  Timed parking
-  Loading
-  Disabled parking
-  No parking
-  Driveway
-  SEPTA bus stop



-  Untimed parking
-  Timed parking
-  Loading
-  Disabled parking
-  No parking
-  Driveway
-  SEPTA bus stop

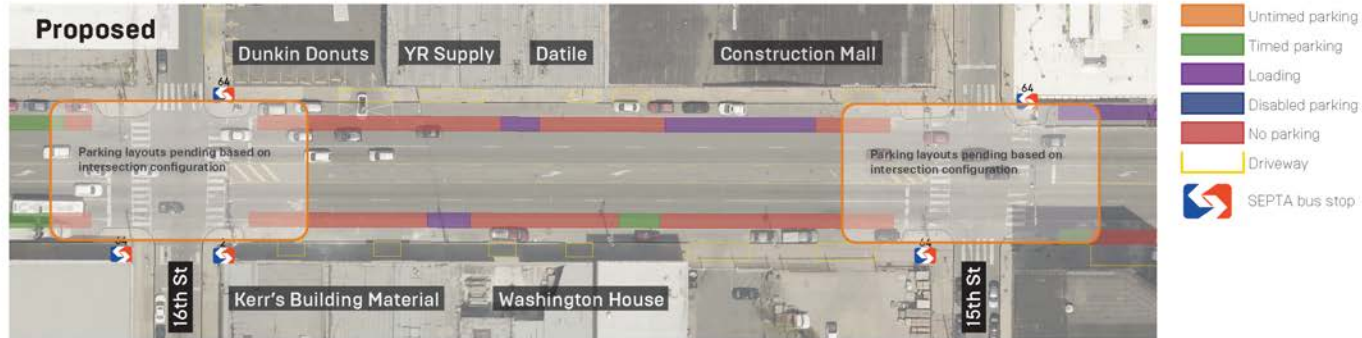
1500 Block Proposed - Rationale

Survey respondents:

Construction Mall
Kerr's Building Material
Marble Works
YR Supply
Daltile
Dunkin Donuts

Multiple businesses on this block have access to private/off-street loading via multiple driveways, which results in loss of street parking. **We propose leaving the existing loading zones as they are, converting untimed parking on the north side of the street to a 30-minute loading zone outside Construction Mall, and converting the remaining untimed parking to 2-hour or 4-hour timed parking.**

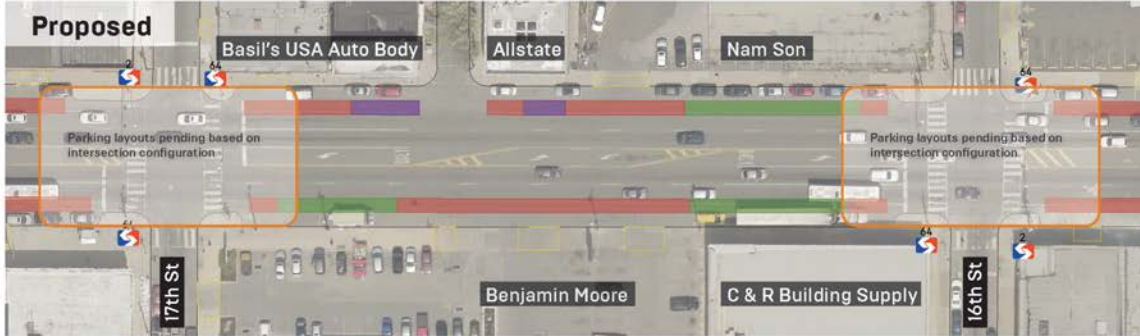
Note: This list includes only those businesses which responded to the survey. Additional outreach has been done since the survey, which includes additional businesses and business organizations.



1600 Block Existing & Proposed



-  Untimed parking
-  Timed parking
-  Loading
-  Disabled parking
-  No parking
-  Driveway
-  SEPTA bus stop



-  Untimed parking
-  Timed parking
-  Loading
-  Disabled parking
-  No parking
-  Driveway
-  SEPTA bus stop

1600 Block Proposed - Rationale

Survey respondents:

Nanson Bakery (Carpenter Street)
C&R Building Supply
A&A Food Corp

Multiple businesses on this block have access to private/off-street loading via multiple driveways, which results in loss of street parking. On the north side, **we propose creating an additional loading zone outside Basil's Autobody and instituting timed parking in front of Nam Son.** On the south side of the street, we propose **converting existing loading to timed parking** since Benjamin More and C&R Building supply have off-street loading access in the large parking lot.



Note: This list includes only those businesses which responded to the survey. Additional outreach has been done since the survey, which includes additional businesses and business organizations.

1700 Block Existing & Proposed



-  Untimed parking
-  Timed parking
-  Loading
-  Disabled parking
-  No parking
-  Driveway
-  SEPTA bus stop



-  Untimed parking
-  Timed parking
-  Loading
-  Disabled parking
-  No parking
-  Driveway
-  SEPTA bus stop

1700 Block Proposed - Rationale

Survey respondents:

- Family Dollar
- Grace and Peace Community Church
- Sherwin Williams
- Diamond MMA
- Falcone's Carpet
- Allure
- Bury the Hatchet
- Autozone

On the north side of the block, we propose **maintaining the existing loading zone in front of Sherwin Williams and adding a 30-minute loading zone in front of Little Shepherds CLC. Remaining parking will become 2- or 4-hour timed parking.** On the South side of the block we propose **converting existing unregulated parking to 2- or 4-hour parking.**

Note: This list includes only those businesses which responded to the survey. Additional outreach has been done since the survey, which includes additional businesses and business organizations.



1800 Block Existing & Proposed



-  Untimed parking
-  Timed parking
-  Loading
-  Disabled parking
-  No parking
-  Driveway
-  SEPTA bus stop



-  Untimed parking
-  Timed parking
-  Loading
-  Disabled parking
-  No parking
-  Driveway
-  SEPTA bus stop

1800 Block Proposed - Rationale

Survey respondents:

Martabak OK
Quality's Home Center
Ferguson

On the north side of the block, **we propose creating a 30-minute loading zone in front of Chick's for takeout pickup**, which currently occurs in the median. The **existing loading in front of Quality Home Center will be maintained**, and **all remaining unregulated parking on both the north and south sides of the block will be converted to 2- or 4-hour timed parking**.



Note: This list includes only those businesses which responded to the survey. Additional outreach has been done since the survey, which includes additional businesses and business organizations.

1900 Block Existing & Proposed



-  Untimed parking
-  Timed parking
-  Loading
-  Disabled parking
-  No parking
-  Driveway
-  SEPTA bus stop



-  Untimed parking
-  Timed parking
-  Loading
-  Disabled parking
-  No parking
-  Driveway
-  SEPTA bus stop

1900 Block Proposed - Rationale

Survey respondents:

- Billows Electric Supply
- Smart Choice Kitchen and Bath
- YD Hardwood Flooring
- Metro PCS
- Only You Wedding Warehouse
- A&A International Foods LLC
- Roma Aluminum Company Inc.
- OpenBox Athletics
- OCF Realty

Multiple businesses on this block have access to private/off-street loading via multiple driveways, which results in loss of street parking. **We propose converting untimed parking to 2- or 4-hour timed parking, formalizing loading in front of Roma with a 30-minute loading zone, and retaining all existing loading zones.**



Note: This list includes only those businesses which responded to the survey. Additional outreach has been done since the survey, which includes additional businesses and business organizations.

2000 Block Existing & Proposed



-  Untimed parking
-  Timed parking
-  Loading
-  Disabled parking
-  No parking
-  Driveway
-  SEPTA bus stop



-  Untimed parking
-  Timed parking
-  Loading
-  Disabled parking
-  No parking
-  Driveway
-  SEPTA bus stop

2000 Block Proposed - Rationale

Survey respondents:

Colonial Marble and Tile
Builders First Source
Cava Building Supply
NextFab

Multiple businesses on this block have access to private/off-street loading via multiple driveways, which results in loss of street parking. **We propose converting untimed parking to 2- or 4-hour timed parking, creating a 30-minute loading zone in front of Colonial Cava, creating timed parking in front of Caliber Collision (which has off-street loading access), and retaining additional existing loading zones.**



Note: This list includes only those businesses which responded to the survey. Additional outreach has been done since the survey, which includes additional businesses and business organizations.

2100 Block Existing & Proposed



- Untimed parking
- Timed parking
- Loading
- Disabled parking
- No parking
- Driveway
- SEPTA bus stop



- Untimed parking
- Timed parking
- Loading
- Disabled parking
- No parking
- Driveway
- SEPTA bus stop

2100 Block Proposed - Rationale

Survey respondents:

Ivan Supply
MTO Bath and Tile
EXYN Technologies

The north side of the block is currently unregulated parking, **We propose converting this to times 2- or 4-hour parking.** On the south side of the block, we propose **a new loading zone in front of MTO bath and Tile** to alleviate double and median parking. We also propose **converting the existing loading zone in front of Dock Street to timed parking** to accommodate customers.

Note: This list includes only those businesses which responded to the survey. Additional outreach has been done since the survey, which includes additional businesses and business organizations.



2200 Block Existing & Proposed



-  Untimed parking
-  Timed parking
-  Loading
-  Disabled parking
-  No parking
-  Driveway
-  SEPTA bus stop



-  Untimed parking
-  Timed parking
-  Loading
-  Disabled parking
-  No parking
-  Driveway
-  SEPTA bus stop

2200 Block Proposed - Rationale

Survey respondents:

VIP
Springfield Beer

Multiple businesses on this block have access to private/off-street loading via multiple driveways, which results in loss of street parking. **We propose converting untimed parking on the north side of the block to 2- or 4-hour timed parking and retaining all existing loading zones on the south side of the block.**

Note: This list includes only those businesses which responded to the survey. Additional outreach has been done since the survey, which includes additional businesses and business organizations.



2300 Block Existing & Proposed



-  Untimed parking
-  Timed parking
-  Loading
-  Disabled parking
-  No parking
-  Driveway
-  SEPTA bus stop



-  Untimed parking
-  Timed parking
-  Loading
-  Disabled parking
-  No parking
-  Driveway
-  SEPTA bus stop

2300 Block Proposed - Rationale

Survey respondents:

Extra Space Storage

US Nail Supply

Habitat for Humanity Restore

A One Auto

Multiple businesses on this block have access to private/off-street loading via multiple driveways, which results in loss of street parking. **We propose converting all untimed parking on both sides of the street to 2- or 4-hour timed parking.**

Note: This list includes only those businesses which responded to the survey. Additional outreach has been done since the survey, which includes additional businesses and business organizations.



2400 Block Existing & Proposed



-  Untimed parking
-  Timed parking
-  Loading
-  Disabled parking
-  No parking
-  Driveway
-  SEPTA bus stop



-  Untimed parking
-  Timed parking
-  Loading
-  Disabled parking
-  No parking
-  Driveway
-  SEPTA bus stop

2400 Block Proposed - Rationale

Survey respondents:
KX Auto

We propose converting all untimed parking on both sides of the street to 2- or 4-hour timed parking and adding a 30-minute loading zone in front of KX Auto's side yard to alleviate sidewalk and double parking at this location.



Note: This list includes only those businesses which responded to the survey. Additional outreach has been done since the survey, which includes additional businesses and business organizations.

2500 Block Existing & Proposed



- Untimed parking
- Timed parking
- Loading
- Disabled parking
- No parking
- Driveway
- SEPTA bus stop



- Untimed parking
- Timed parking
- Loading
- Disabled parking
- No parking
- Driveway
- SEPTA bus stop

2500 Block Proposed - Rationale

Survey respondents:
Vincent Giordano Corporation

We propose converting all untimed parking on both sides of the street to 2- or 4-hour timed parking. Discussion with Vincent Giordano may result in the parking shown on the south side being converted to a loading zone, depending on the needs of that business.

Note: This list includes only those businesses which responded to the survey. Additional outreach has been done since the survey, which includes additional businesses and business organizations.





Parking & Effective Capacity Impacts

Effective Capacity: Untimed Parking

Number of Spaces



40' = 2 parking spaces

Effective Capacity (worst case)



40' = 2 parking spaces

2 spaces =
2 cars
parked

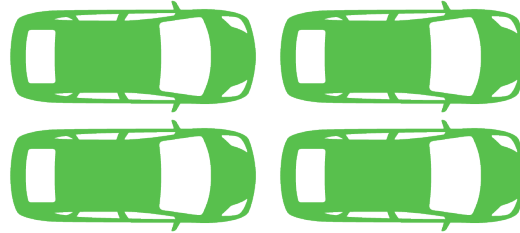
Effective Capacity: Washington Avenue Today

Number of Spaces



40' = 2 parking spaces

Effective Capacity (observed)



40' = can accommodate 4 cars in 12 hours when people park for an average of 6 hours

2 spaces =
4 cars
parked

Effective Capacity: Proposed Timed Parking

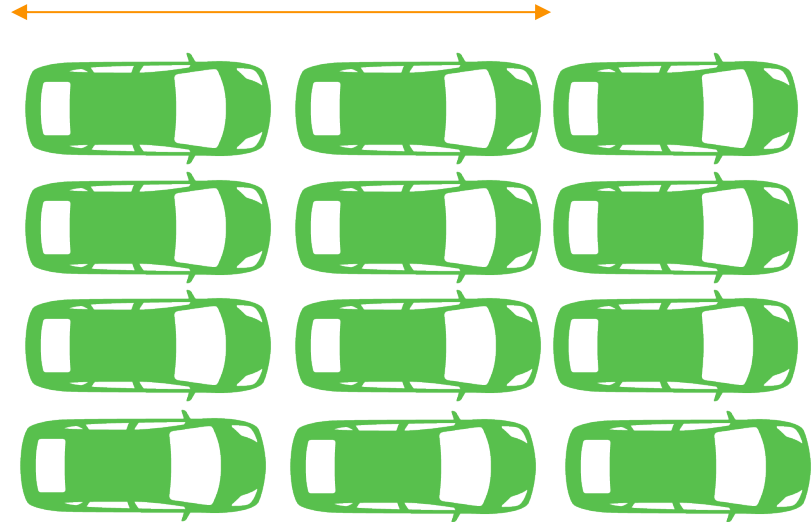
Number of Spaces



40' = 2 parking spaces

**2 spaces =
12 cars
parked**

Effective Capacity (proposed)



40' = can accommodate 12 cars in 12 hours when people park for an average of 2 hours (max. limit)

Parking & Capacity Impact Findings

Washington Avenue East

Existing Spaces	Proposed Spaces*	Net Space Change	Effective Capacity Change
225	144	-81	+320

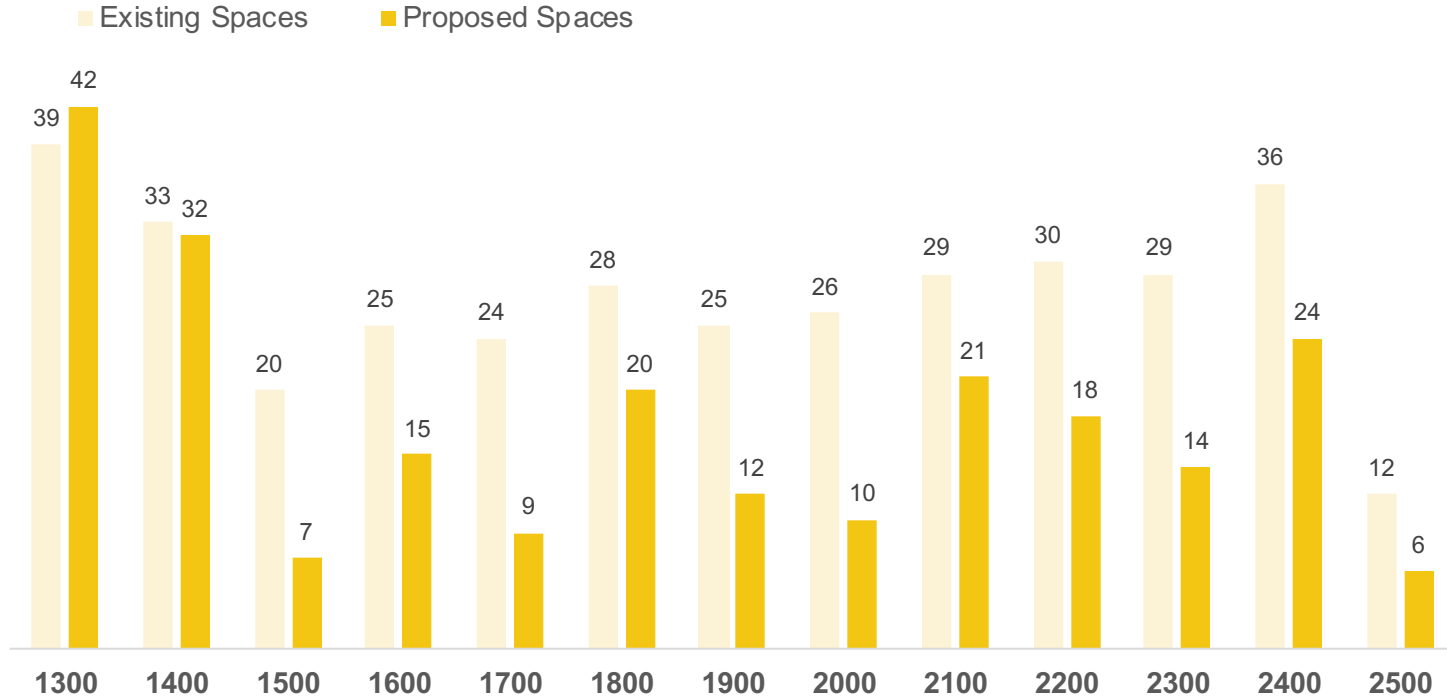
**Includes 62 designated loading spaces*

Washington Avenue West

Existing Spaces	Proposed Spaces*	Net Space Change	Effective Capacity Change
356	230	-126	+178

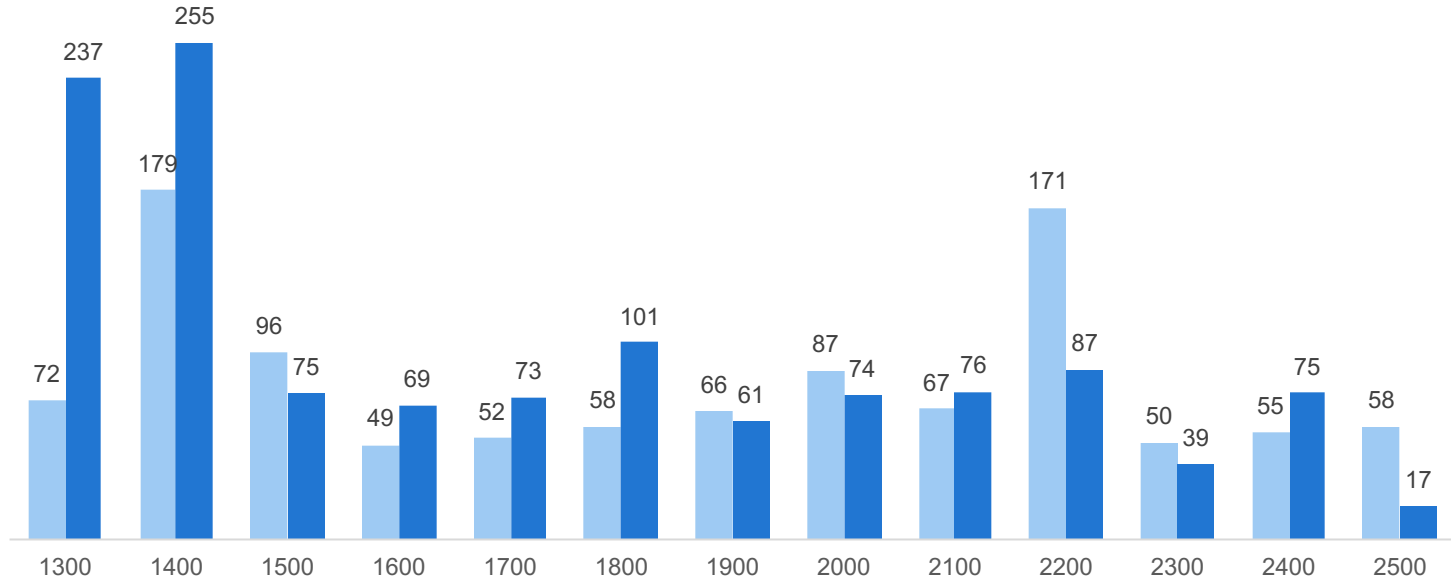
**Includes 24 designated loading spaces*

West Side Parking Impact by Block



West Side Capacity Impact by Block

Existing Capacity Proposed Capacity



Intersection Design & Parking Impacts

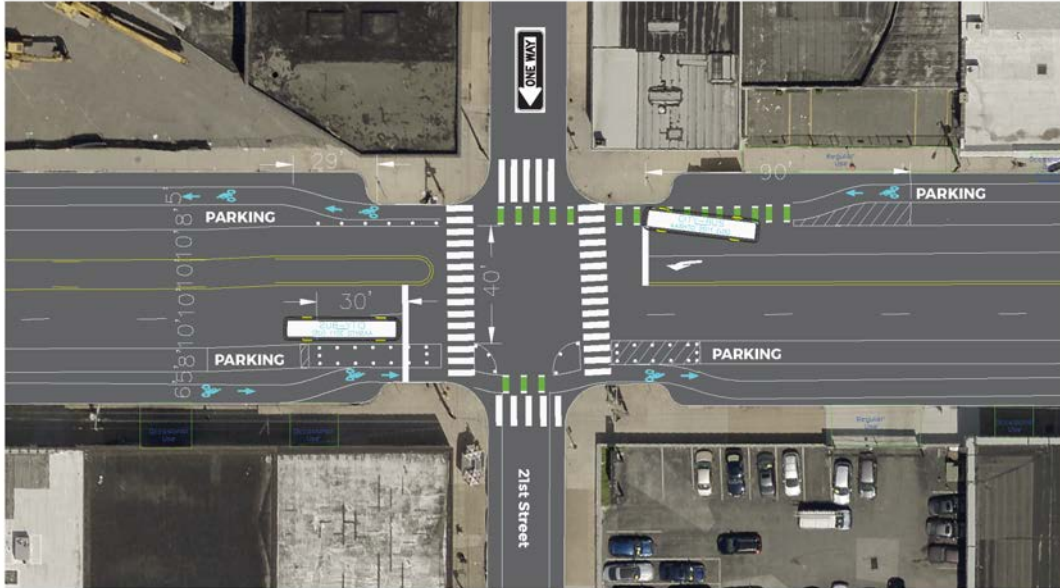
The chosen cross-section will determine the design of each intersection. **Some intersection designs will have a greater impact on parking than others.**



The 3-Lane cross section allows for bus boarding islands on both sides of Washington Avenue. **This configuration has a minimal impact on parking.**

Intersection Design & Parking Impacts

The chosen cross-section will determine the design of each intersection. **Some intersection designs will have a greater impact on parking than others.**



The 4-Lane cross section requires that buses curb on one side of the street, which **requires additional parking loss at the corners for bus clearance and bike lane sight-lines.**



Summary & Next Steps



Summary & Take Away

Although parking loss is expected, **parking capacity will increase** with timed parking, **deliveries will have dedicated space** to load and unload, and **neighbors will be able to park overnight** in spaces that current see little or no turnover on an average day.

The parking and loading proposed **balances the stated desires of businesses to maintain free parking with what analysis shows is necessary** for appropriate turnover on Washington Avenue.

These parking & loading changes **can be implemented regardless of what cross-section is eventually chosen** for Washington Avenue.



Follow-Up & Ongoing Communication

- Inform key stakeholders of the survey results.
- Make survey results available online.
- Review block-by-block parking and loading with businesses to fine-tune things like specific hours for loading zones.
- Create Final Engineering Plan for Streets Department.
- Continue regular communications before, during, and after paving in 2021.



Thank You