Washington Avenue

Grays Ferry Avenue to S Columbus Boulevard

Transportation and Parking Study
Community Meeting – October 23, 2013

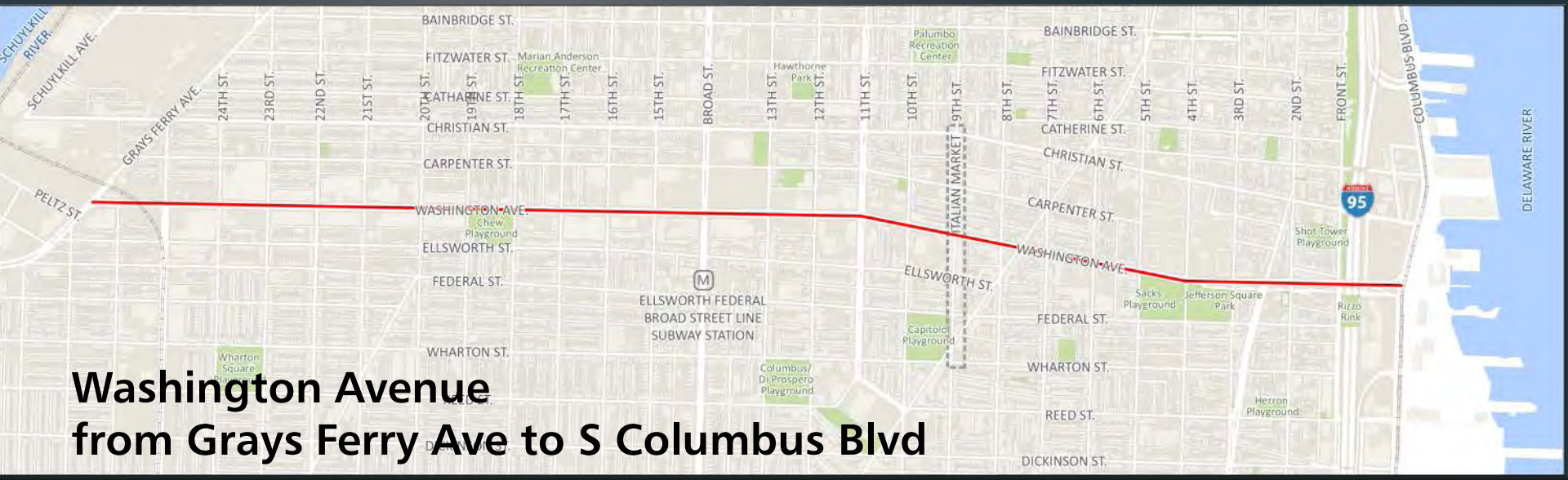
PCPC
PHILADELPHIA CITY PLANNING COMMISSION

KITTELSON & ASSOCIATES, INC.
TRANSPORTATION ENGINEERING/PLANNING

Boles, Smyth Associates Inc.
2400 Chestnut Street Philadelphia, PA

Tonight's discussion

- What we've learned
  - Parking and loading conditions
  - Vehicle, bicycle and pedestrian movement
  - Traffic safety
- Possible management strategies
- Street cross-section options
- Hearing from you



Washington Avenue from Grays Ferry Ave to S Columbus Blvd

Study overview & outcome

- Guide signing and striping plan to:
  - better balance corridor demands
  - ensure adequate parking and safe loading for businesses
  - improve safety
  - reduce spot congestion
  - guide enforcement
- Lay framework for longer range planning
- Develop up to three alternative configurations for consideration

Parking study

- Determine **actual parking conditions** versus permitted conditions to understand demand
  - **Parking inventory study**

- Determine **average length of parking s**tays in the corridor
  - **Parking duration study**

- **Prioritize business needs** for Loading Zones, Customer Parking, and Employee Parking
  - **Parking strategies**

- Identify user spaces to **meet all needs through street design**
  - **Traffic and active transportation needs assessment**

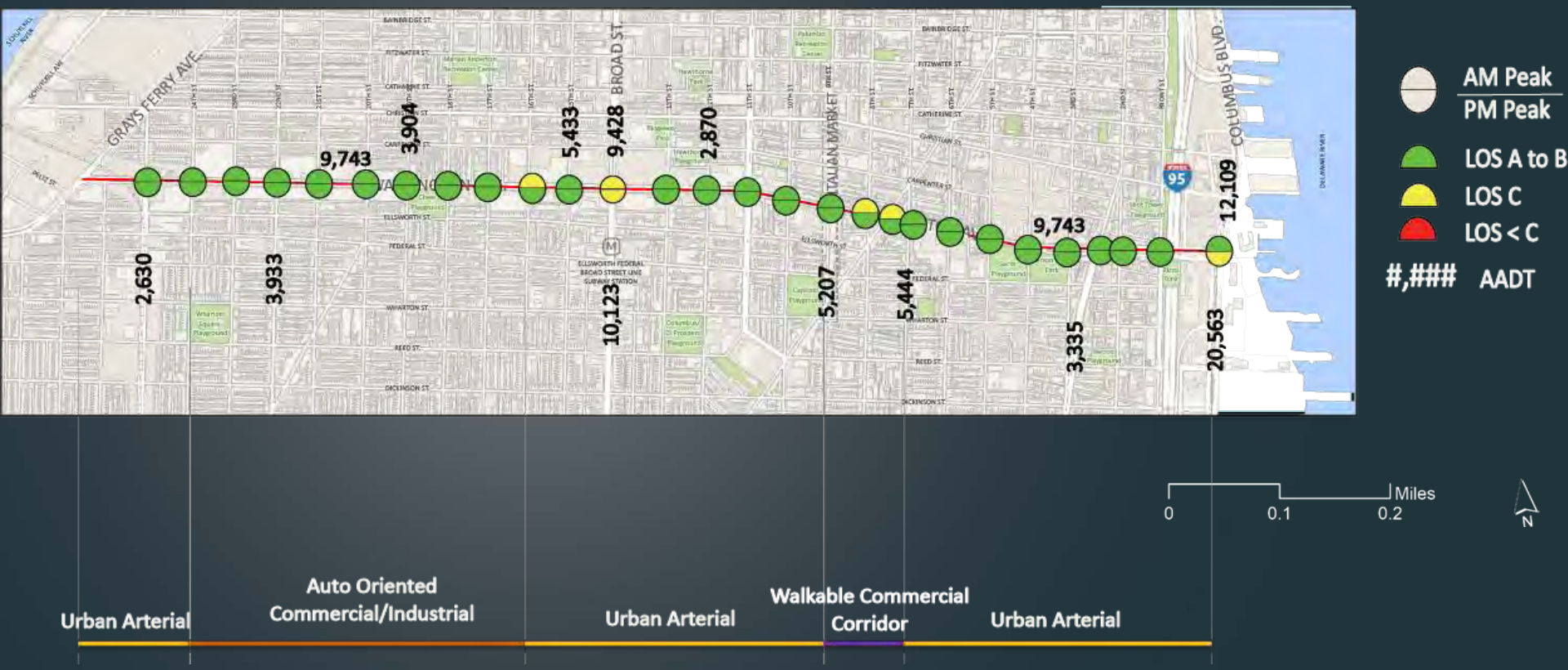
- Provide **guidance for users, businesses and enforcement** agencies
  - **Short term improvement Plan with preferred options**

Comparing daily traffic of similar streets

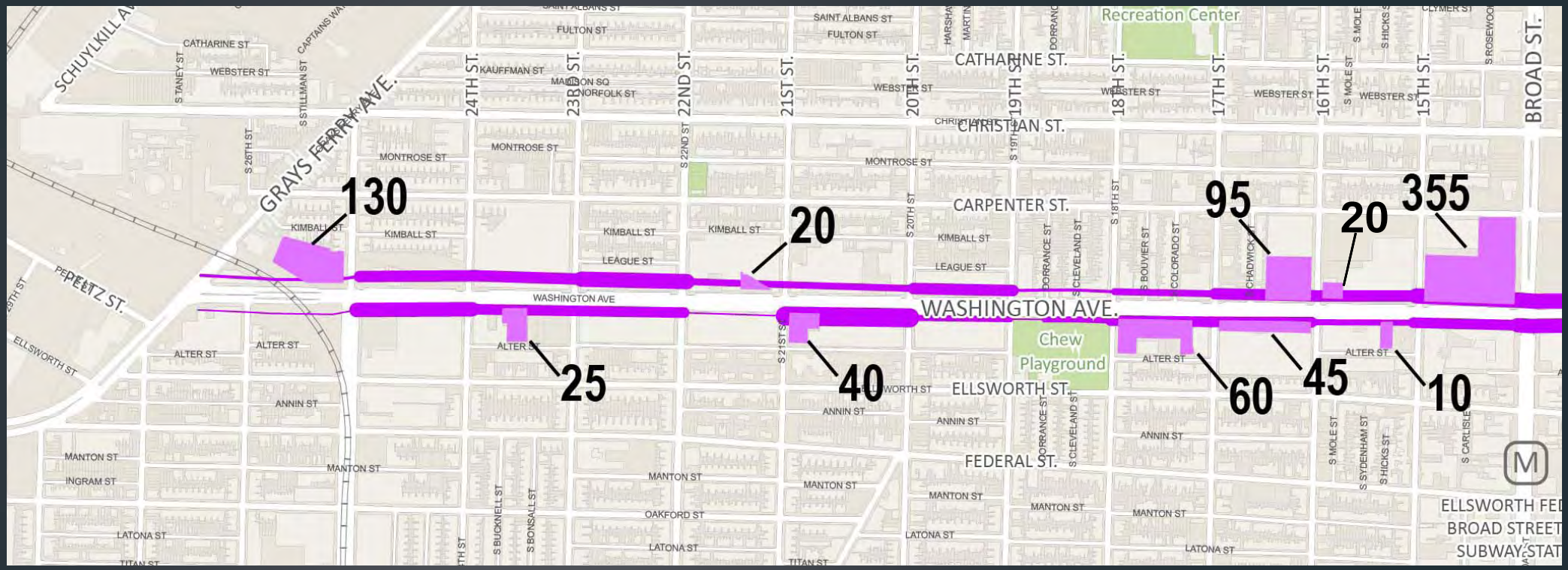
Street	AADT	Number of Lanes
Washington Avenue	9,800	4 lanes (plus TWLT lane)
South Broad Street	22,000	4 Lanes
Oregon Avenue	15,000	4 lanes (plus TWLT lane)
Passyunk Avenue	12,000	2 Lanes

- Similarly scaled streets in Philadelphia carry higher traffic volumes

Traffic Levels of Service (LOS) & character zones



Parking Supply – West of Broad Street



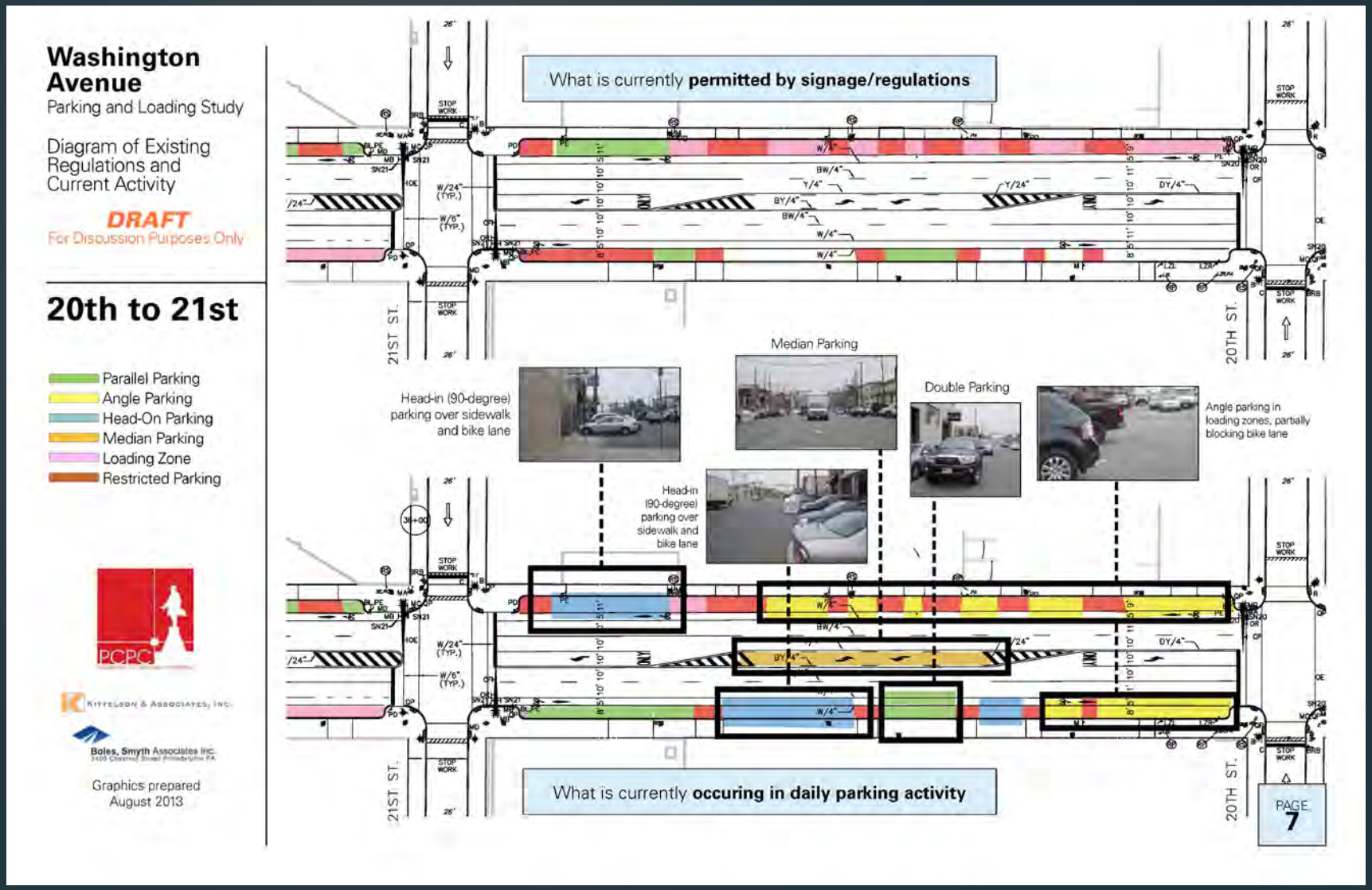
Curbside Parking Supply

- 0 - 5 Parking Spaces
- 6 - 10 Parking Spaces
- 11 - 15 Parking Spaces
- 16 - 20 Parking Spaces
- >20 Parking Spaces

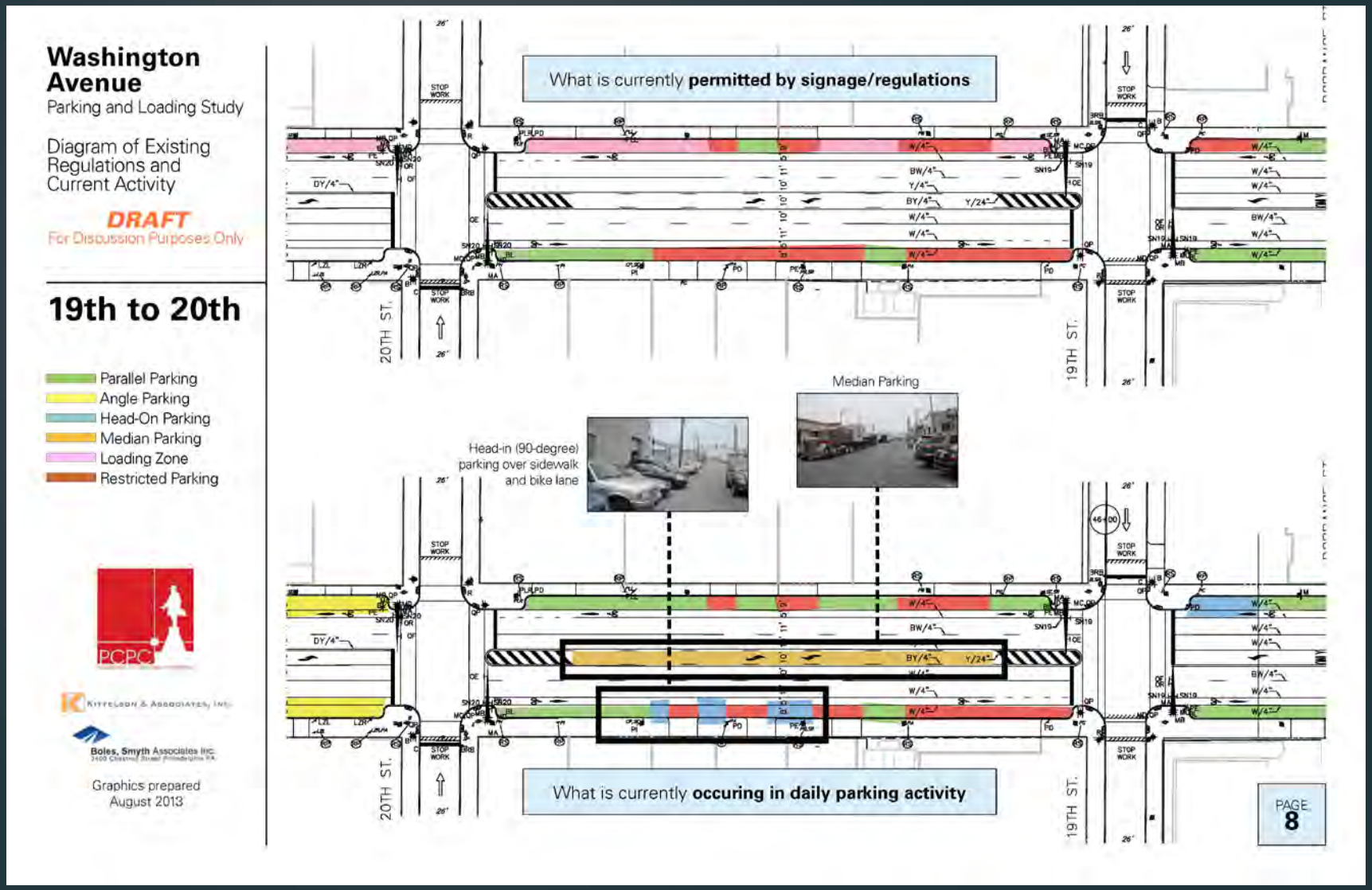
0 0.1 0.2 Miles

N

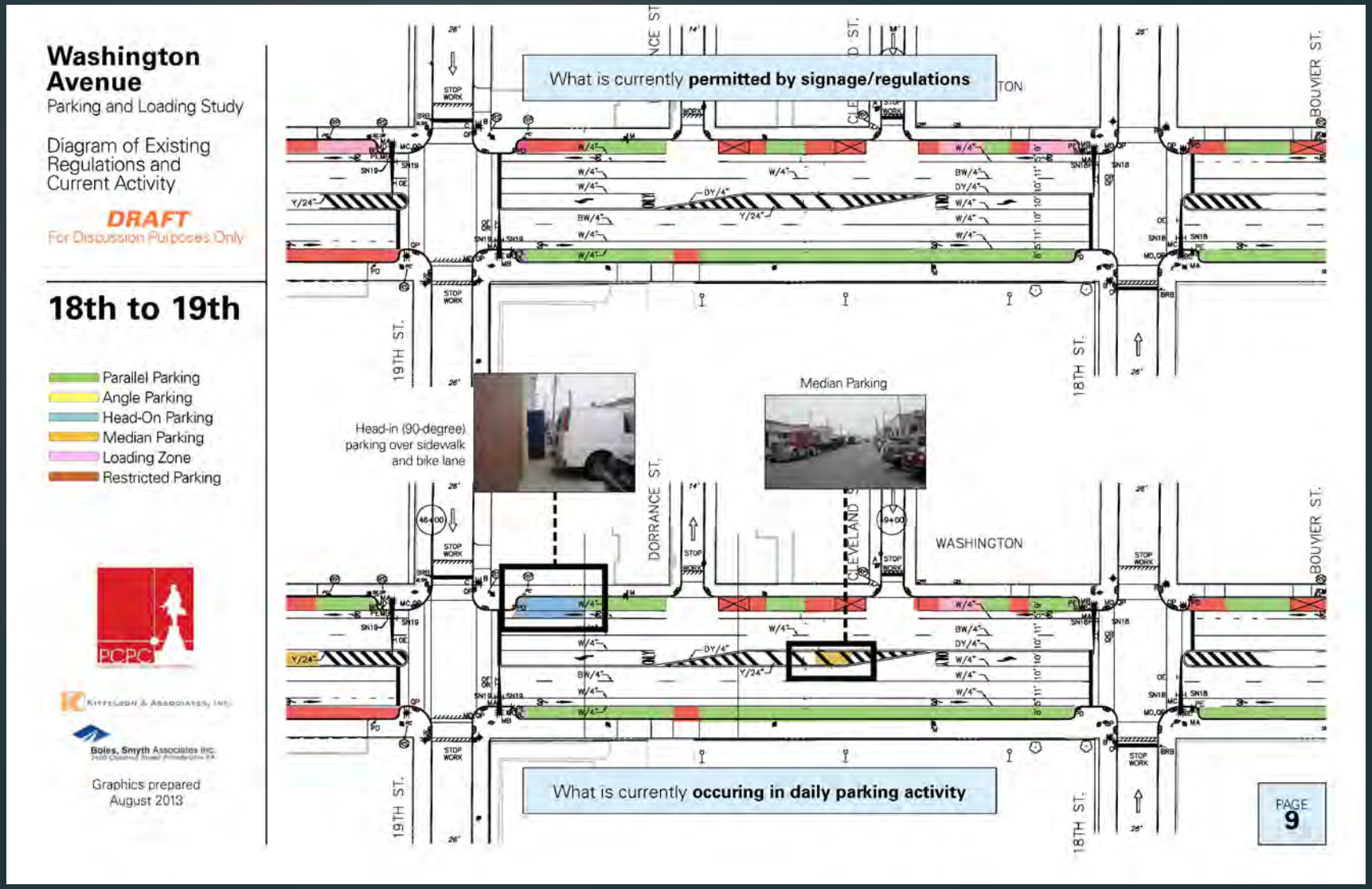
Permitted parking vs actual parking



Permitted parking vs actual parking



Permitted parking vs actual parking



Parking & loading supply & use– West of Broad Street*

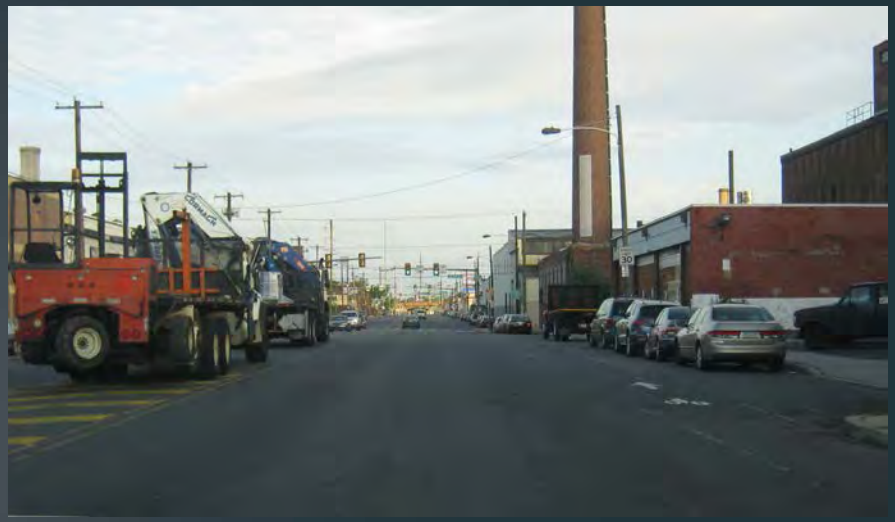
	Parking Spaces (As Permitted)	Parking Spaces (Actual)	Difference
On-Street Parking	234	282	**48**
On-Street Loading Spaces	32	9	**-23**
Parking Lots	795	-	-

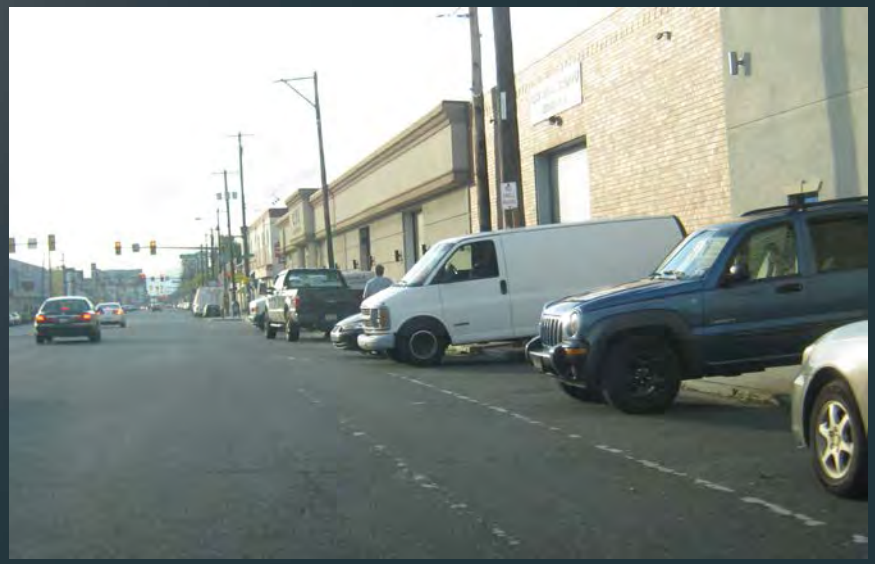
* Data from July 16, 2013

- Higher demand for on-street parking than currently permitted
- Loading space impacted by cars parking illegally

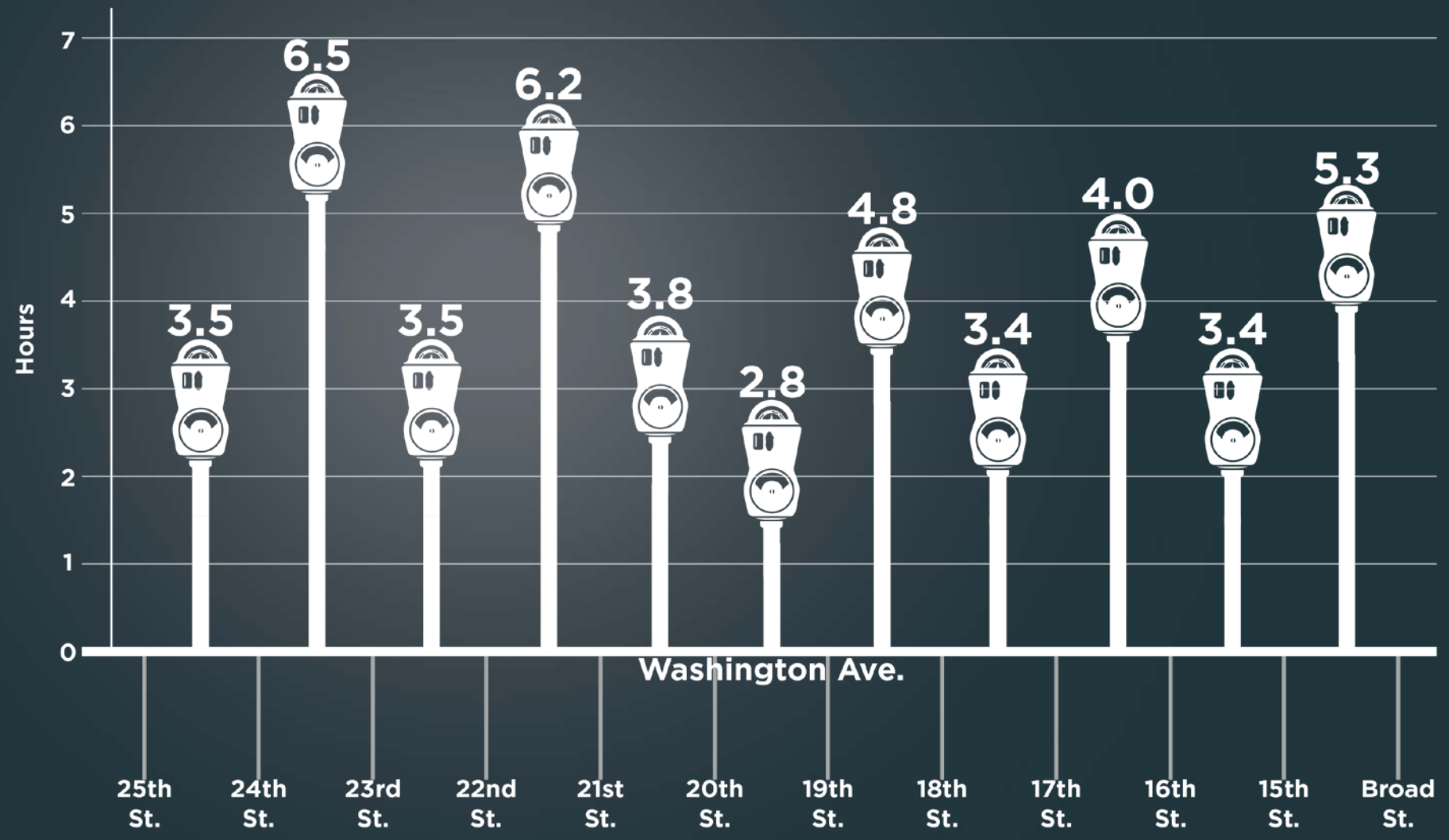
Parking duration study: West End July 16, 2013

- Locations:
  - Washington Avenue from 25th Street to 19th Street.
  - 19th Street to Broad Street
- Rotated study blocks
  - 7:30 – 11:00 AM
  - 2:30 – 6:00 PM
- Noted:
  - Vehicle Type, Vehicle Make & Color in Each Parking Space.
- Observations marked:
  - Double parking and median parking were observed
  - Vehicles parked in No Stopping Zones or driveways

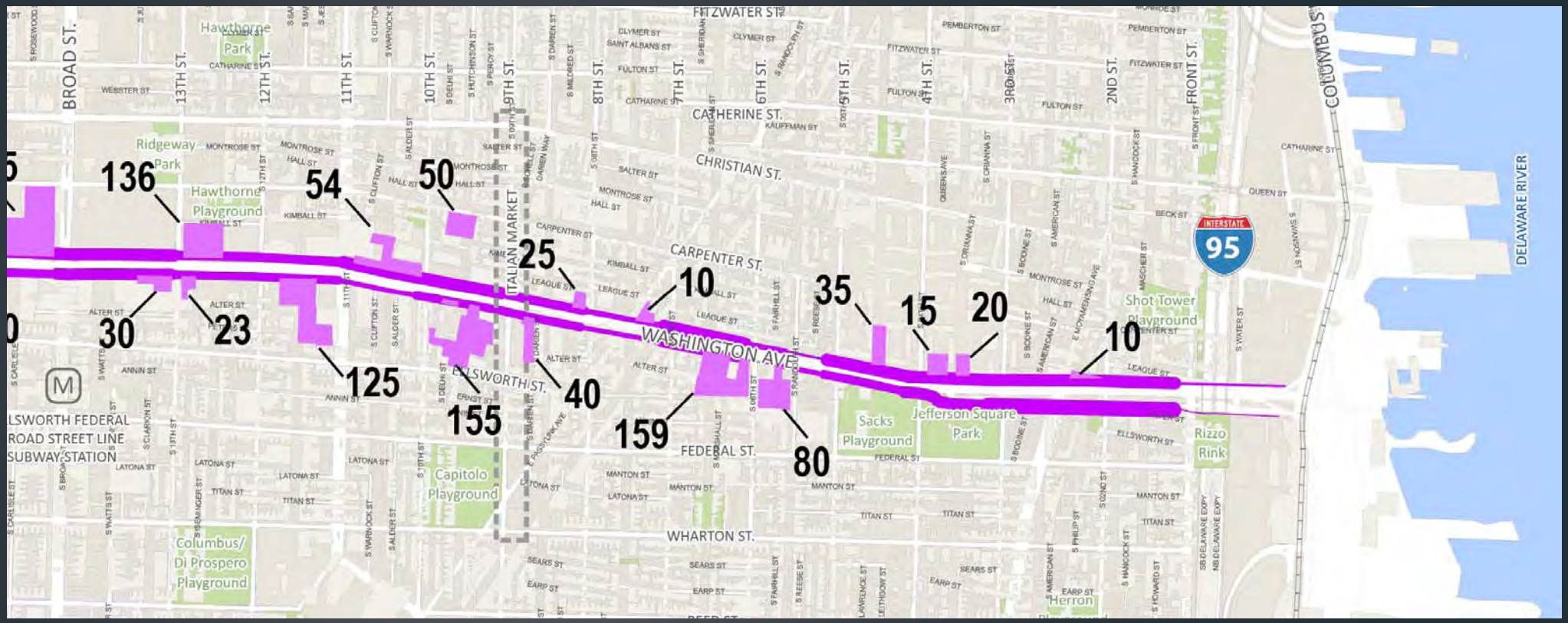




Parking duration : Average time parked per vehicle



Parking Supply – East of Broad Street



Curbside Parking Supply

- 0 - 5 Parking Spaces
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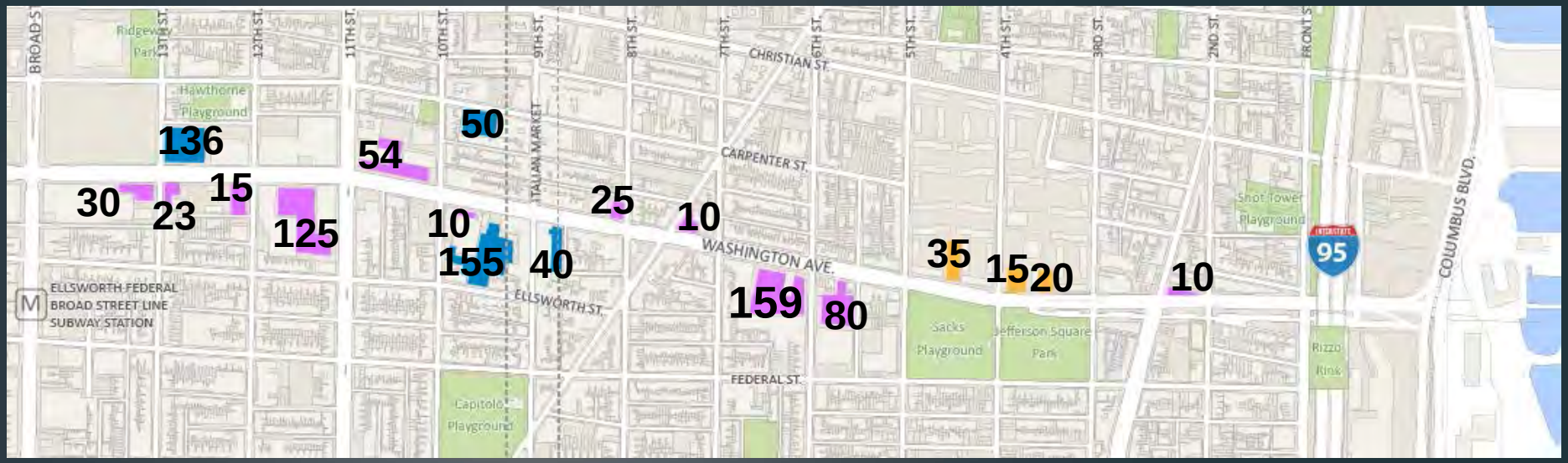
- 11 - 15 Parking Spaces
- 16 - 20 Parking Spaces
- >20 Parking Spaces

0 0.1 0.2 Miles

N

Parking lot type – East of Broad Street



Parking Lot Type

- Private - Business Owned
- Private - Residential
- Public

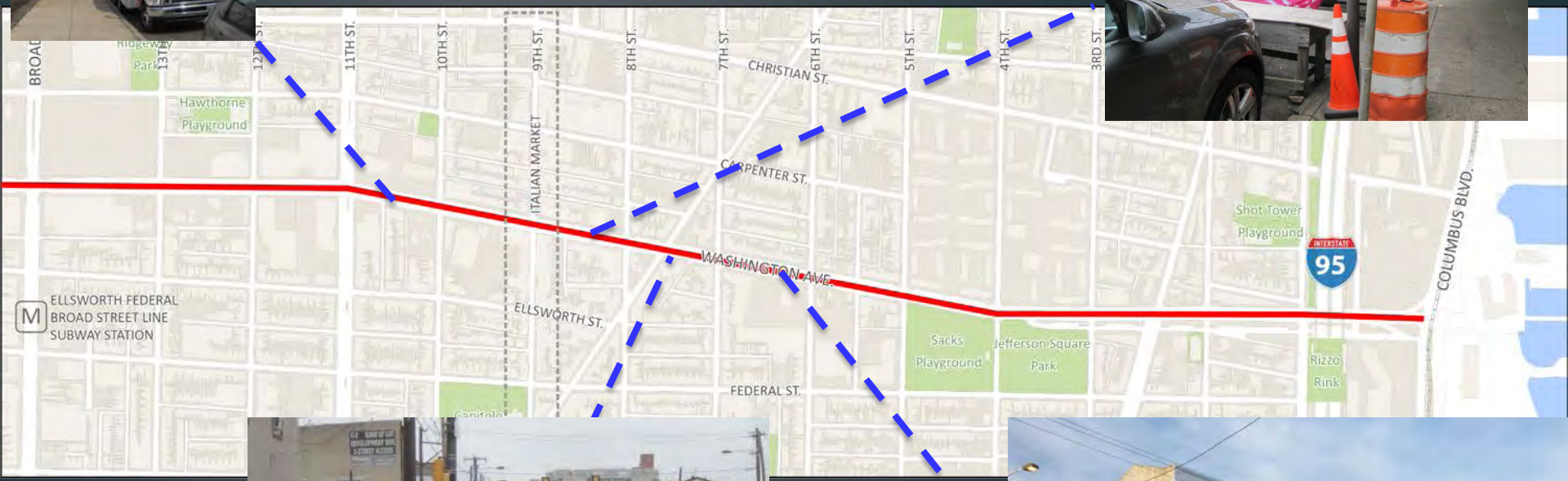
0 0.1 0.2 Miles

N

East Side Parking Challenges – Similar to West Side

Business Activities in Parking Lanes

Loading Activities Block Parking and Bike Lanes



Illegal Parking

Median Parking

Parking and loading findings

- More parking demand than supply
- Pavement markings and signage are not obvious
- Cars ignore parking restrictions to create more parking
- Center turn lanes used for parking, loading and unloading
- Businesses activities in the sidewalk, parking and bike lanes
- Head-in parking obstructs bike lane and sidewalk

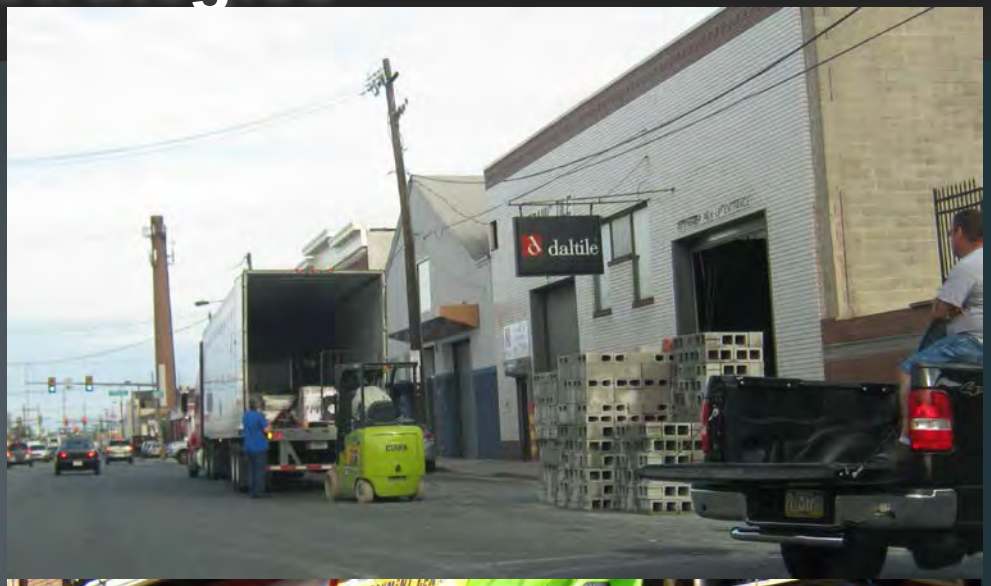
Parking management strategies

Understand how to meet various needs:

- loading and staging
- short term parking
- long term parking

Organize physical space

- off-street parking alternatives
- revise cross section to increase # of spaces(i.e. back-in angle parking)
- delineate spaces to maximize efficiency



Parking management strategies

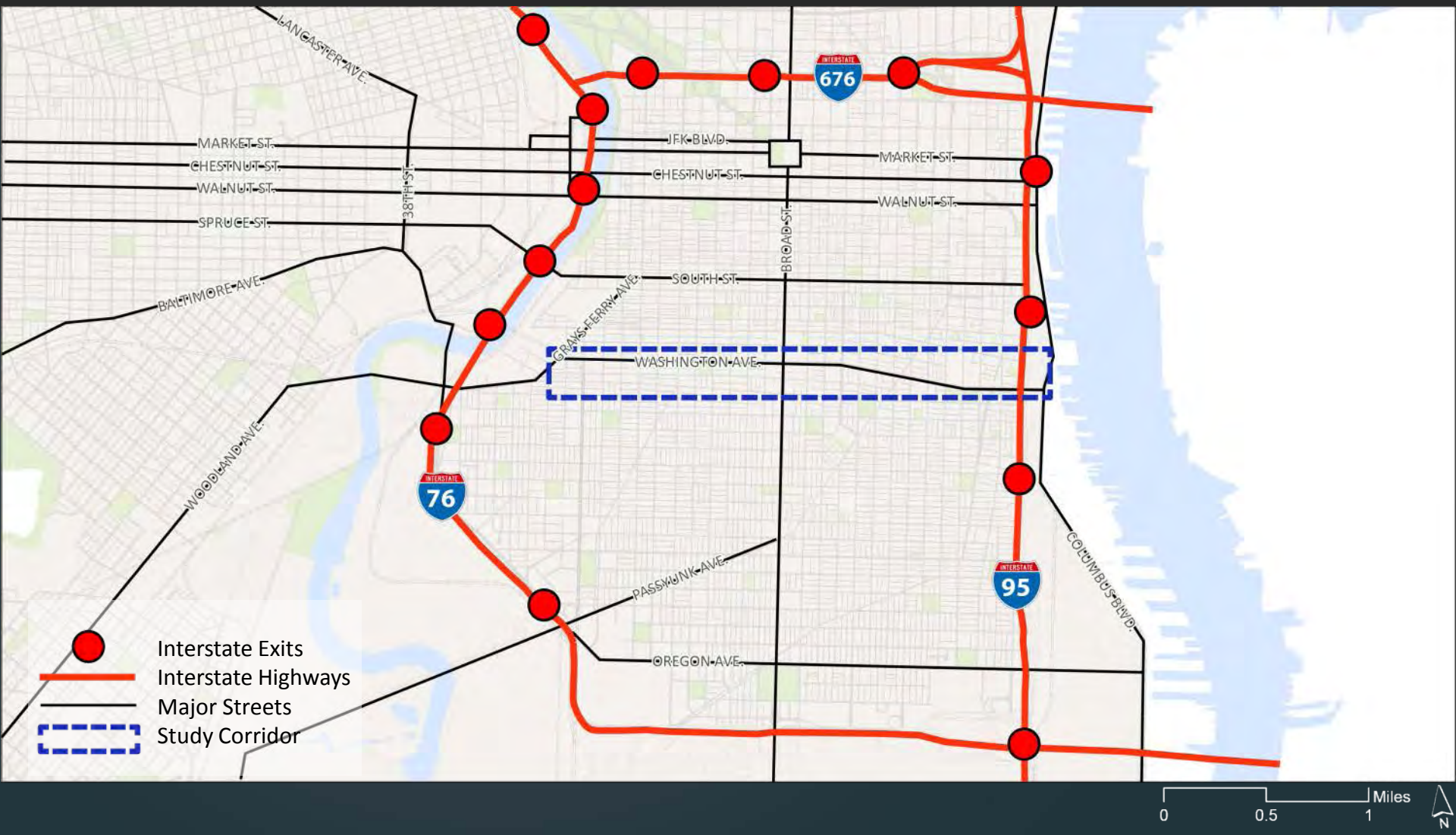
Price and restrict to reinforce use for intended activity:

- paid versus free parking in high value short term zones
- permit parking on nearby residential streets
- permanent or time specific loading zones

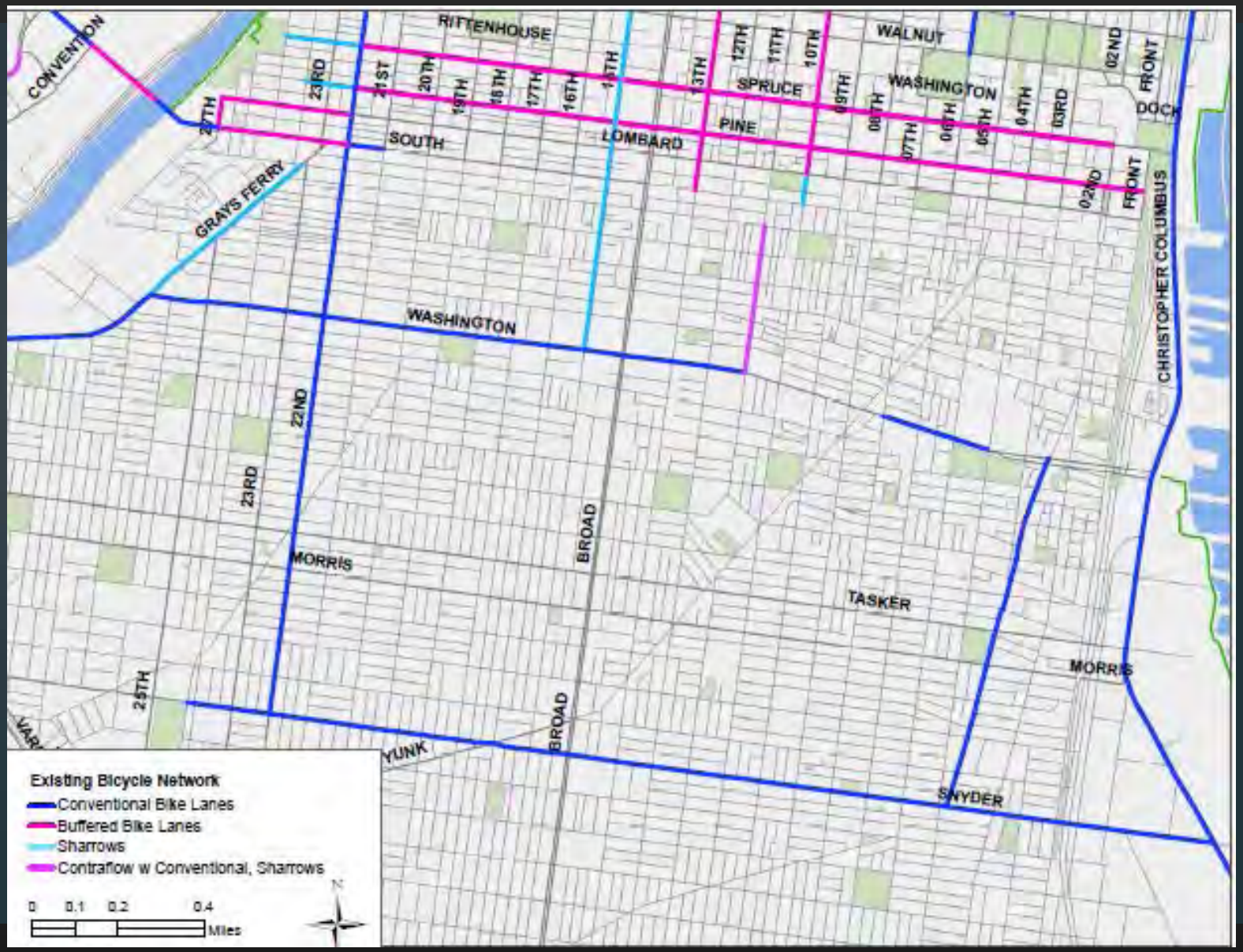
Sign and mark based on consensus:

- equitable enforcement
- high rates of compliance

Washington Ave's traffic function



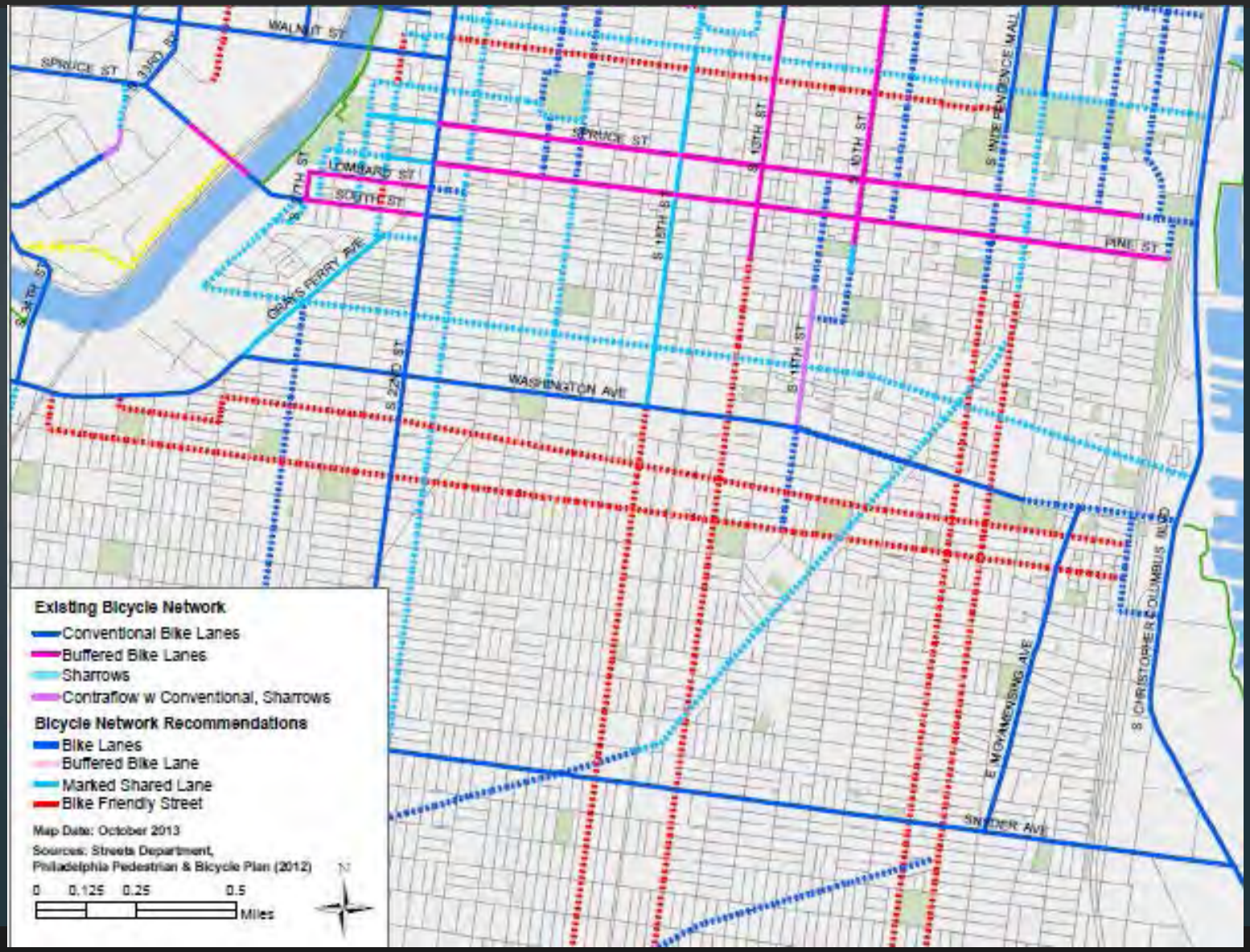
Washington Ave's bicycle network function



Philadelphia Pedestrian and Bicycle Plan 2012

WASHINGTON AVENUE TRANSPORTATION AND PARKING STUDY, PHILADELPHIA

Washington Ave's bicycle network function

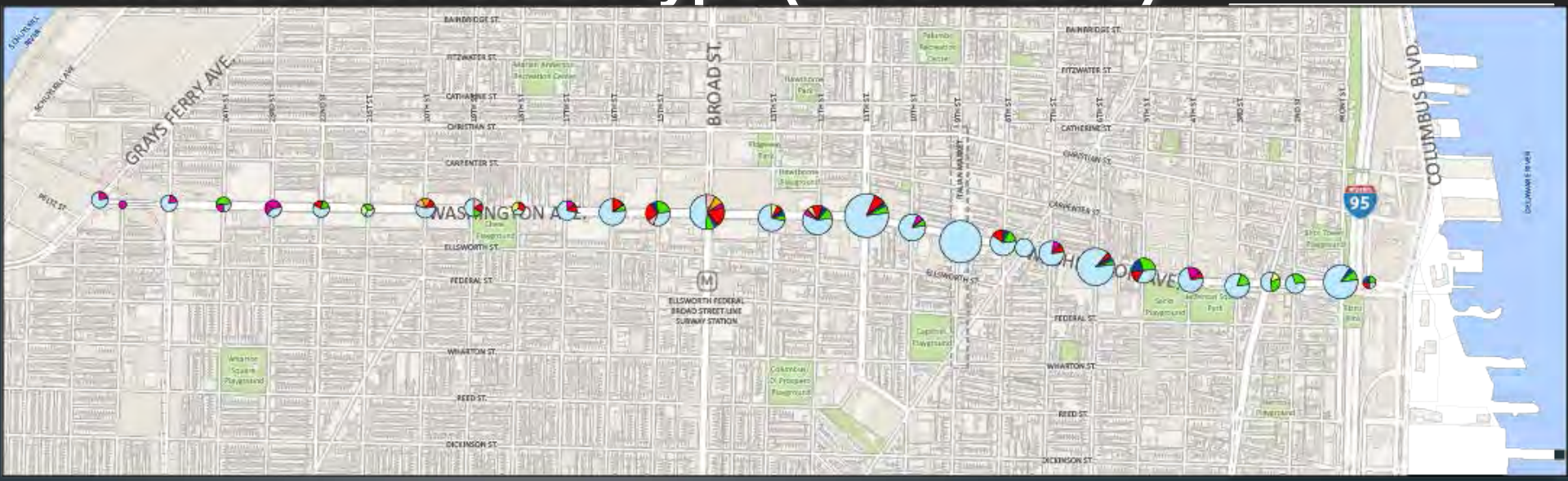


Philadelphia Pedestrian and Bicycle Plan 2012

Safety statistics

- 915 total (reportable and non-reportable) crashes along the corridor over 3 years
- On average:
  - 6 crashes occur along the corridor per week
  - 1 crash every 10 days requires towing or involves an injury
  - 1 pedestrian or bicyclist is injured every 3 weeks due to a crash

Intersection crash type (2010 – 2012)



- Angle
- Head On
- Hit Pedestrian
- Rear-end
- Side Swipe - Same Direction
- Side Swipe - Opposite Direction
- Unknown
- Non-Reportable Crash - Crash Type Was Not Recorded

- Non-reportable crashes prevalent at most intersections
- Of reportable crashes
  - Angle and head on crashes exceed rear-end crashes at intersections
  - Pedestrian crashes are dominant crash-type at 15th Street, 16th Street, Broad Street, 11th Street and 8th Street

Pedestrian and bicycle crashes (2010 – 2012)

Pedestrian and Bicycle Crashes (2010 - 2012)

Pedestrian Crash

Bicycle Crash

- Multiple pedestrian and bicycle crashes occurring at intersections between 5th Street and 15th Street
- Multiple pedestrian crashes occurring at intersections with signals and crosswalks
- Bicycle crashes concentrated in the section of corridor that lacks a bike lane between 7th and 11th Streets

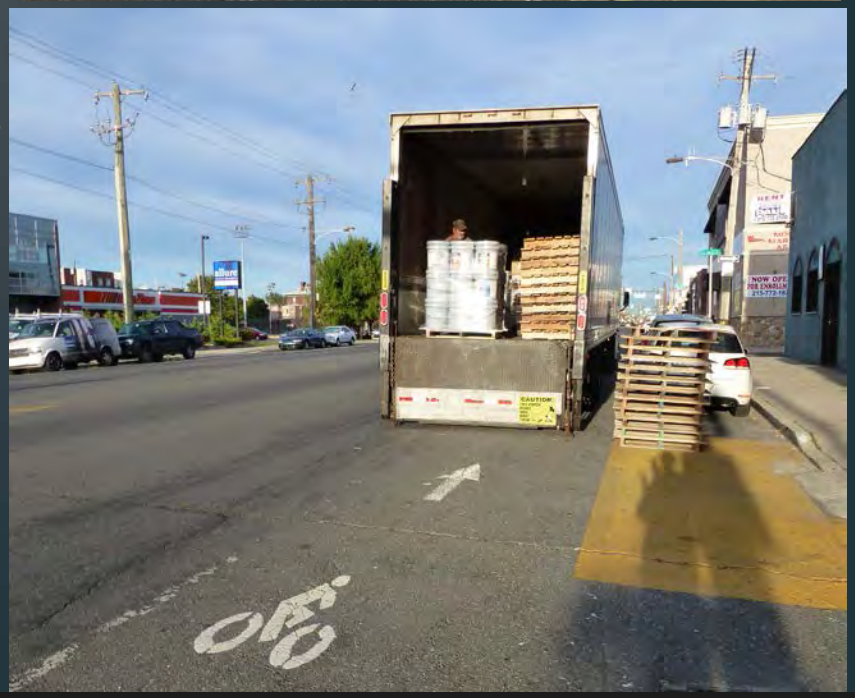
Lighting conditions of crashes

- Crashes in Daylight Conditions
- Crashes in Dawn, Dusk or Dark Conditions

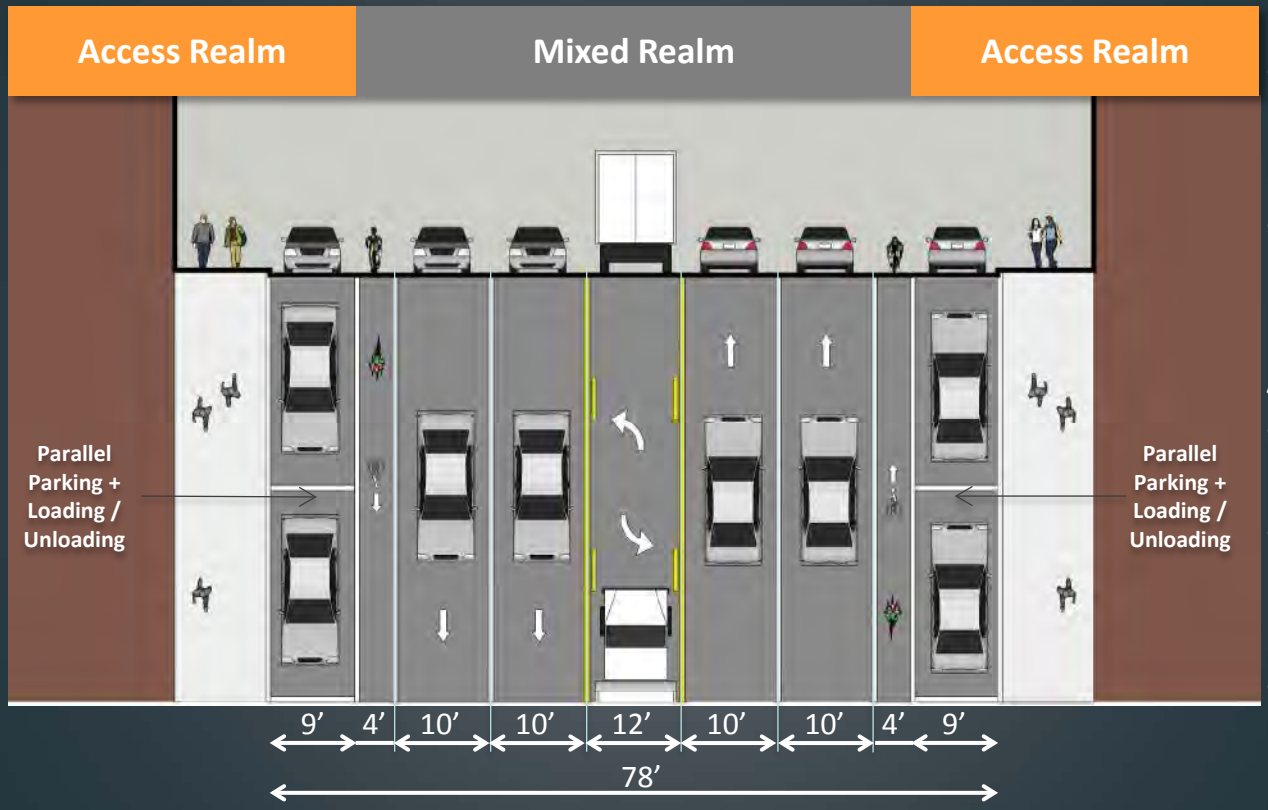
- Over one-third (39%) of reportable crashes west of Broad are occurring in dark conditions
- Visibility is a concern on the west side after dark

Goals for Washington Avenue

- Define space for activities & users
  - pedestrian circulation & crossing safety
  - on-road bicycle safety
- Improve business operations
  - loading space for businesses
  - retail customer & business parking
  - employee parking
- Reinforce Washington Ave network role
  - access to major routes
  - key link in bicycle network
- Keep Washington Ave a distinctive and unique place
  - a good neighbor to residents
  - a strong business district
  - a city-wide destination



WASHINGTON AVENUE TODAY : 4th STREET TO 7TH STREET AND 11th STREET TO GRAYS FERRY AVENUE

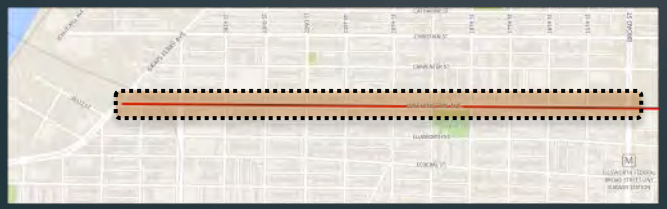


Mixed Realm

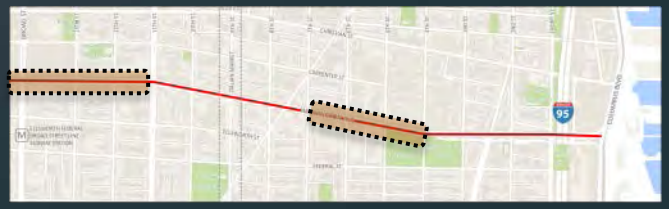
- Center left turn lane is currently being used for parking and loading / unloading activities.
- Bike lanes are not evident

Access Realm

- Perpendicular parking is used to generate more parking spaces
- Perpendicular parking is restricting sidewalks and bike lanes
- Other business activities are occurring in the access realm (storage, dumpsters, etc.)



Key Plan

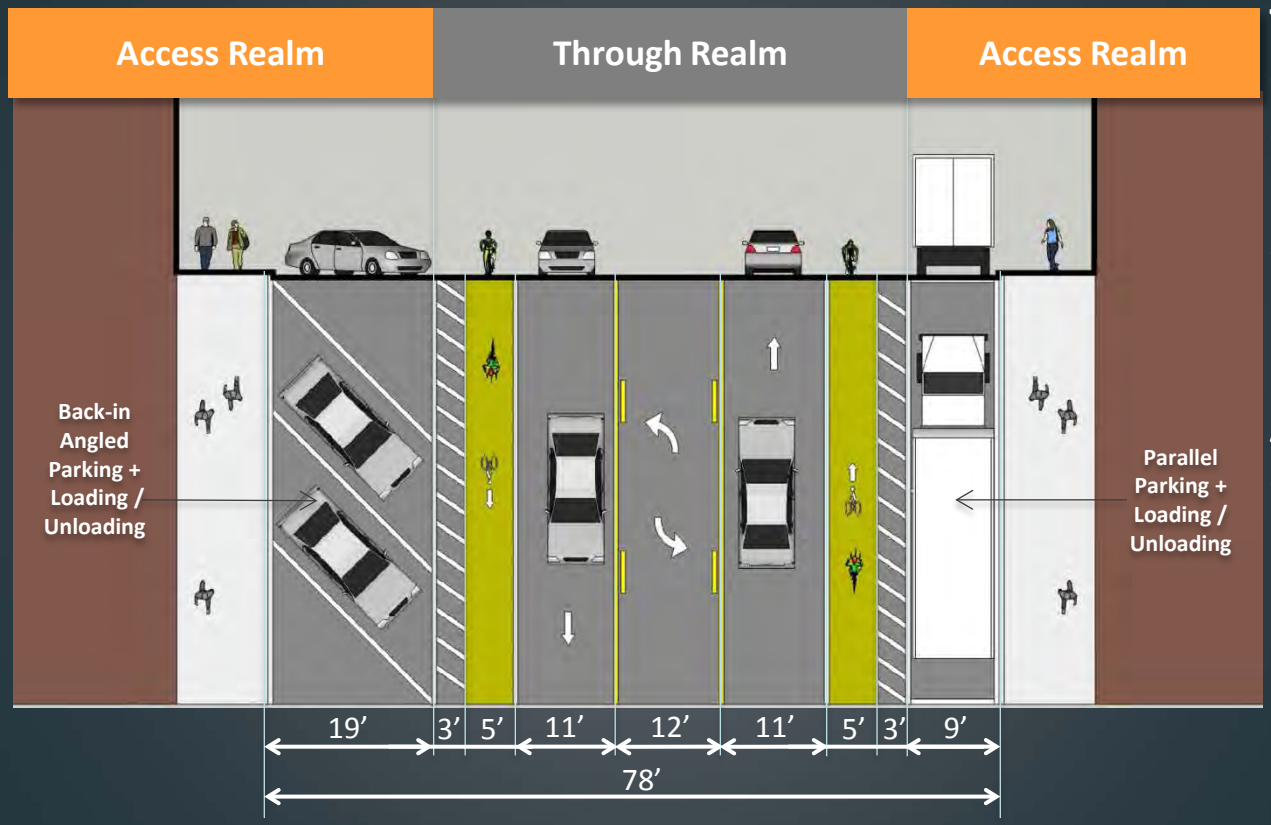


Key Plan

Back-in diagonal parking, buffered bike lanes

WASHINGTON AVENUE TRANSPORTATION AND PARKING STUDY, PHILADELPHIA

WASHINGTON AVENUE OPTION A - 4th STREET TO 7TH STREET AND 11th STREET TO GRAYS FERRY AVENUE

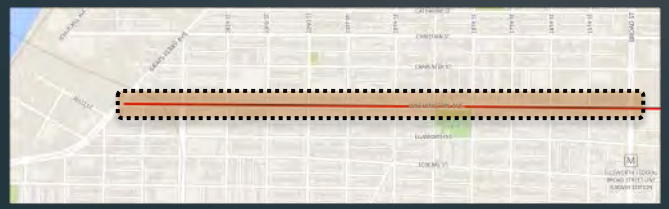


Through Realm

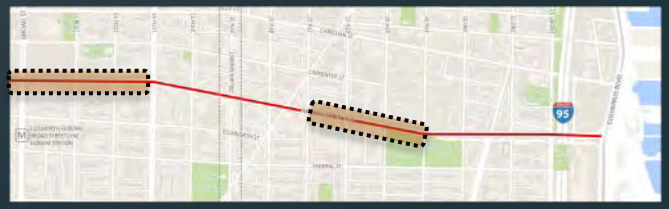
- 2 lanes + center left turn lane
- Left turn restrictions at selected intersections
- Buffered green bike lanes

Access Realm

- Parallel parking + loading / unloading zone

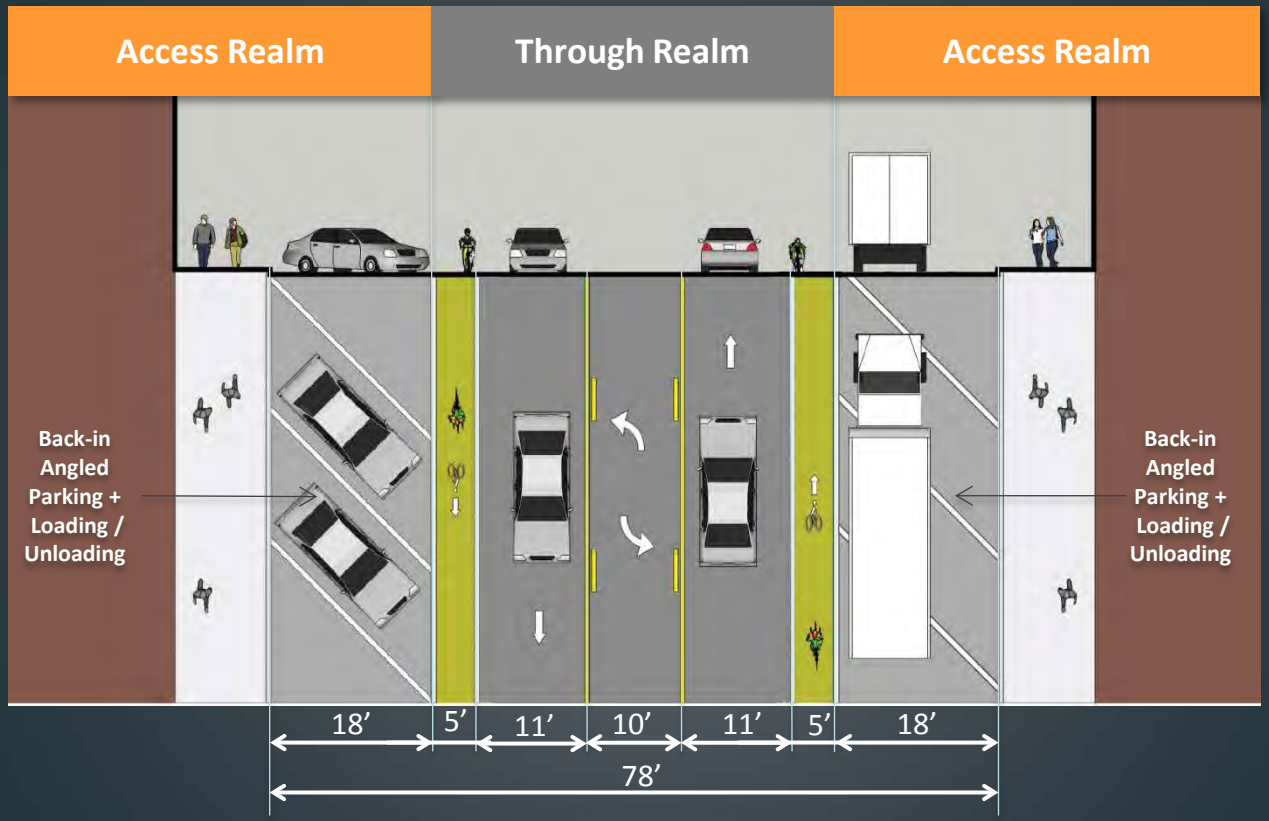


Key Plan



Key Plan

WASHINGTON AVENUE OPTION B - 4th STREET TO 7TH STREET AND 11th STREET TO GRAYS FERRY AVENUE

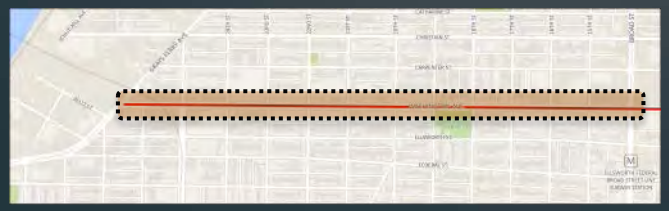


Through Realm

- 2 lanes + center left turn lane
- Left turn restrictions at selected intersections

Access Realm

- Back-in angled parking + loading / unloading zone – More parking spaces



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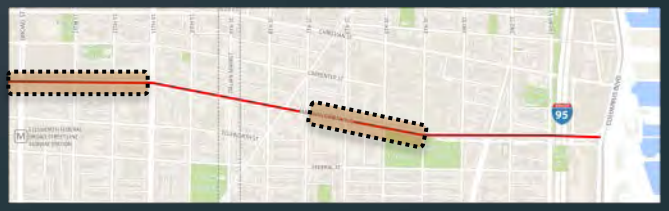
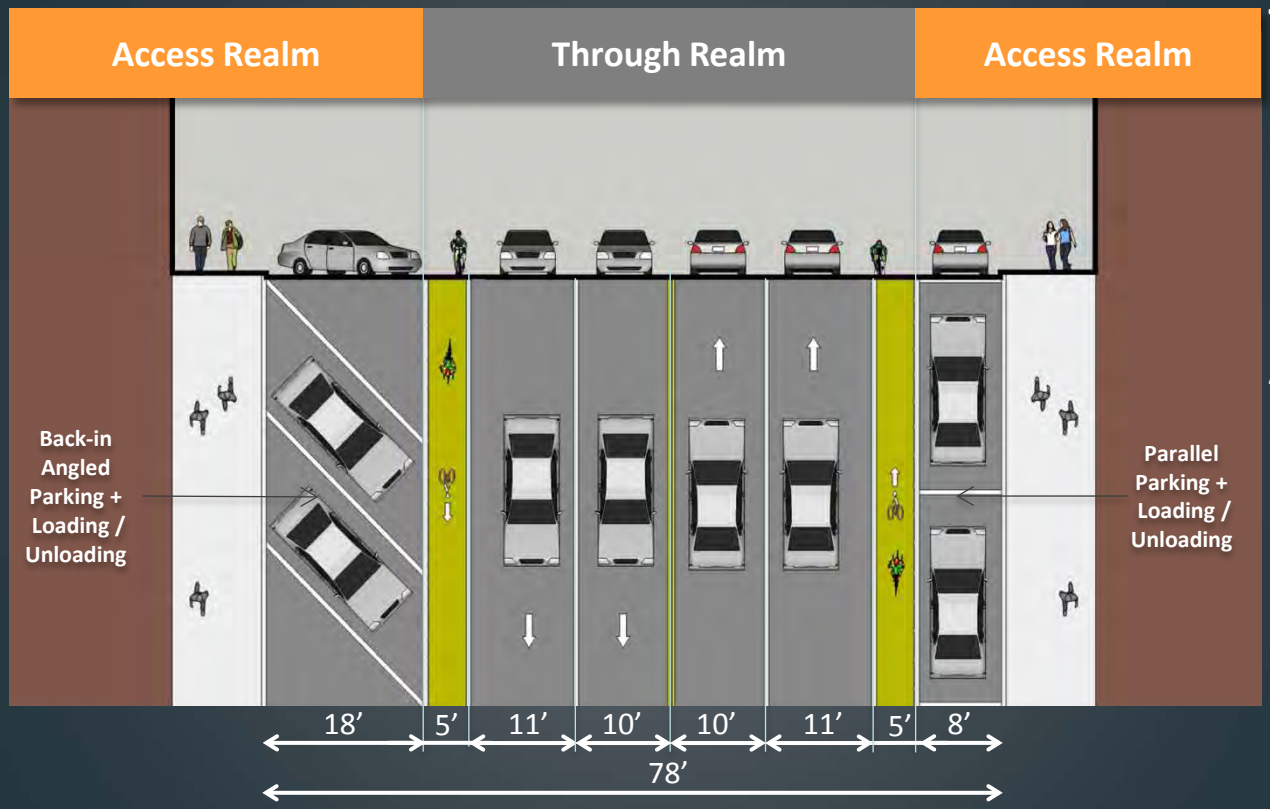


Key Plan

WASHINGTON AVENUE OPTION C - 4th STREET TO 7TH STREET AND 11th STREET TO GRAYS FERRY AVENUE

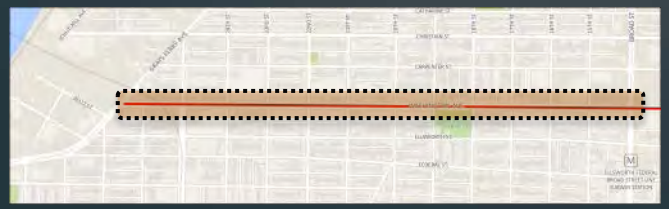


Through Realm

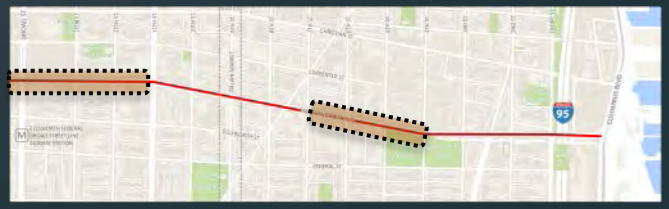
- 4 travel lanes
- Left turn restrictions at selected intersections

Access Realm

- Parallel parking + loading / unloading zone on one side
- Loading + back-in angled parking on another side to provide more parking spaces

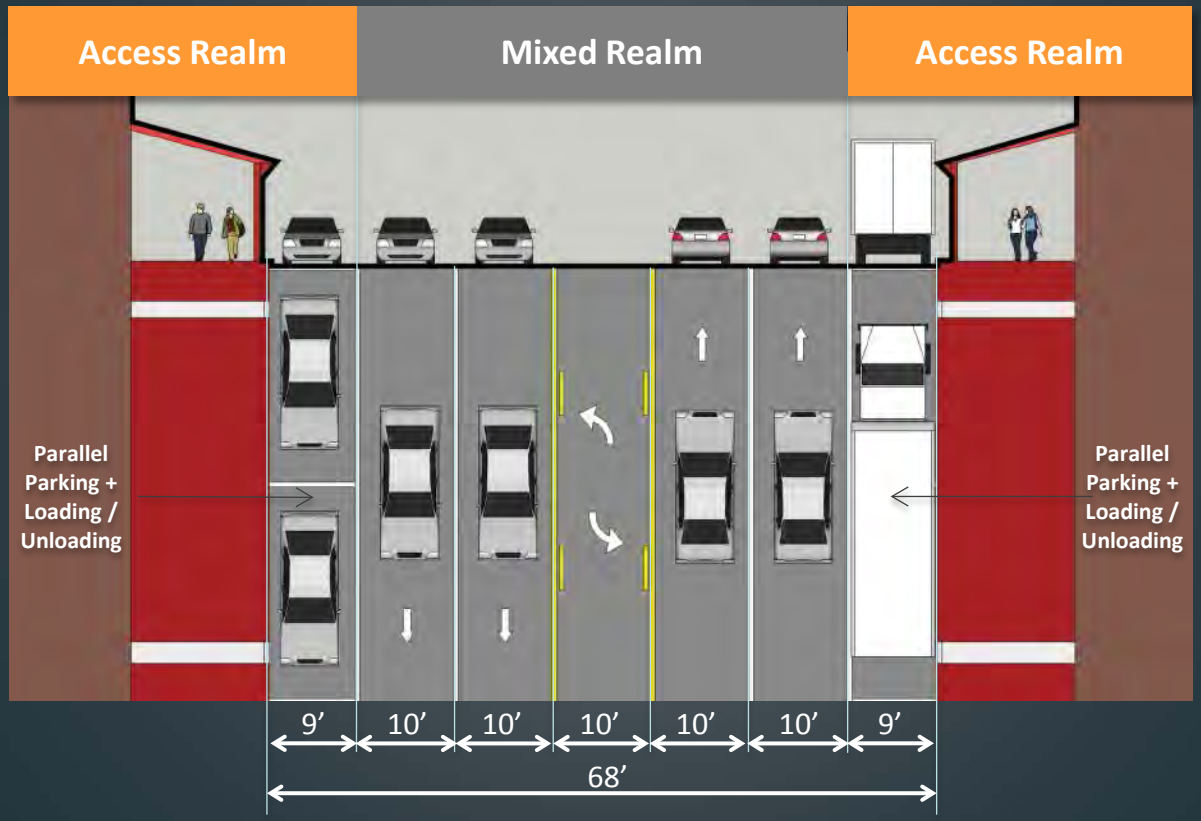


Key Plan



Key Plan

WASHINGTON AVENUE TODAY : 7TH STREET TO 11TH STREET- ITALIAN MARKET

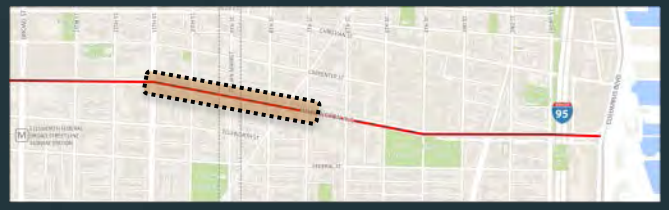


Mixed Realm

- Center left turn lane is currently used for parking and loading / unloading activities
- No bike lanes present
- Left turn restrictions at 9th Street

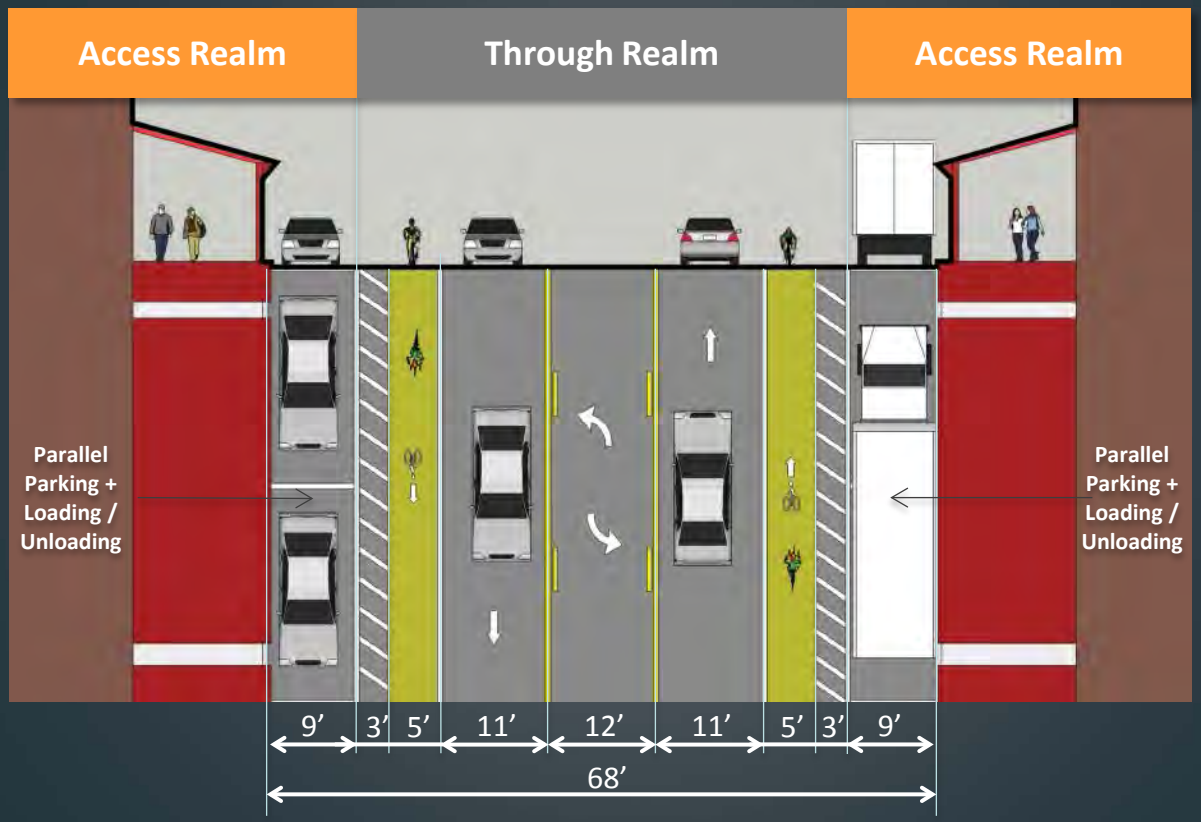
Access Realm

- Italian Market activities occur on the sidewalk and spill over into parking and travel lanes



Key Plan

WASHINGTON AVENUE OPTION A - 7TH ST. TO 11TH ST.- ITALIAN MARKET

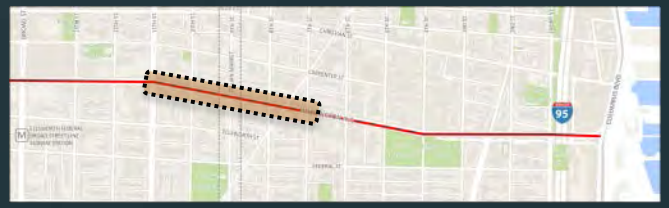


Through Realm

- 2 lanes + center left turn lane
- Left turn restrictions at selected intersections
- Buffered green bike lanes

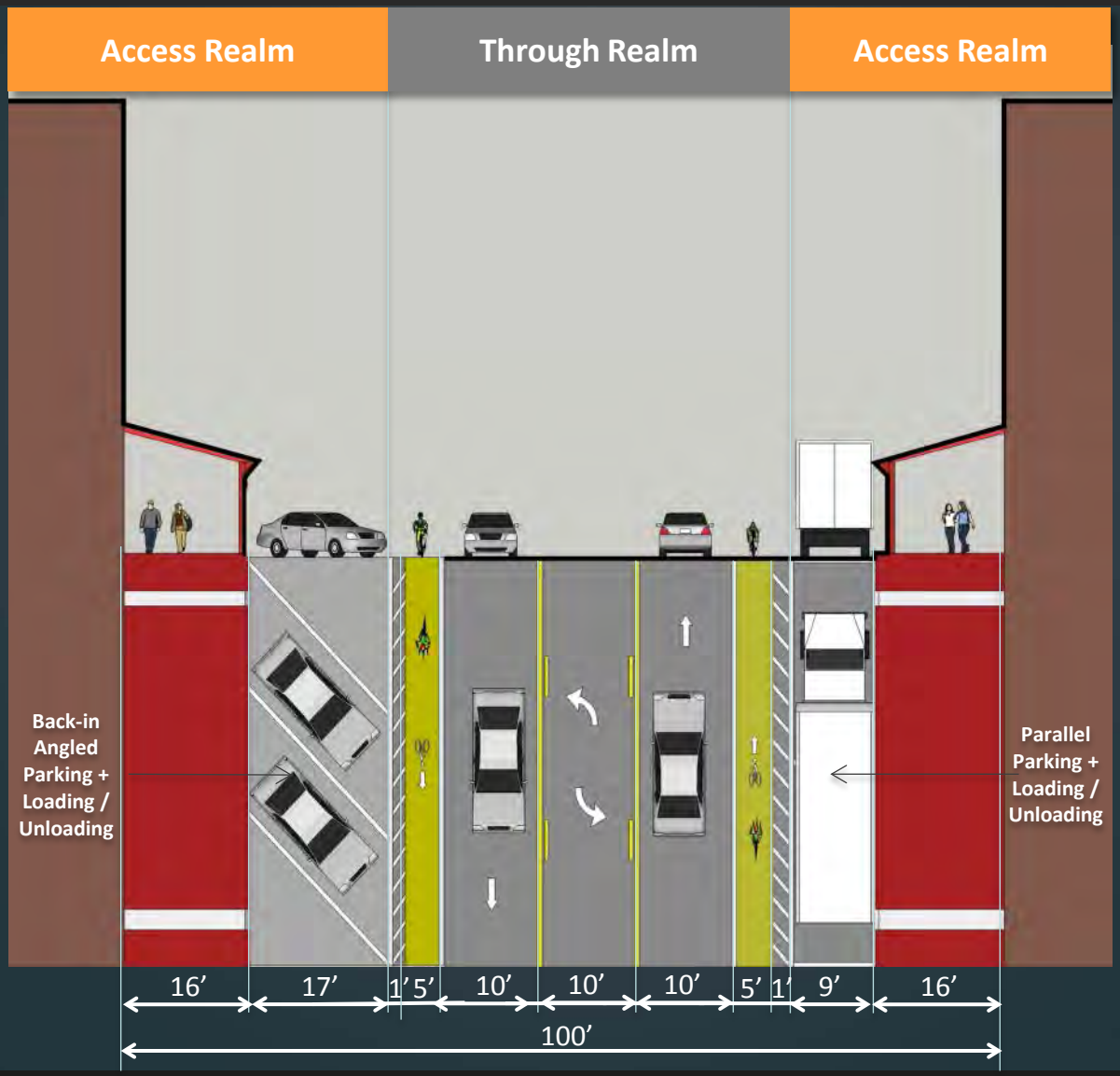
Access Realm

- Parallel parking + loading/ unloading zone
- Pedestrian and market activities



Key Plan

WASHINGTON AVENUE OPTION B - 7TH ST. TO 11TH ST.- ITALIAN MARKET

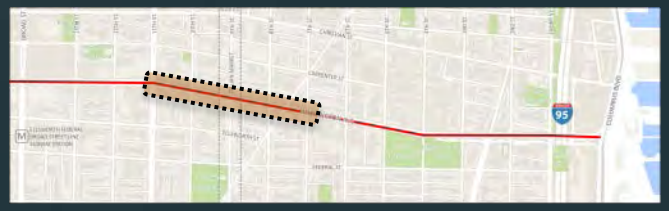


Through Realm

- 2 lanes + center left turn lane
- Left turn restrictions at selected intersections
- Buffered green bike lanes

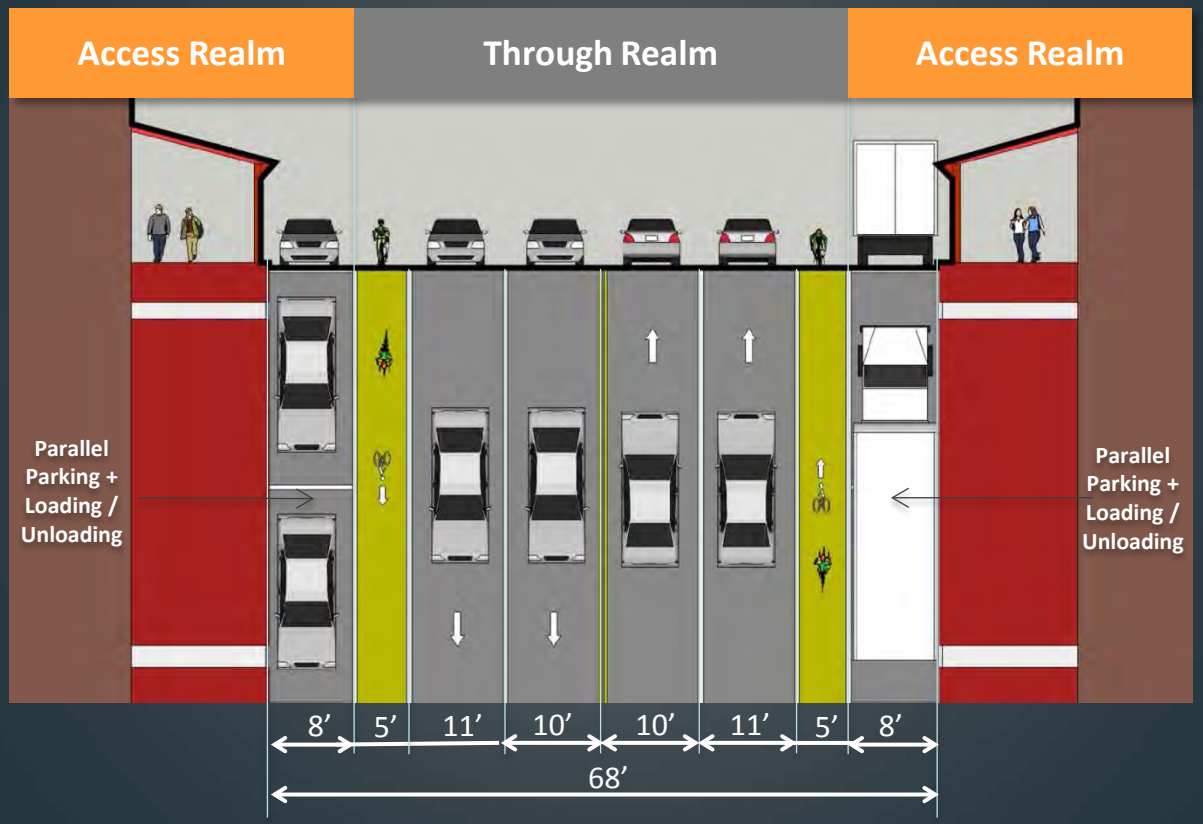
Access Realm

- Parallel parking + loading/ unloading zone on one side
- Back-in angled parking on another side- More parking spaces



Key Plan

WASHINGTON AVENUE OPTION C - 7TH ST. TO 11TH ST.- ITALIAN MARKET

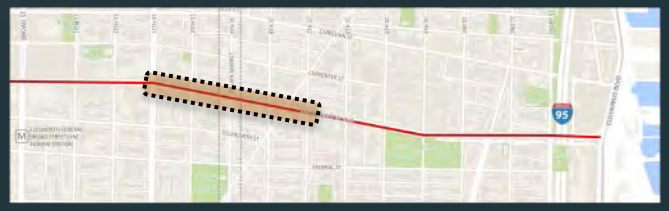


Through Realm

- 4 lanes plus 5' bike lane

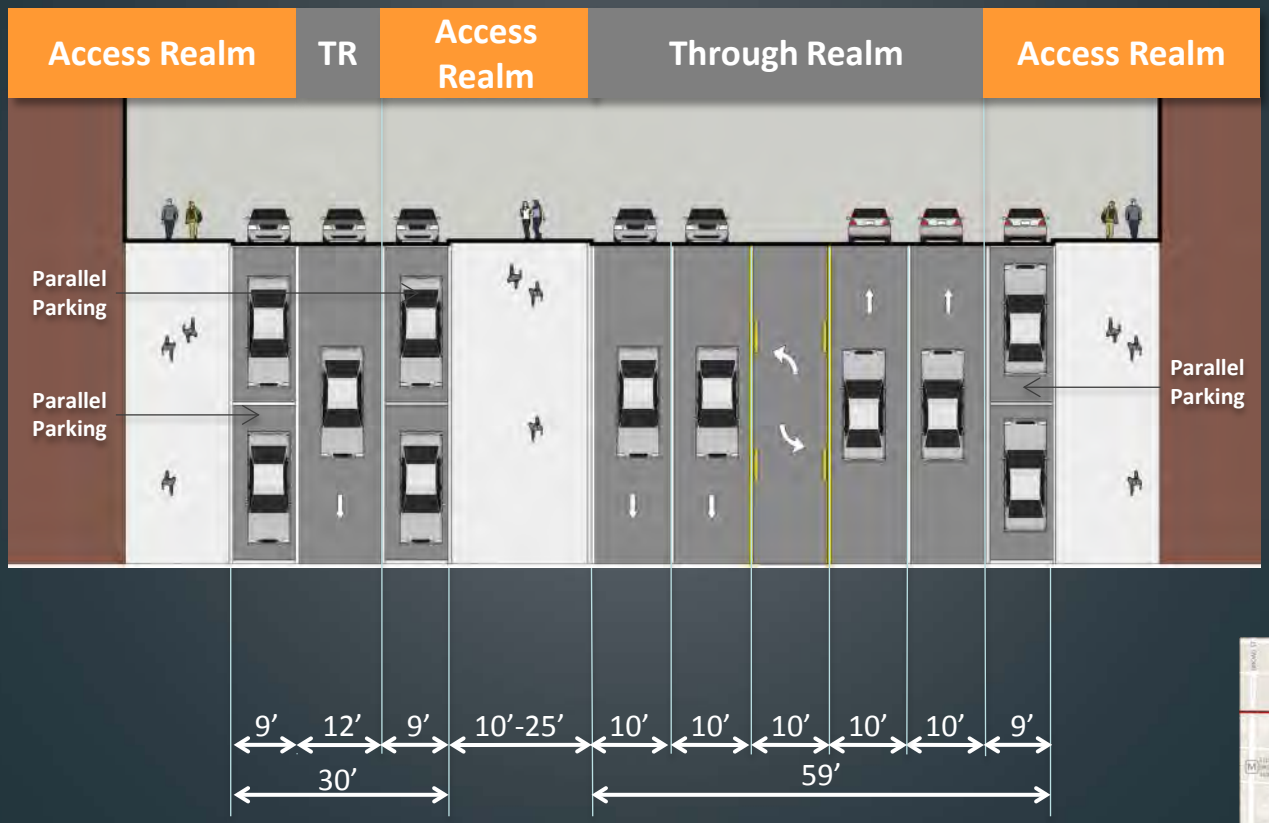
Access Realm

- Parallel parking + loading/ unloading zone
- Pedestrian and market activities



Key Plan

WASHINGTON AVENUE TODAY : COLUMBUS BLVD. TO 4TH ST.

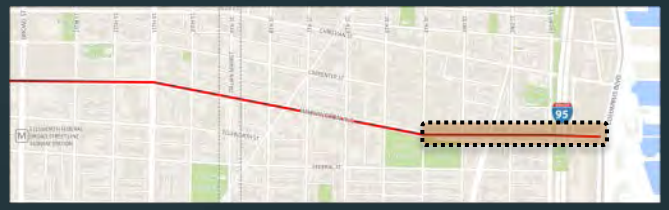


Through Realm

- No bike lanes

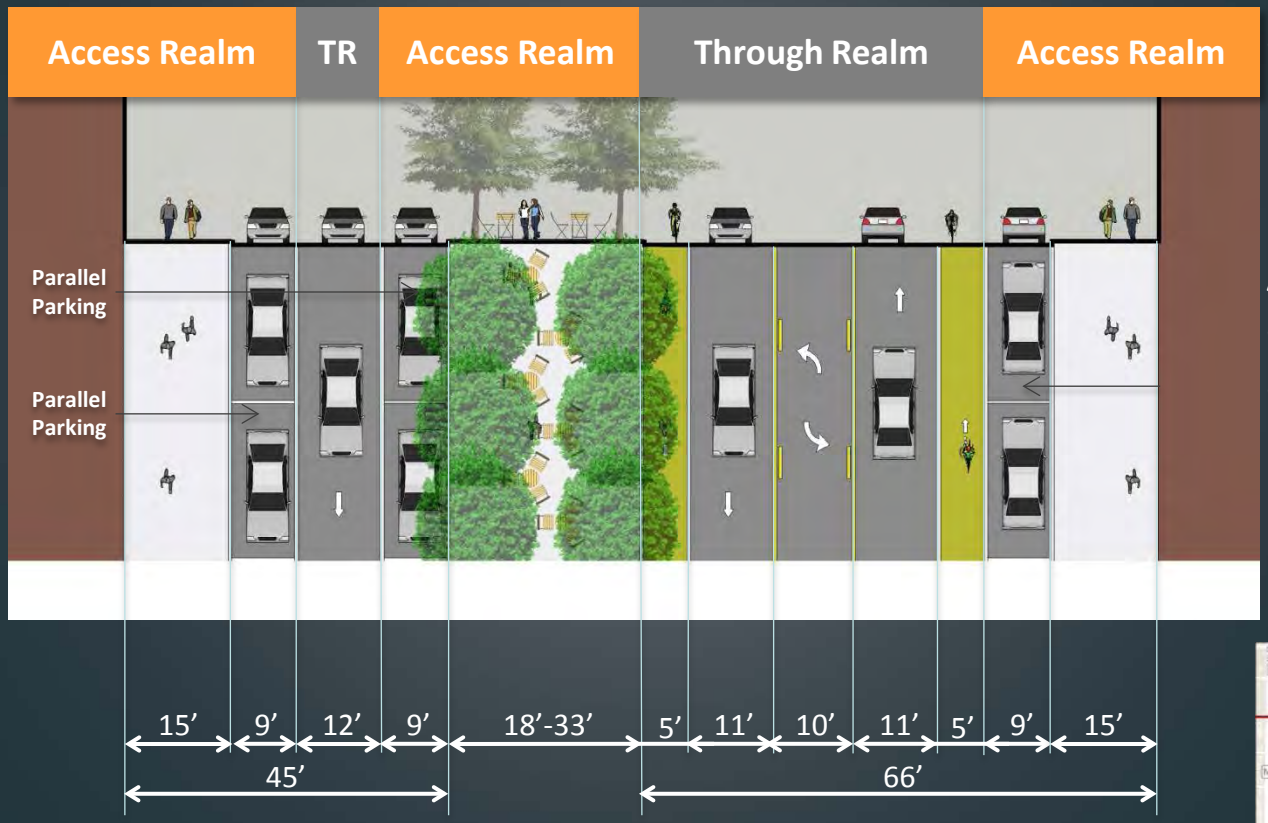
Access Realm

- Central median with varying width



Key Plan

WASHINGTON AVENUE OPTION A : COLUMBUS BLVD. TO 4TH ST.

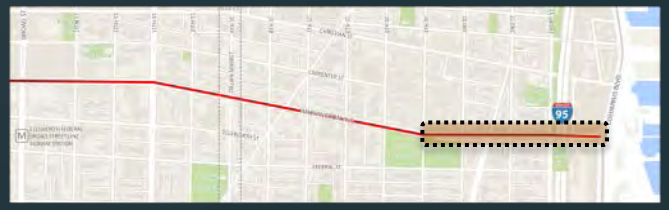


Through Realm

- 2 lanes + center left turn lane
- Left turn restrictions at selected intersections

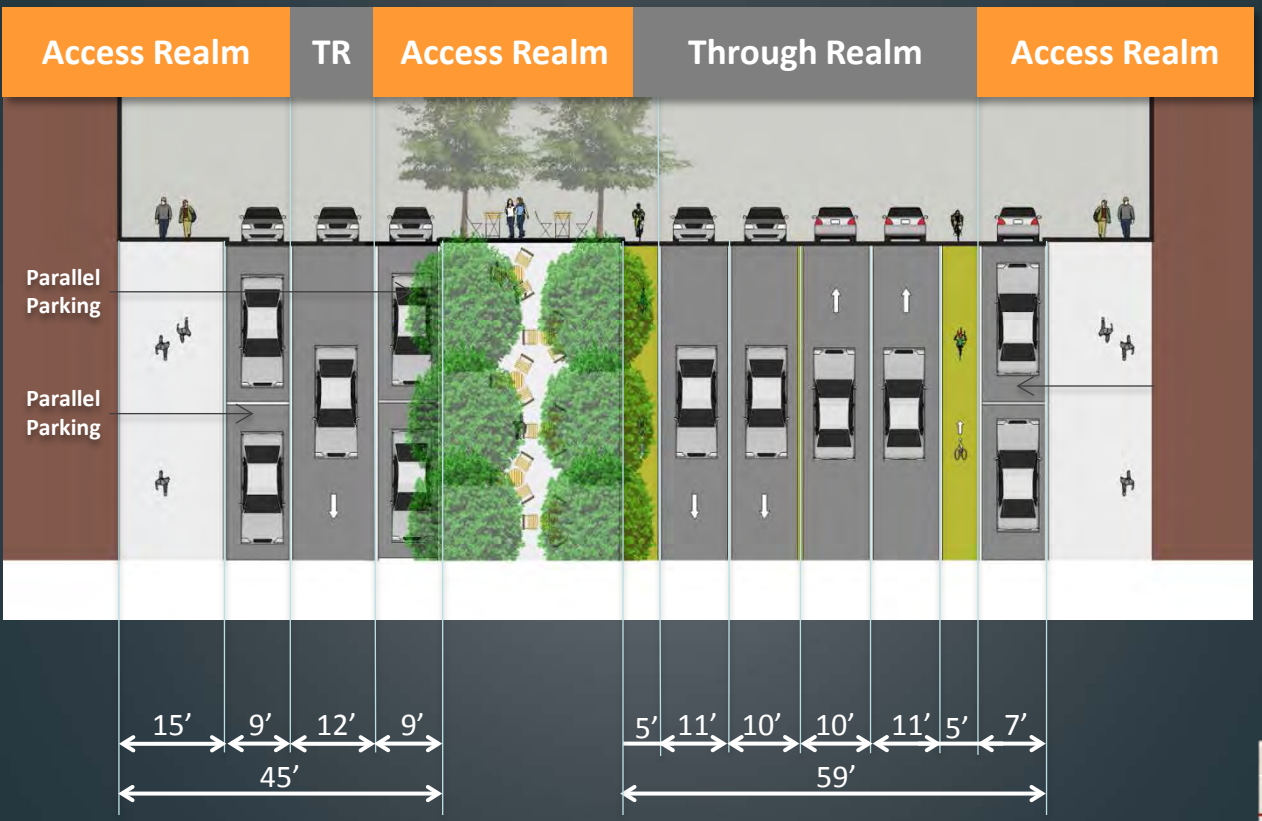
Access Realm

- Access road on south side
- Wider central median width (for parking, through, green)



Key Plan

WASHINGTON AVENUE OPTION B : COLUMBUS BLVD. TO 4TH ST.

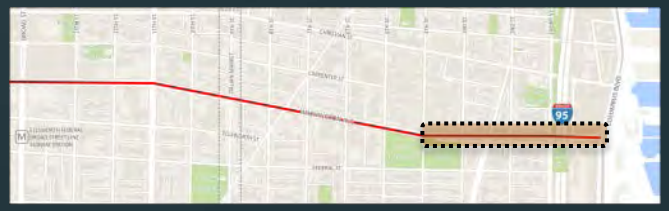


Through Realm

- 4 lanes
- bike lanes

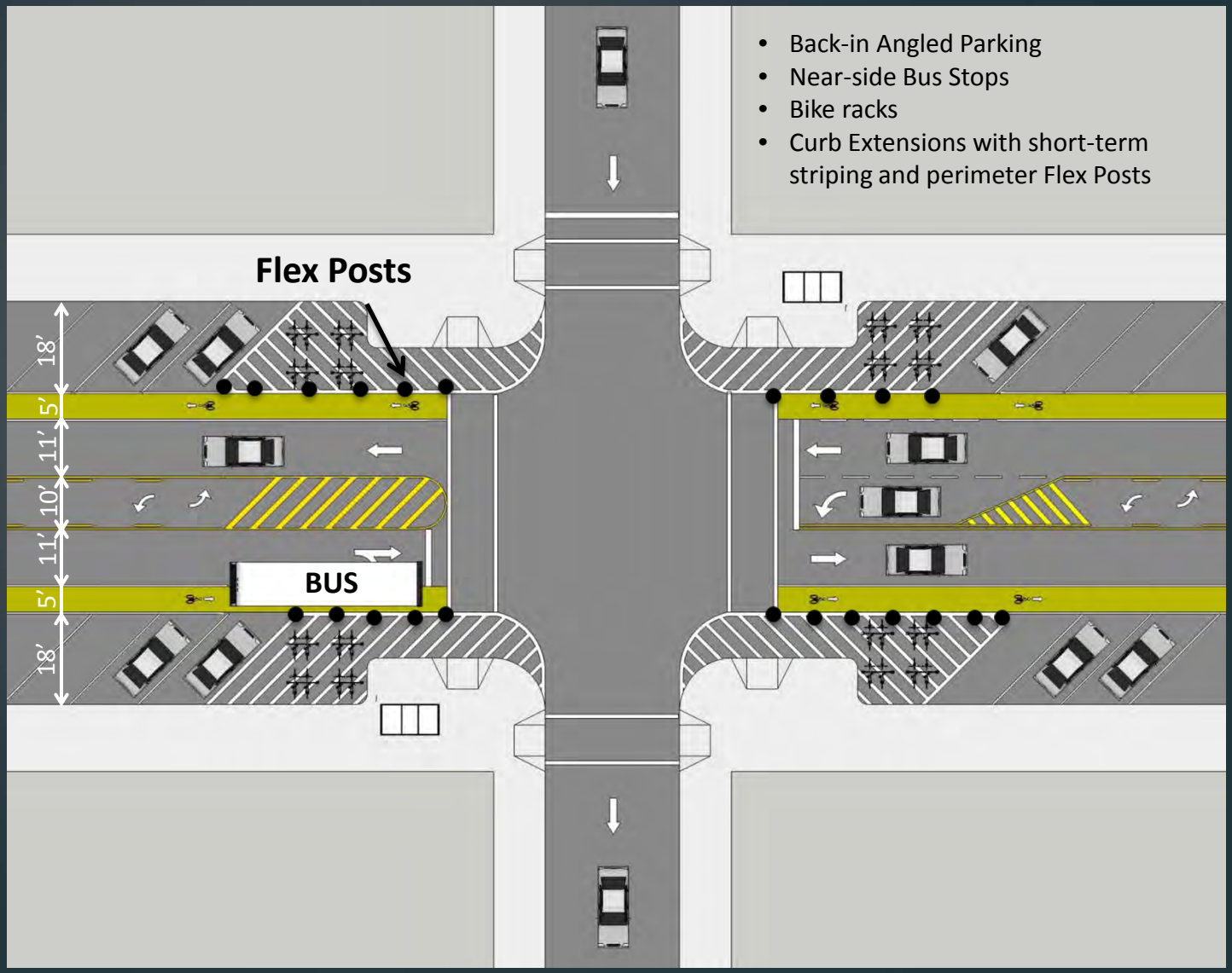
Access Realm

- Access road on south side
- Wider central median width – could be flex space (for parking, through, green)



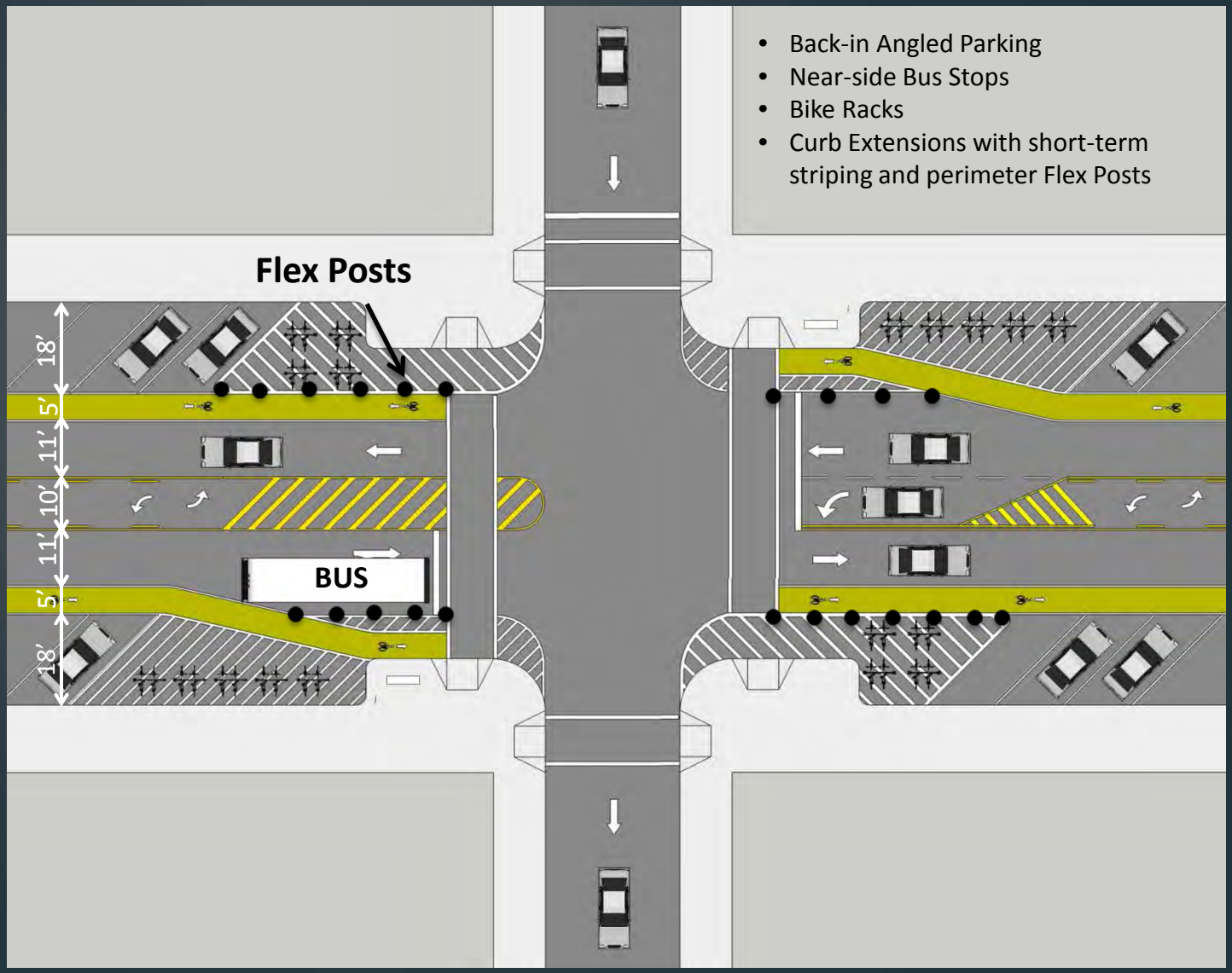
Key Plan

WASHINGTON AVENUE INTERSECTION PLAN- OPTION A



- Back-in Angled Parking
- Near-side Bus Stops
- Bike racks
- Curb Extensions with short-term striping and perimeter Flex Posts

WASHINGTON AVENUE INTERSECTION PLAN- OPTION B



- Back-in Angled Parking
- Near-side Bus Stops
- Bike Racks
- Curb Extensions with short-term striping and perimeter Flex Posts

Hearing from you

DISCUSSION AND QUESTIONS