

# **Pedestrian and Bicycle Master Plan Update Ad Hoc Advisory Committee**

June 8, 2015





# Agenda

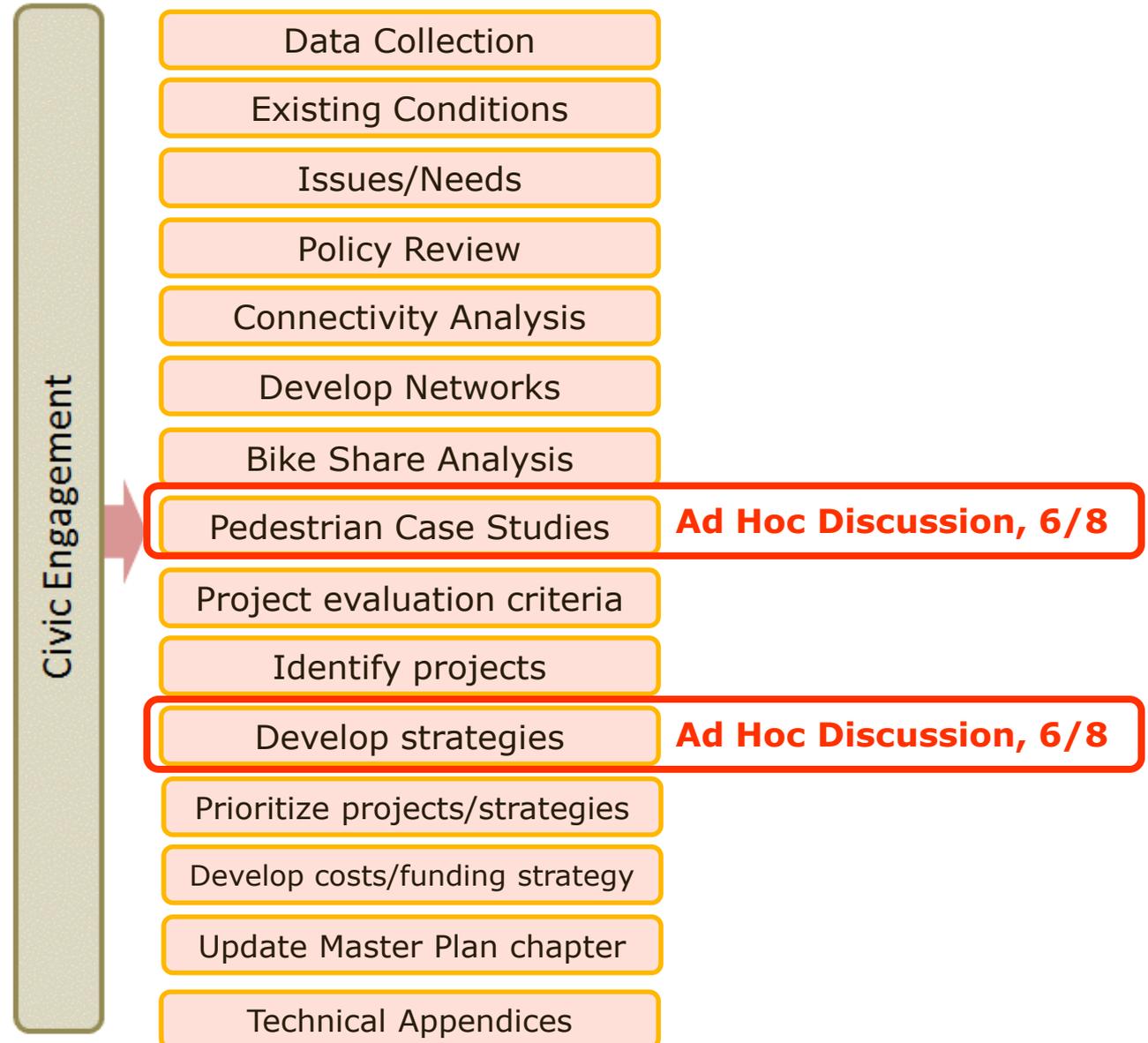
1. Welcome and Introductions
2. Project Schedule Overview
3. Recap from Bicycle Network Discussion
4. Draft Pedestrian Case Studies
5. Draft Pedestrian Strategies
6. Public Comment
7. Committee Member Updates
8. Next Steps



# Project Schedule Overview



# Project Milestones/Tasks





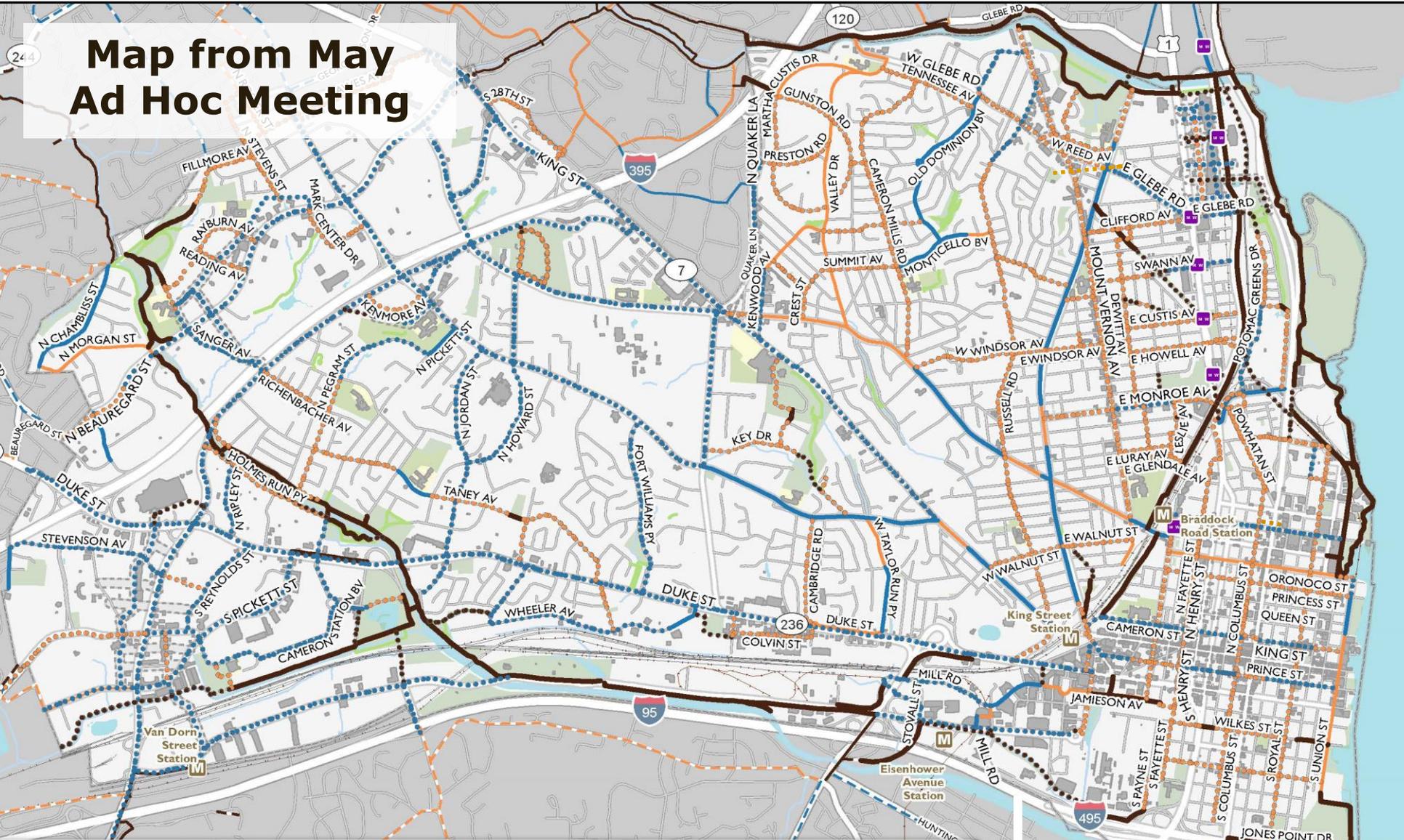
# Draft Bicycle Network

# Draft Citywide Bicycle Network



Committee Input	Changes Made
A. Need for more continuous, low stress routes	Added ~1.3 miles of enhanced bicycle corridor to provide more continuity of experience
B. Need for improved transitions on/off trails	Evaluated trail transitions as part of Case Study field work. Including strategies in plan related to this issue.
C. Overuse of shared roadways	Removed some shared roadway recommendations that were redundant with nearby routes or unnecessary (low volume neighborhood streets)
D. Bicycle and pedestrian conflicts in Old Town, particularly along Union Street and King Street	Included pedestrian strategy in the plan, proposed enhanced bicycle corridor parallel to King Street, and shared bicycle corridor parallel to Union Street

# Map from May Ad Hoc Meeting



## DRAFT Recommended Bicycle Network

Bike Facility Group	Existing Facilities	Metro Station
Enhanced Bicycle Corridor	Bike Lane	Metroway Stop
Shared Roadway	Sharrow	Future Street
Trail	Trail	
	Unpaved Nature Trail	

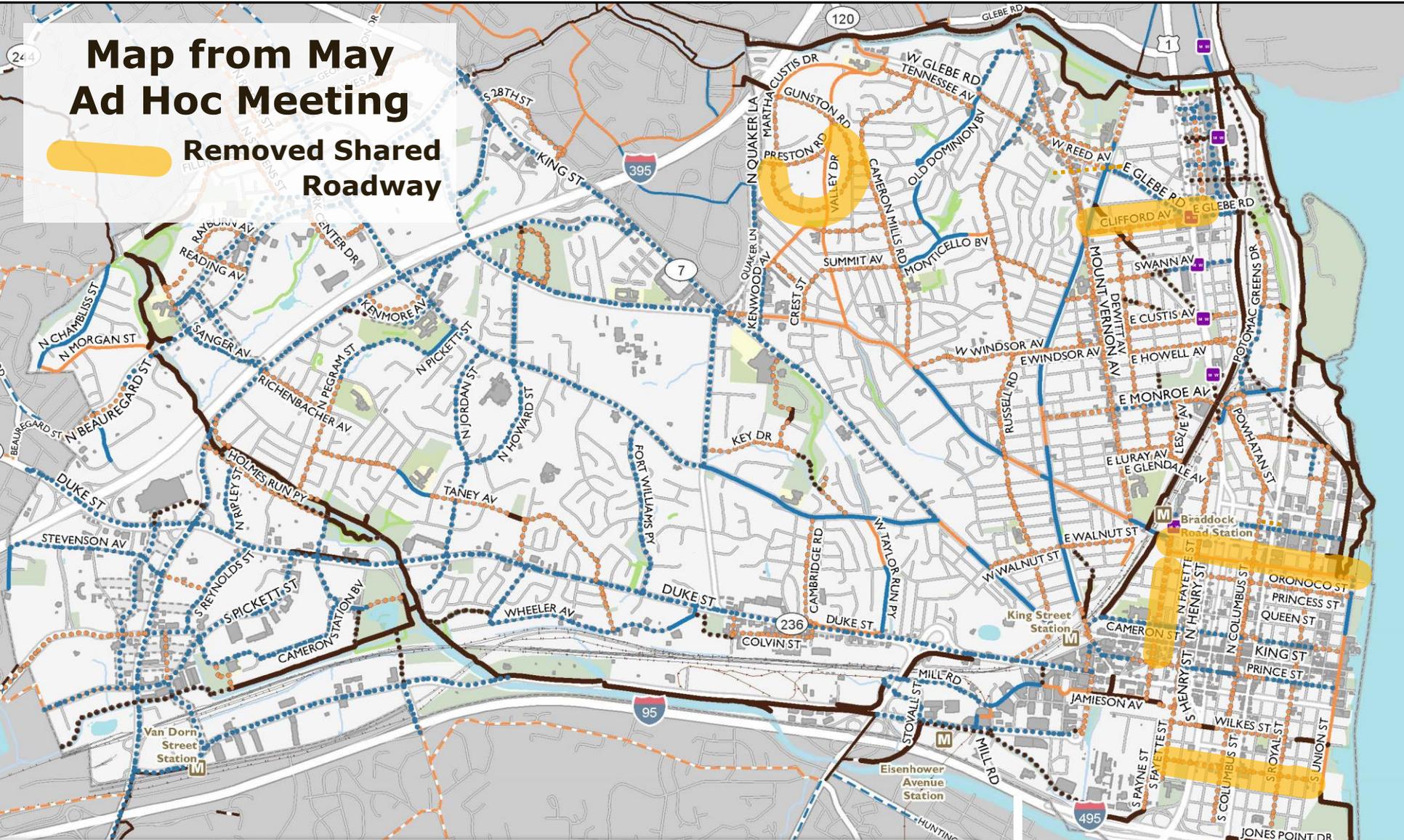
Date: 4/10/2015

0 0.125 0.25 0.5 Miles

Bike Facility Group	Existing Facilities	Metro Station
Enhanced Bicycle Corridor	Bike Lane	Metroway Stop
	Sharrow	
	Trail	
	Unpaved Nature Trail	

# Map from May Ad Hoc Meeting

**Removed Shared Roadway**



## **DRAFT** Recommended Bicycle Network

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Shared Roadway	Sharrow	Metroway Stop
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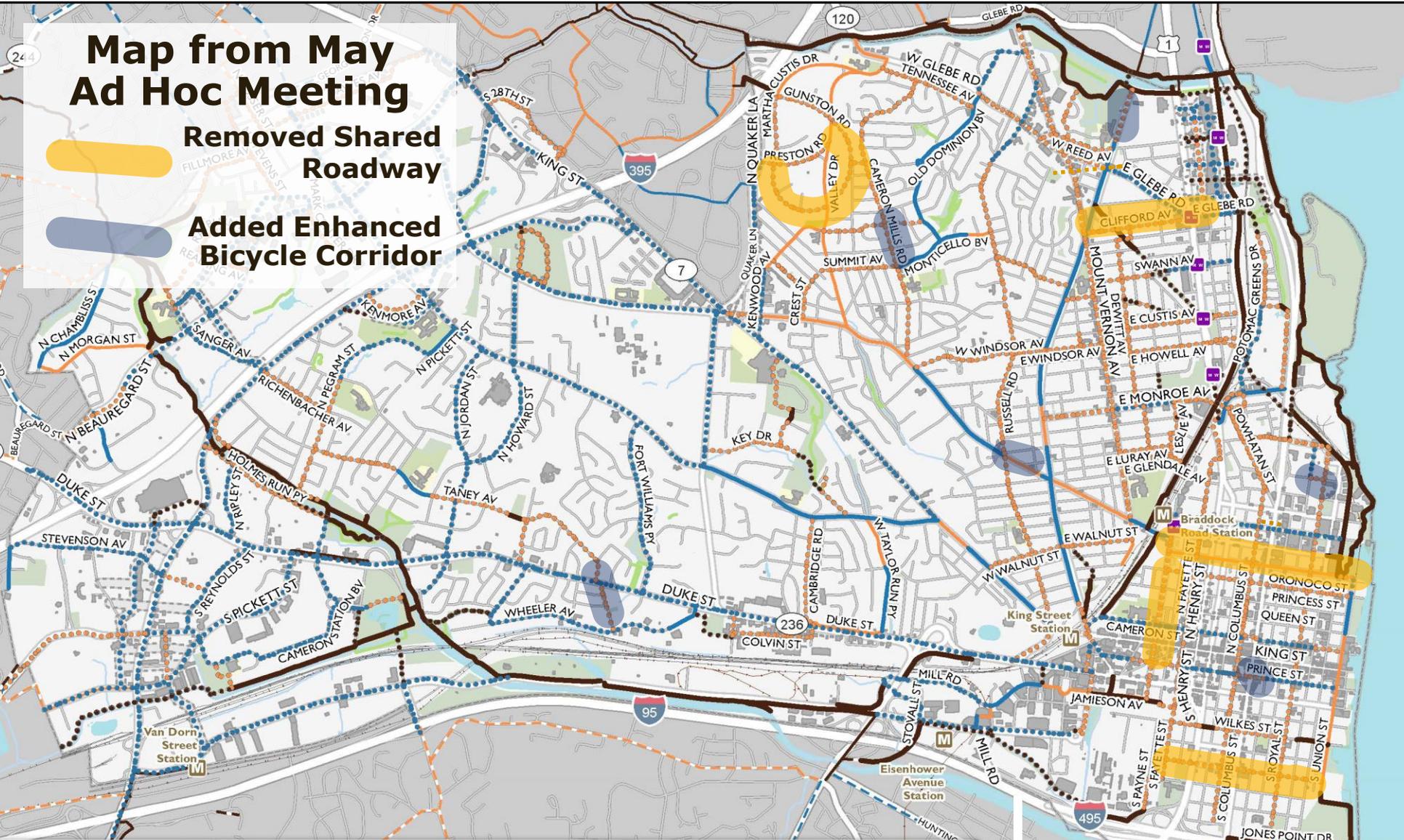
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Enhanced Bicycle Corridor	Bike Lane	Metro Station
	Sharrow	Metroway Stop
	Trail	
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# Map from May Ad Hoc Meeting

Removed Shared Roadway

Added Enhanced Bicycle Corridor



## DRAFT Recommended Bicycle Network

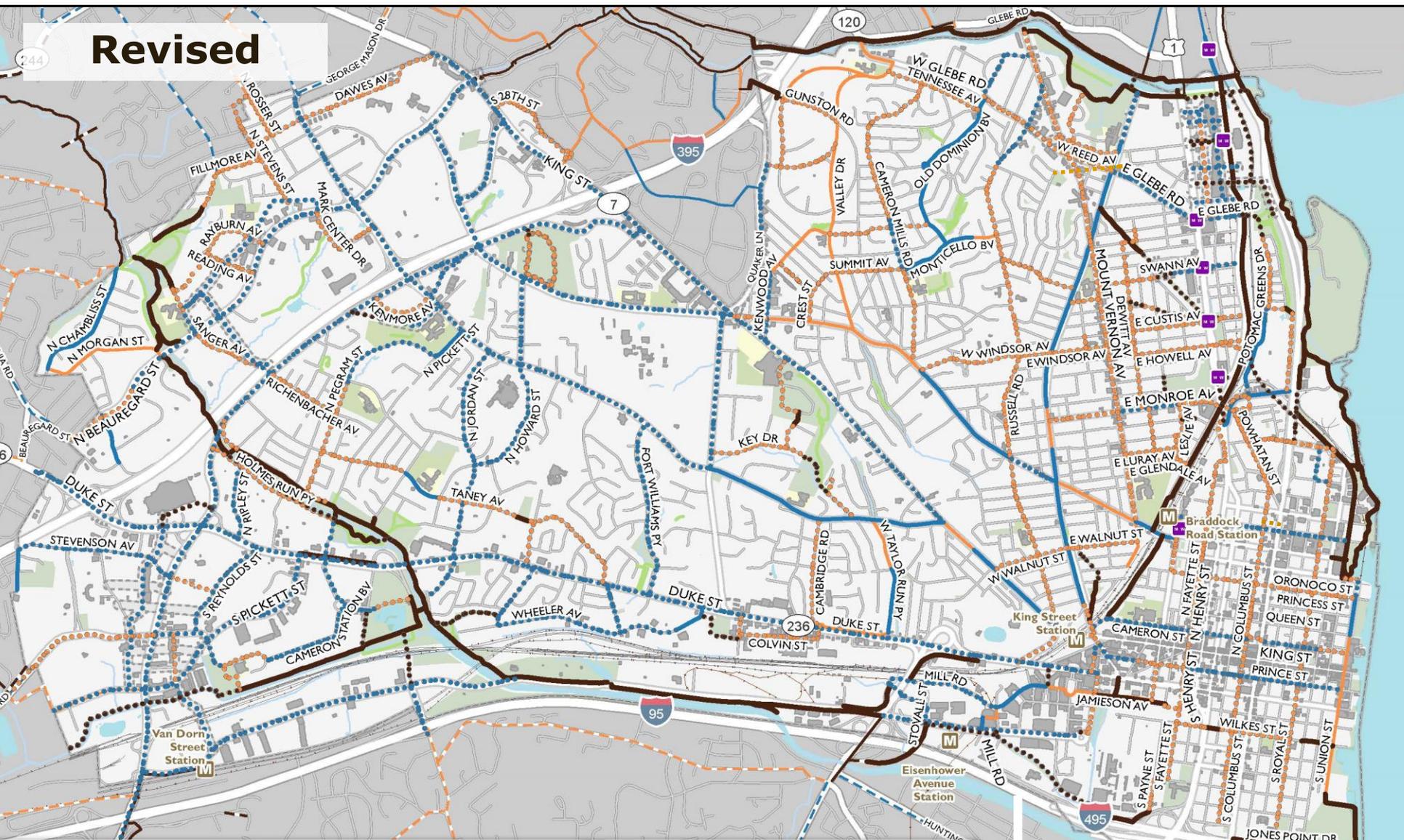
Bike Facility Group		Existing Facilities		Metro Station	
	Enhanced Bicycle Corridor		Bike Lane		Metro Station
	Shared Roadway		Sharrow		Metroway Stop
	Trail		Trail		Future Street
			Unpaved Nature Trail		

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	Trail		Trail		Future Street

Revised



# DRAFT Recommended Bicycle Network

Bike Facility Group	Existing Facilities	Metro Station
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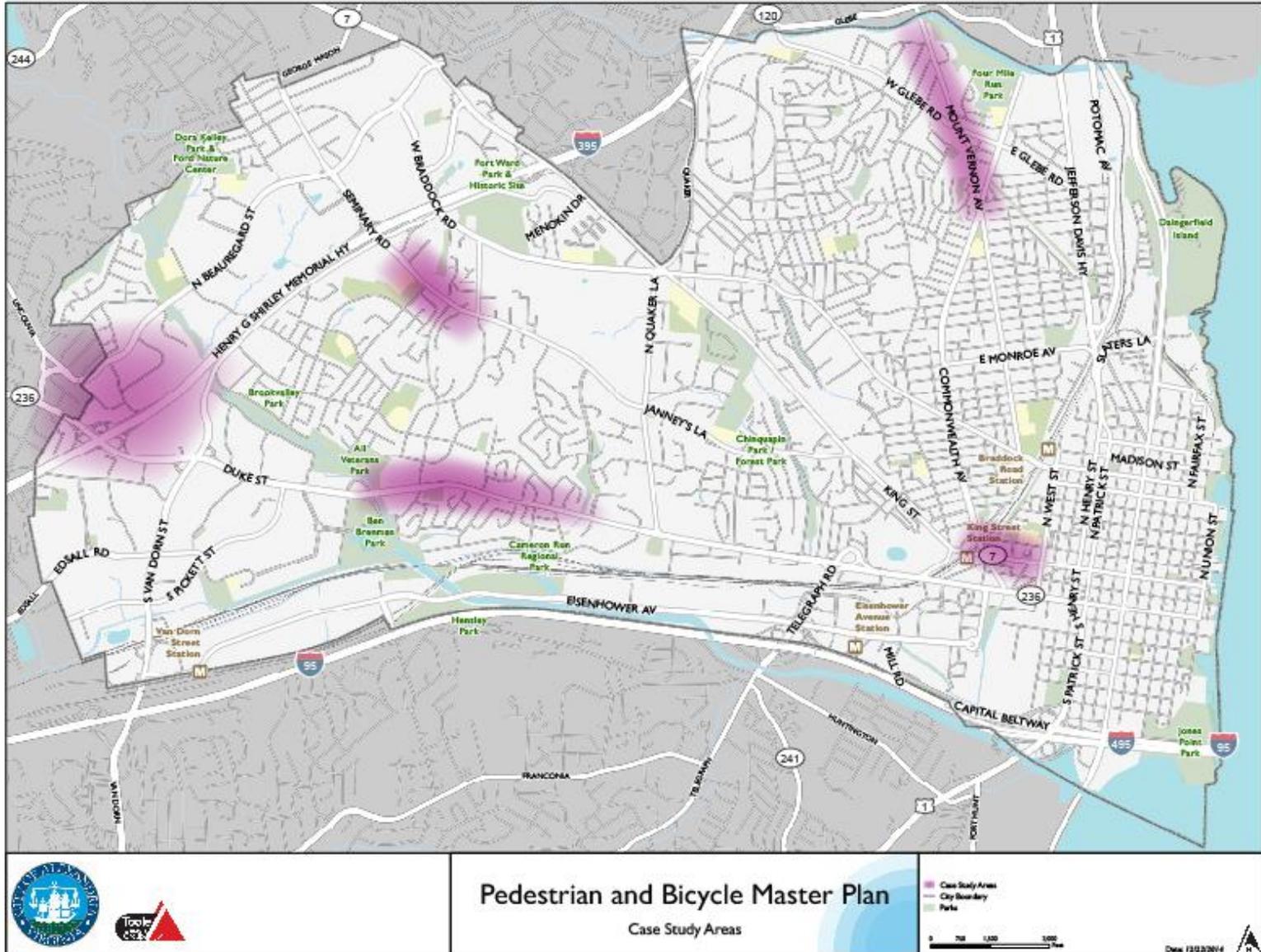
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# Pedestrian Case Studies Update

# Pedestrian Case Study Areas



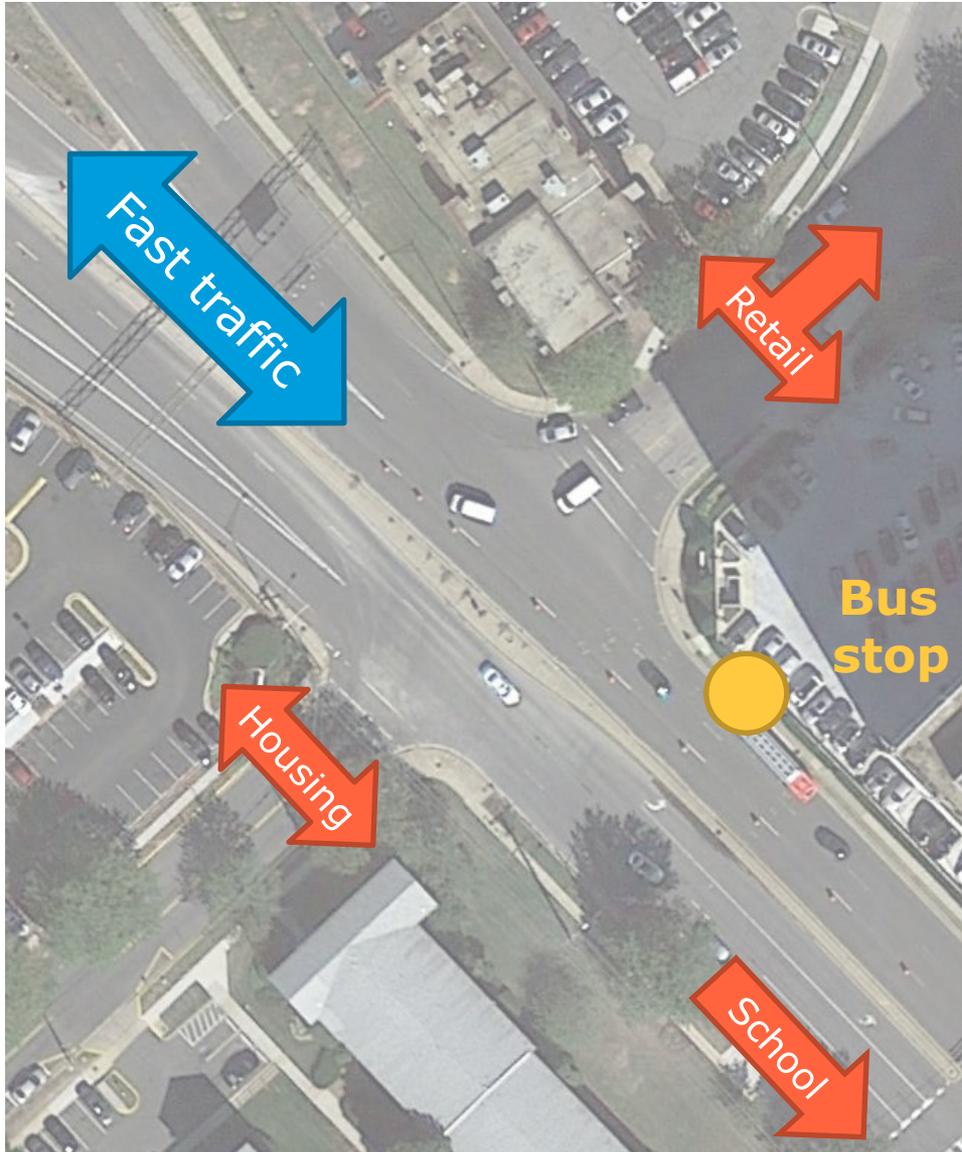
# Pedestrian Case Studies



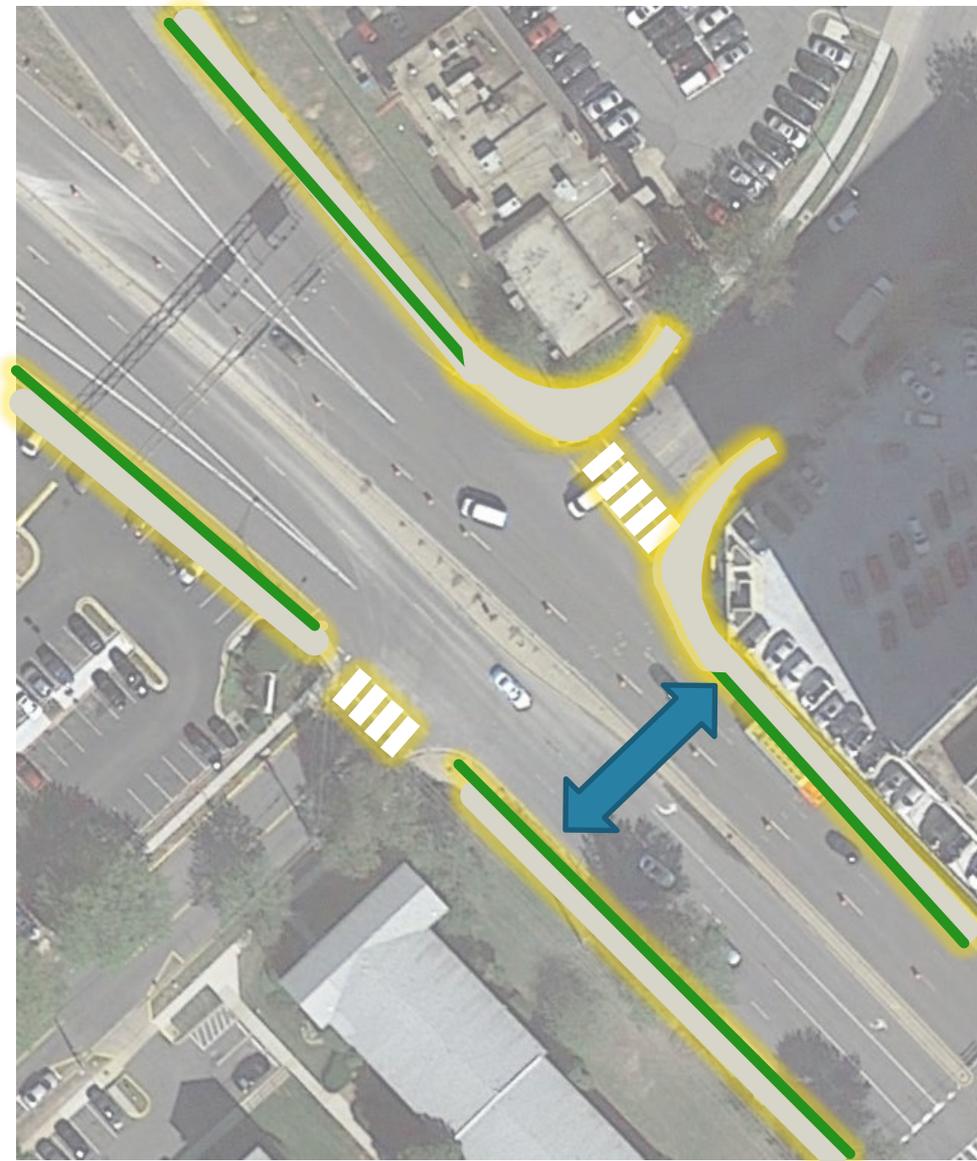
	<b>CASE STUDIES:</b>	<b>I-395 and Landmark Mall</b>	<b>Hammond Middle School Area</b>	<b>Duke Street Corridor</b>	<b>Mount Vernon Ave/ Four Mile Run</b>	<b>King Street Station</b>
<b>THEMES / CHALLENGES</b>	Major Barriers/Freeway Interchanges	✓	✓			✓
	Schools and Neighborhoods		✓		✓	
	Transit Access and Integration	✓		✓		
	Neighborhood Main Streets				✓	
	Suburban Commercial Connectors	✓		✓		
	Trail/Roadway Transitions				✓	
	Lack of connectivity around large apartment complexes/ commercial buildings	✓		✓		
	Curb ramps/ADA upgrades	✓	✓	✓	✓	
	Maintenance of sidewalks	✓		✓	✓	
	Sidewalk gaps and narrow sidewalks	✓	✓	✓		✓
	Conflicts between people walking and people biking			✓	✓	✓



# Example: Kenmore Avenue and Seminary Road



# Example: Kenmore Avenue and Seminary Road



- Reduce turning radius to slow vehicles and shorten pedestrian travel distance
- Widen sidewalks and buffers
- Install high visibility crosswalks and replace curb ramps
- Improve signage
- Strategy for unsignalized crossing:
  - Short term: Move bus stop closer to crosswalk
  - Longer term: Evaluate possible signal or other strategies



# Committee Discussion:

Are there questions or input about the draft case study maps?



# Draft Pedestrian Strategies

# Draft Pedestrian Strategies



- Tonight's focus is on engineering strategies
  - Programs and policies will be discussed at the next meeting
- Strategies were developed based on:
  - 2008 Transportation Master Plan
  - Ad Hoc Committee and Public input
  - City staff input
  - Case Study Area field work

# Changes from the 2008 Transportation Master Plan



- Separate design guidelines provide design options to implement the plan
- Emphasis on closing of sidewalk gaps, sidewalk maintenance
- Reducing walking and bicycling conflicts on sidewalks
- *Implementation of* instead of *development of* design guidelines
- Focus on improving crossing conditions, including crosswalk placement and design, and removal of slip ramps
- More emphasis on trail access and safety, and Safe Routes to School

# Draft Pedestrian Engineering Strategies

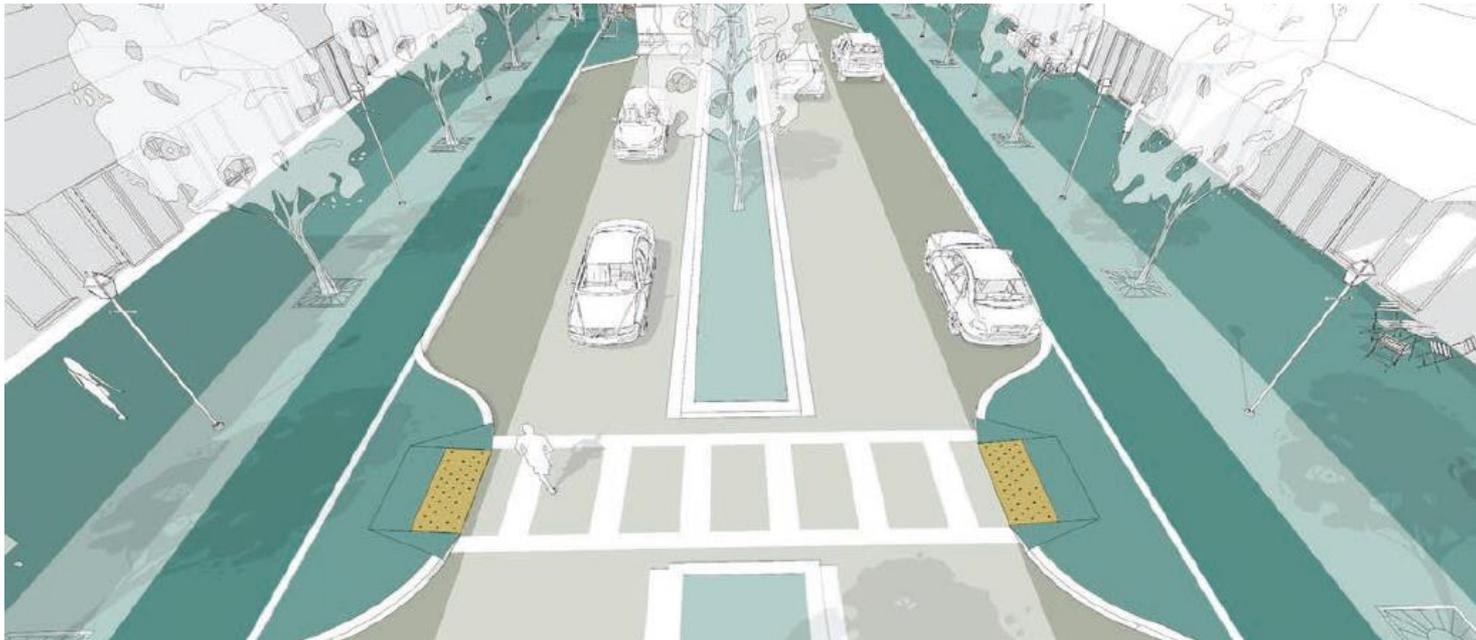


1. Apply the Complete Streets Design Guidelines for all new development and future capital improvement projects.
2. Close sidewalk gaps and improve sidewalks where needed.
3. Prioritize and standardize curb ramp upgrades and other ADA improvements.
4. Improve safety and access through and across major barriers including freeways, waterways and rail corridors.
5. Improve crossing conditions, especially in areas with high pedestrian demand.
6. Improve access and safety for all users on trails; particularly at entrance/exit points.
7. Reduce conflicts between bikes and pedestrians on sidewalks.
8. Improve pedestrian access to transit.
9. Improve walkability, connectivity and ADA access near schools.

# Pedestrian Engineering Strategy: Apply the Complete Streets Design Guidelines for all new development and future capital improvement projects



- Sidewalk widths for various street types
- Sidewalk materials
- Street trees
- Driveway and alley design
- Wayfinding and street furnishings
- Seating
- Bicycle parking
- Bus stops / shelters
- And more.....



# Pedestrian Engineering Strategy: Close sidewalk gaps and improve sidewalks where needed



**Sidewalk Gaps**



**Narrow Sidewalks**



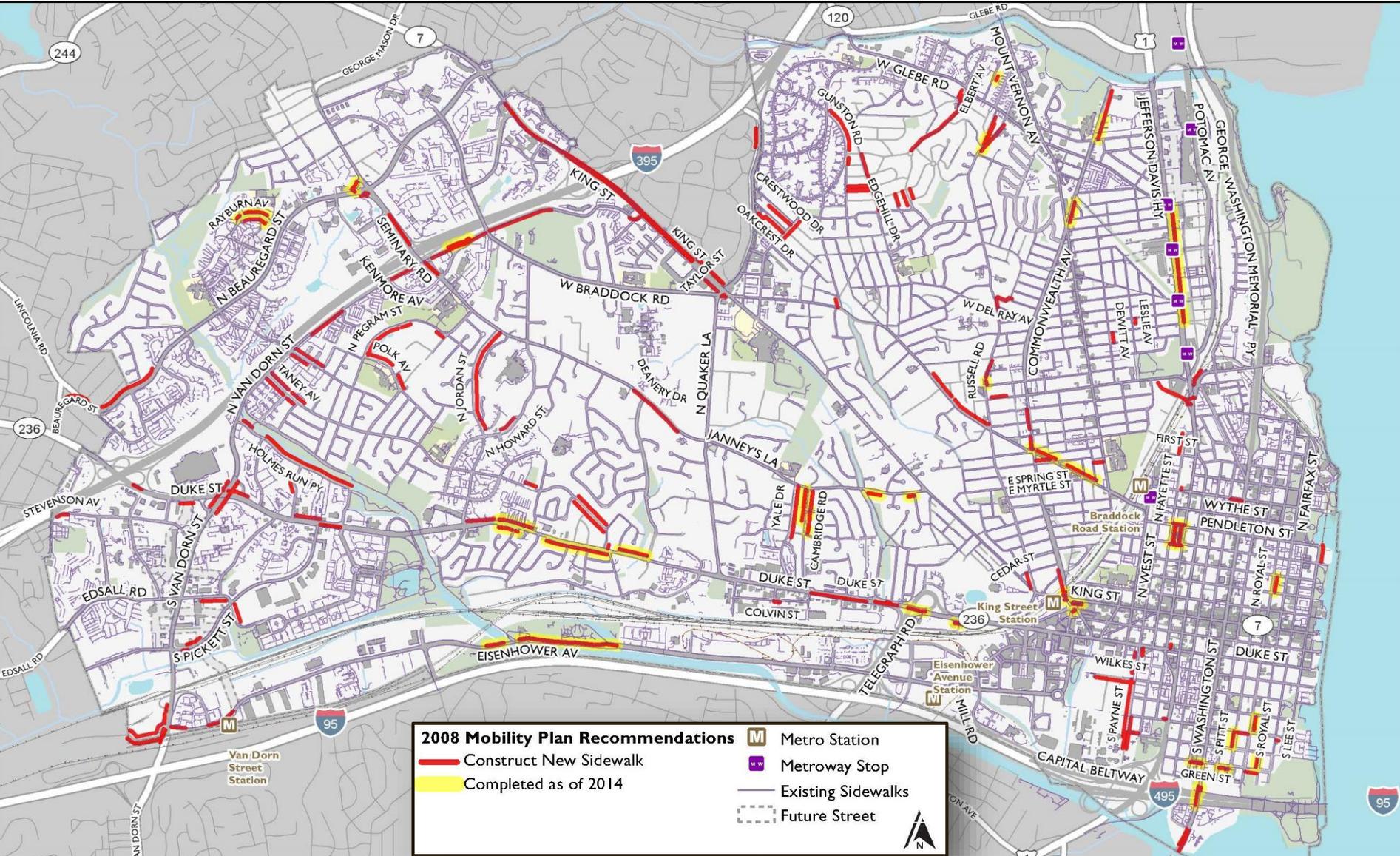
**Maintenance Issues**



**Obstructions**



# Pedestrian Engineering Strategy: Close sidewalk gaps and improve sidewalks where needed



# Pedestrian Engineering Strategy: Close sidewalk gaps and improve sidewalks where needed



**Complete Streets Design Guidelines include new street typologies with recommended sidewalk width standards**



FRONTAGE ZONE

PEDESTRIAN ZONE

AMENITY ZONE

# Pedestrian Engineering Strategy: Prioritize and standardize curb ramp upgrades and other ADA improvements



- Common accessibility challenges at intersections include:
  - Diagonal ramps
  - No tactile warning pad / strip
  - Inaccessible / inaudible pedestrian pushbuttons
  - Inadequate space or steep slopes
  - Uneven surfaces



# Pedestrian Engineering Strategy: Prioritize and standardize curb ramp upgrades and other ADA improvements



- Curb ramps should be provided at every crossing
  - ADA design standards
  - Where feasible, use 2 separate perpendicular curb ramps
- Pedestrian pushbuttons should be easily activated and conveniently located



# Pedestrian Engineering Strategy: Reduce conflicts between bikes and pedestrians on sidewalks



- Most prevalent in:
  - Commercial districts
  - Places without high-quality on-street bicycle facility
- Younger and inexperienced bicyclists are more likely to ride on sidewalks
- Consistent with VA state law, current city law permits bicycle on sidewalks in Alexandria except where prohibited:
  - King Street east of West Street
  - Union Street between Cameron and Prince

# Pedestrian Engineering Strategy: Reduce conflicts between bikes and pedestrians on sidewalks



- Improve signage and enforcement
- Provide alternatives for bicyclists:
  - On-street, low-stress bicycle facilities **on the street** with conflicts
  - On-street, low-stress bicycle facilities on **a nearby**, parallel street
  - Widen / redesign sidewalk to provide sidepath





# Committee Discussion

Are there any key engineering issues that have not been addressed through the draft strategies?

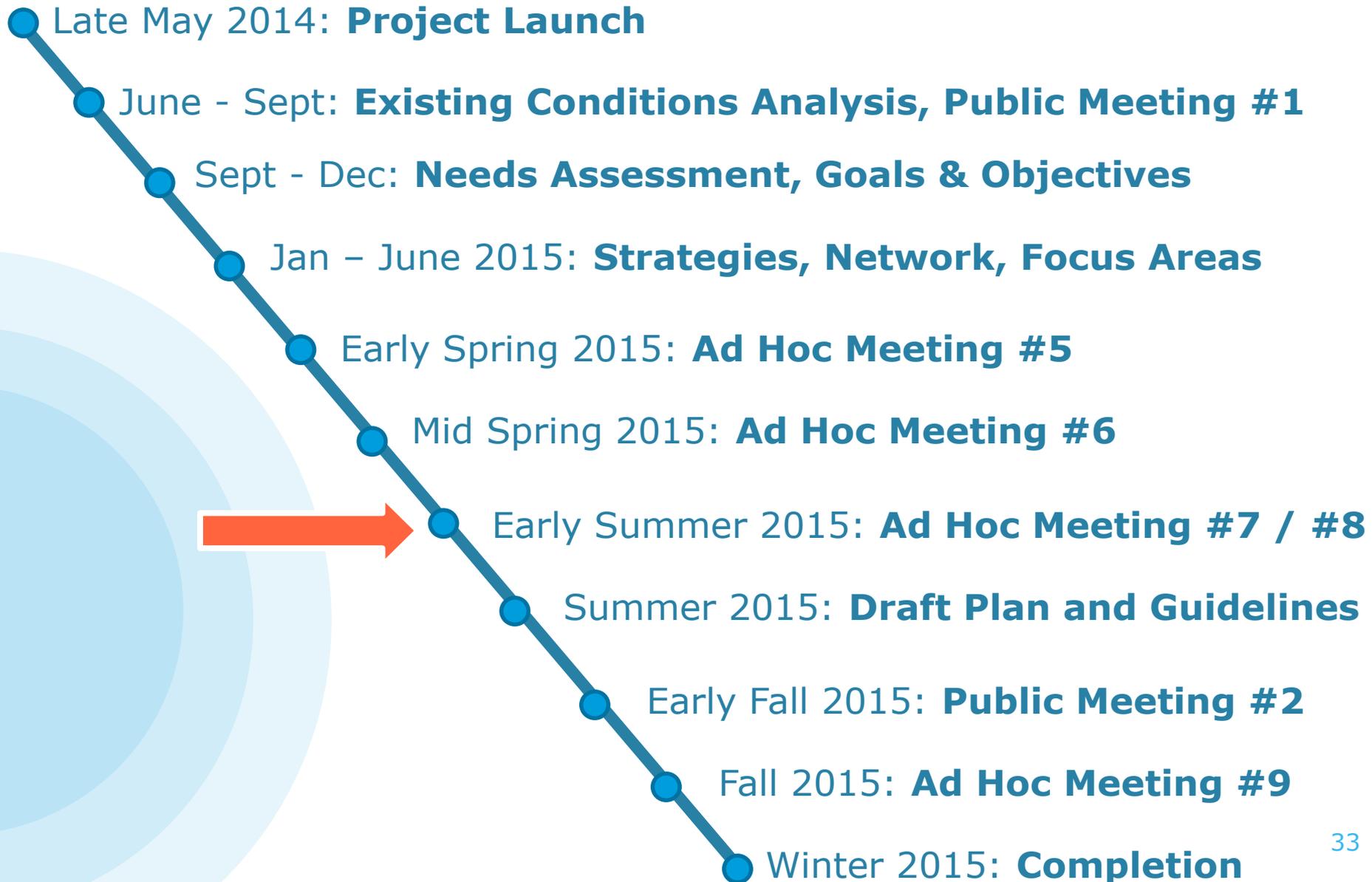


# Public Comment



# Committee Member Updates

# Next Steps





# Thank You!

[www.alexandriava.gov/pedbikeplan](http://www.alexandriava.gov/pedbikeplan)

