

# Poughkeepsie 9.44.55

Rethinking the Arterials & Interchange

*NYSAMPO Conference*



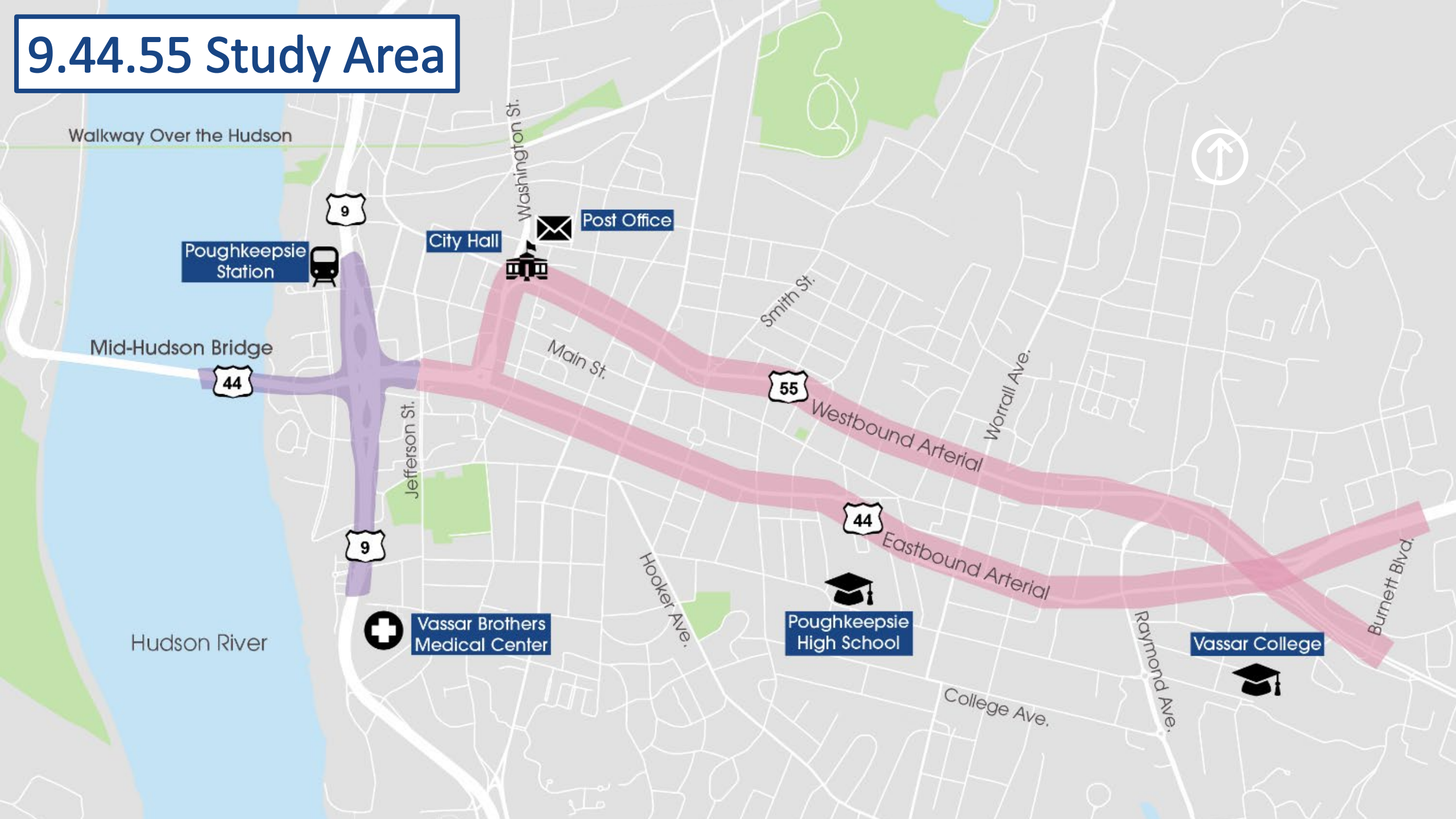
May 9, 2023



# Agenda

1. Setting the stage
2. Planning takeaways
3. Phase 1: Interchange
4. Phase 2: Arterials
5. Post Study

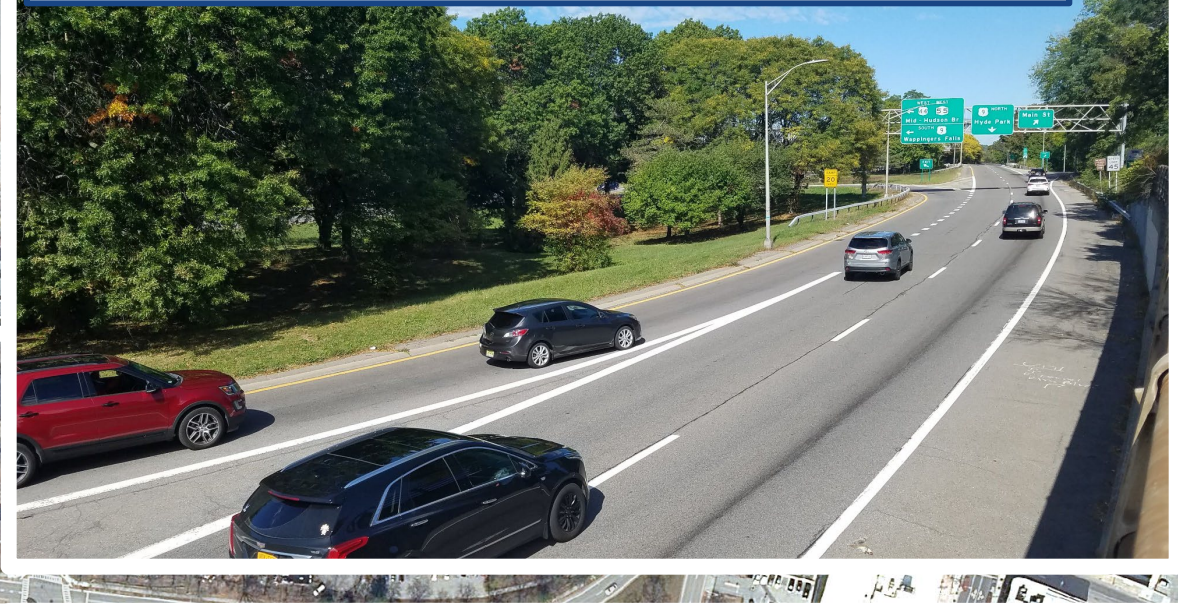
# 9.44.55 Study Area



# Route 9/44/55 Interchange



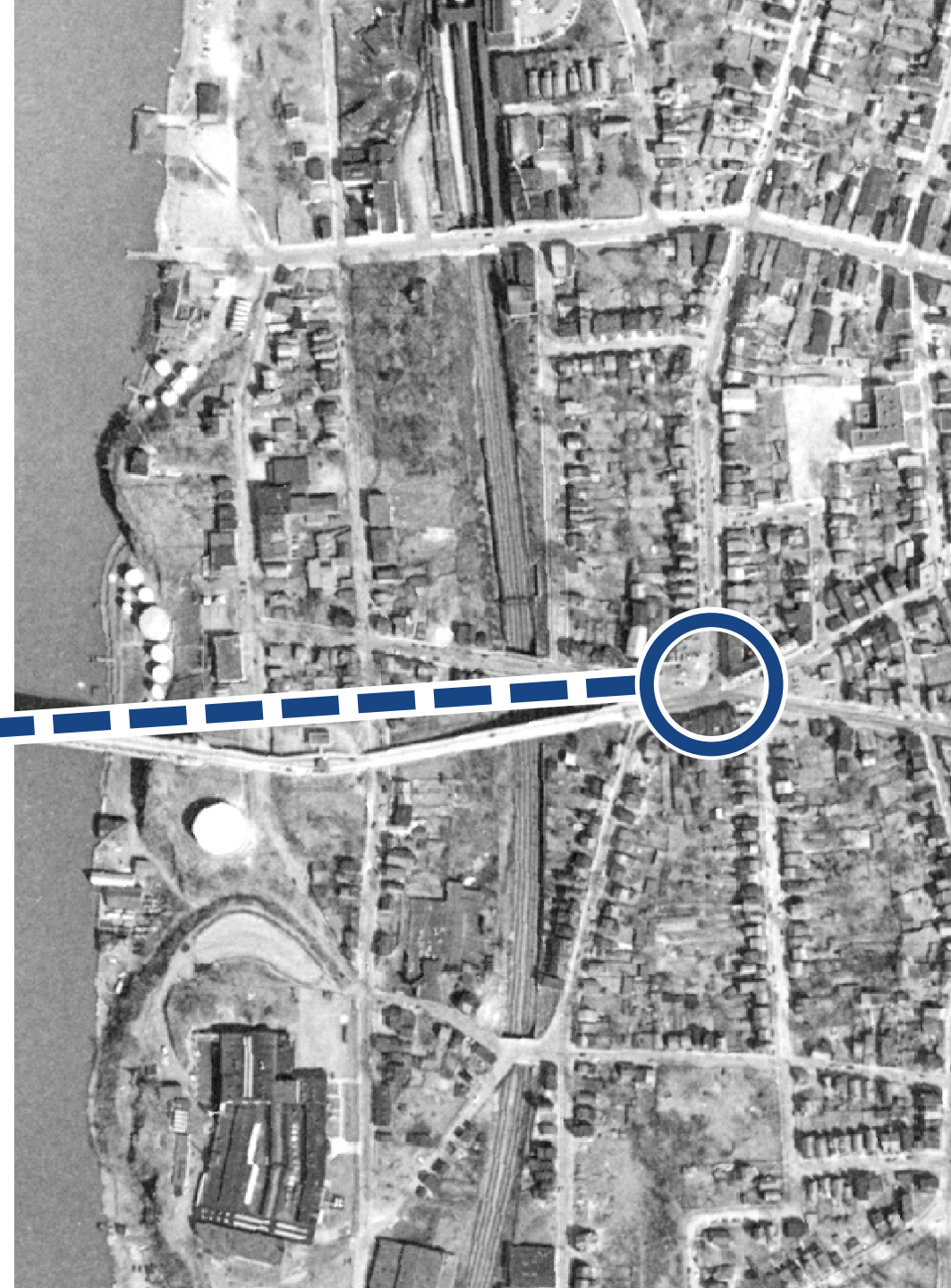
Northbound 9 approach to Mid-Hudson Bridge Exit



Westbound 44/55 approach to Mid-Hudson Bridge



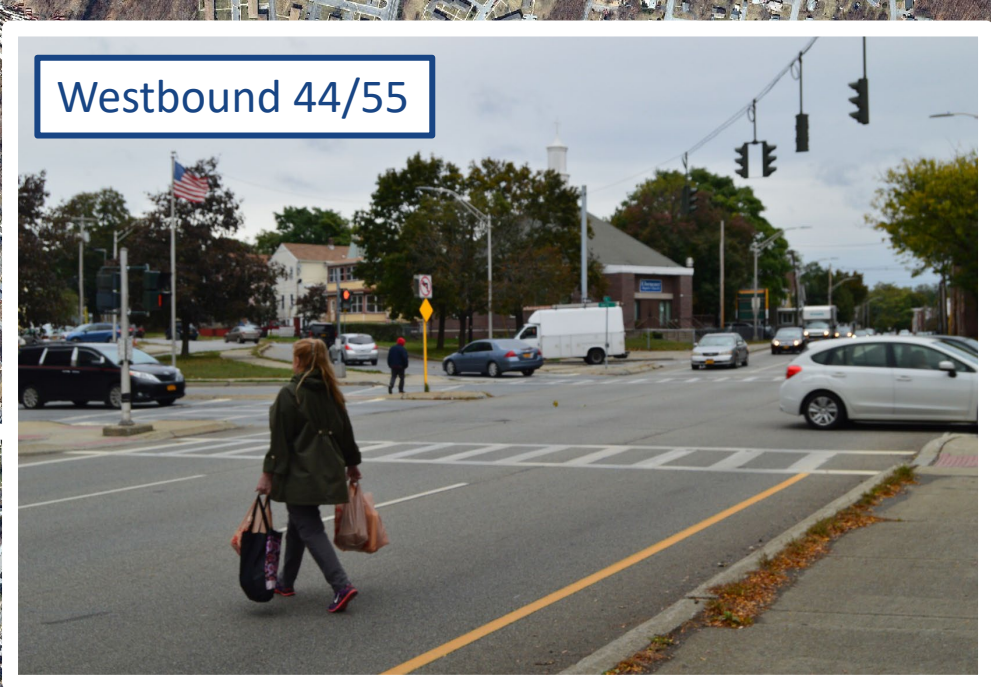
# 9/44/55 'Interchange' Circa 1955



# Route 44/55 Arterials



Westbound 44/55



Eastbound 44/55



**44/55 (Mill St) Circa 1870**



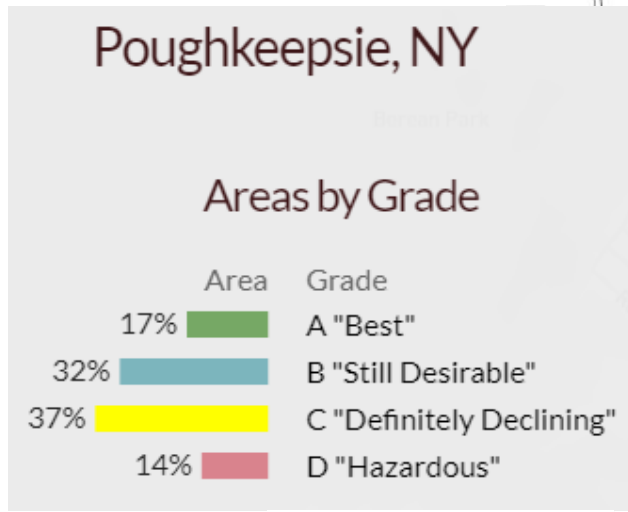
# And Don't Forget the Past

- Past policies & decisions still resonate today
- Redlining (1935-1940)
- Be open to breaking the cycle through planning

1938

Interchange

Arterials





# Poughkeepsie 9.44.55

## 1. What it was?

- Detailed look at the 9/44/55 Interchange and 44/55 Arterials in Poughkeepsie

## 2. How did it start?

- 2018 Call for Planning Proposals (2019-2020 UPWP)
- Separate proposals: NYSDOT-Interchange & Poughkeepsie-Arterials

## 3. Why then?

- Timing was right for the MPO, agencies, and local leadership
  - Window of time when county, city, & town interests were aligned
  - Planning funds available

Read the room and find  
the right time

# Poughkeepsie 9.44.55 – Takeaways

## 1. Find Balance

- Regional & local transportation needs
- Don't chase Level of Service (LOS)

Lesson #1: One doesn't need to come at the cost of the other

## 2. Manage expectations

- Time, funding, & scope

Lesson #2: Be real about what you can and can't do

## 3. Make public outreach agile

- Don't take public 'feedback' personally

Lesson #3: Planners will invariably serve as a sounding board

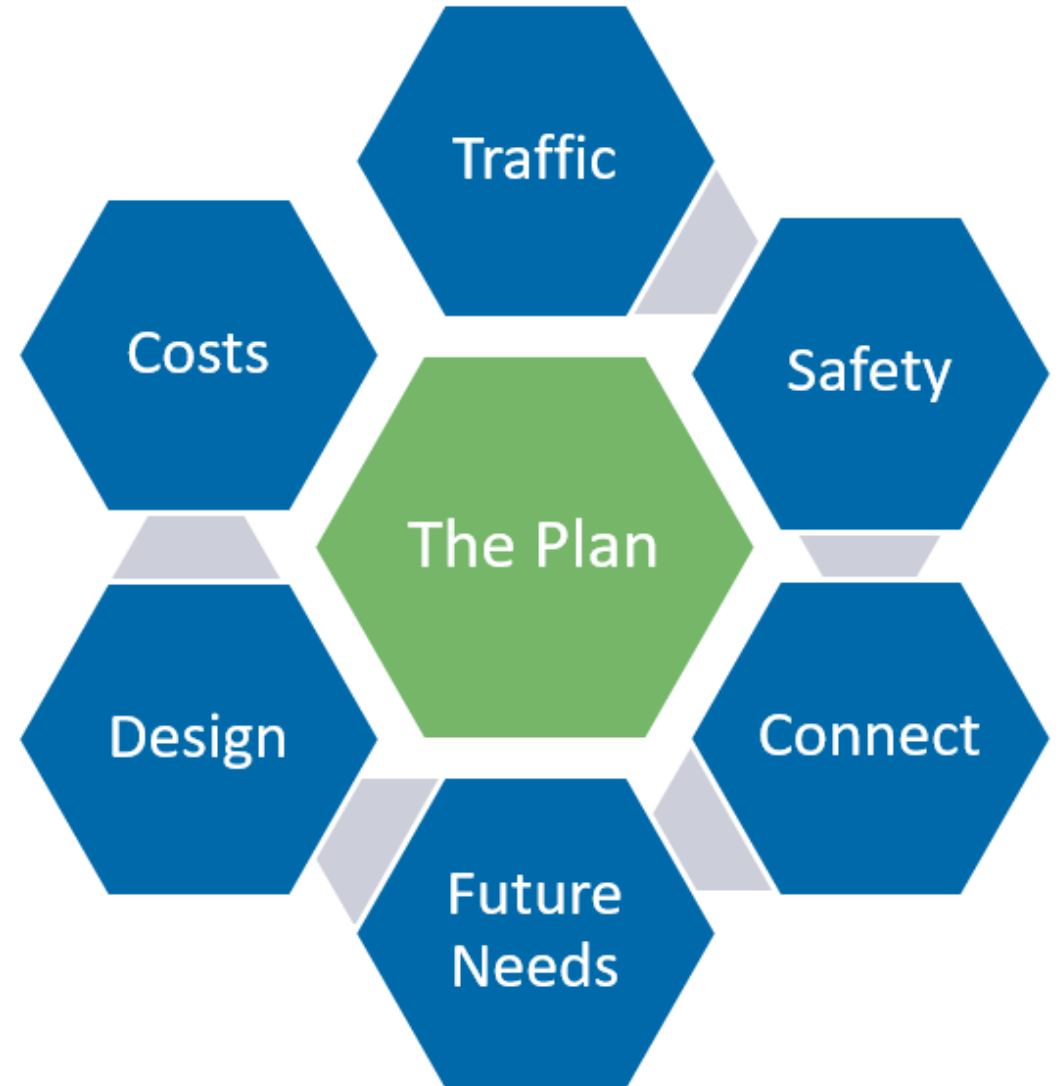
## 4. Keep talking after the study

- Relish the small victories

Lesson #4: Keep the momentum going and try for early wins

# Study Purpose

- Identify feasible design concepts for the Route 9/44/55 Interchange and Route 44/55 Arterials:
  - Based on an informed and public process that...
  - Maximizes safety, livability, and connectivity, and
  - Delivers acceptable traffic operations









# Study Branding



Unique Study  
Name, Tagline, &  
Logo

## Color Scheme

RGB	Primary Color	Gradients
Dark Blue (24/69/132)		
Medium Blue (61/123/191)		
Gold (228/156/37)		

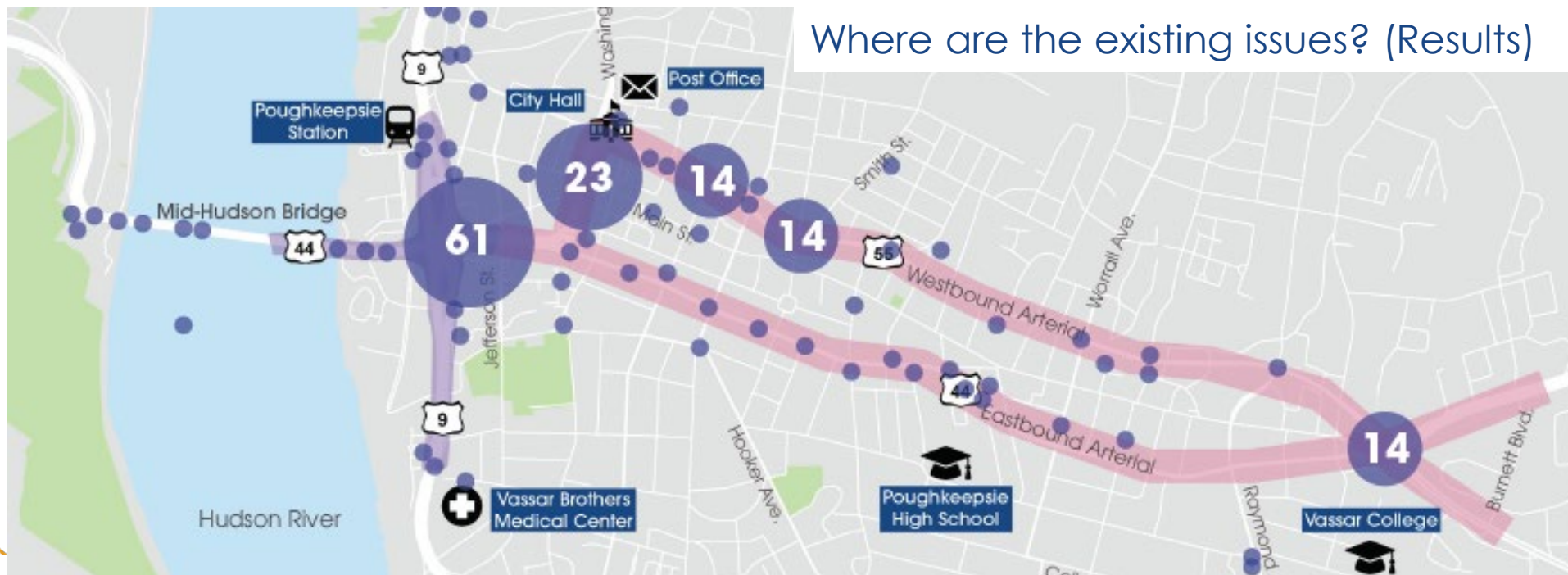




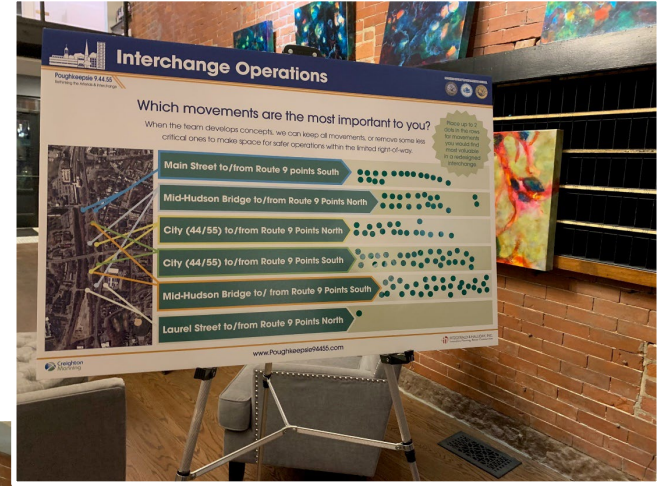
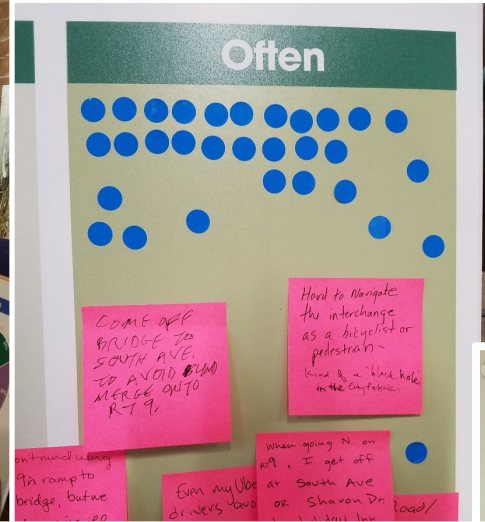
# Public Outreach

# First Friday | 2019

Interchange Priorities	Dot Count
Simplify Confusing Travel Patterns	85
Reduce Crashes	45
Reduce Traffic Impacts from Crashes & Breakdowns	26
Reduce Speeds on Route 9	20
<b>Total</b>	<b>176</b>



# Open House | 2020



# Poughkeepsie National Night Out | 2021

## HELP US RETHINK THE POUGHKEEPSIE ARTERIALS

The Poughkeepsie 9.44.55 Project Team is evaluating options to make the Route 44/55 Arterials safer and more walkable, while accommodating traffic in the City and Town of Poughkeepsie.

**Which concept do you like best?** Place a dot on the board to Leave a comment with a star

EXISTING One-Way, 3-Lane Streets	3 TO 2 One-Way, 2-Lane Streets with Bike Lanes	TWO-WAY 2-Lane Streets with Center Turn Lane
<ul style="list-style-type: none"><li>No safety improvements</li><li>No walkability improvements</li><li>No reduction in speeding</li></ul>	<ul style="list-style-type: none"><li>Improves safety</li><li>Reduces speeds</li><li>Dedicated space for bicycling</li><li>Shorter crosswalks</li><li>Provides curbside options (parking, loading, bus stop, etc.)</li></ul>	<ul style="list-style-type: none"><li>Improves safety</li><li>Reduces speeds</li><li>Allows two-way travel</li><li>Higher cost to construct</li></ul>
Peak Hour Travel Time: 4.5 minutes	Peak Hour Travel Time: 7.5 minutes	Peak Hour Travel Time: 12.5 minutes

Stay Connected! [www.poughkeepsie94455.com](http://www.poughkeepsie94455.com)





# Virtual | 2019-2021

## Study Website

Home About Library Get Involved

**Mission:**  
Identify design alternatives for the Route 9/44/55 Interchange and eastbound and westbound Arterials.

Poughkeepsie 9.44.55  
Rethinking the Arterials & Interchange

## Social Media

Dutchess County Government  
August 27, 2021

If you travel around Poughkeepsie, you know the Route 44/55 arterials - the three-lane, one-way streets with high speeds and high crash rates, that are certainly not comfortable places if you're trying to walk.

...challenges, the Dutchess County Transportation Council (DCTC)'s Poughkeepsie 9.44.55 design concepts to make the arterials safer and more walkable.

...ts and provide your feedback at a virtual public meeting, available on the project September 15th.

For more information about the DCTC and Poughkeepsie 9.44.55, visit [www.poughkeepsie94455.com](http://www.poughkeepsie94455.com).

Poughkeepsie 9.44.55

## Mapping Survey

Poughkeepsie 9.44.55  
Rethinking the Arterials & Interchange

DUTCHESS COUNTY TRANSPORTATION COUNCIL

Select an option below

View issues marked by others

Search address or place

Help?

## Virtual Meetings

YouTube

Search

**This Presentation Will Cover**

- Why redesign the Arterials?
- What We've Heard So Far
- Concept Development
- Traffic Modeling and Trade-offs

Mark Debald  
Program Manager, Dutchess County Transportation Council

And with the traffic

2:22 / 22:40

Dutchess County @DutchessCoGov · May 10, 2022

The Dutchess County Transportation Council has announced the completion of Poughkeepsie 9.44.55, its detailed study of how to redesign the Route 9 Interchange and Route 44/55 arterials in Poughkeepsie. Learn more: [dutchessny.gov/Departments/Co...](http://dutchessny.gov/Departments/Co...)

Poughkeepsie 9.44.55  
Rethinking the Arterials & Interchange

Over 400 comments submitted



# Interchange

# Interchange

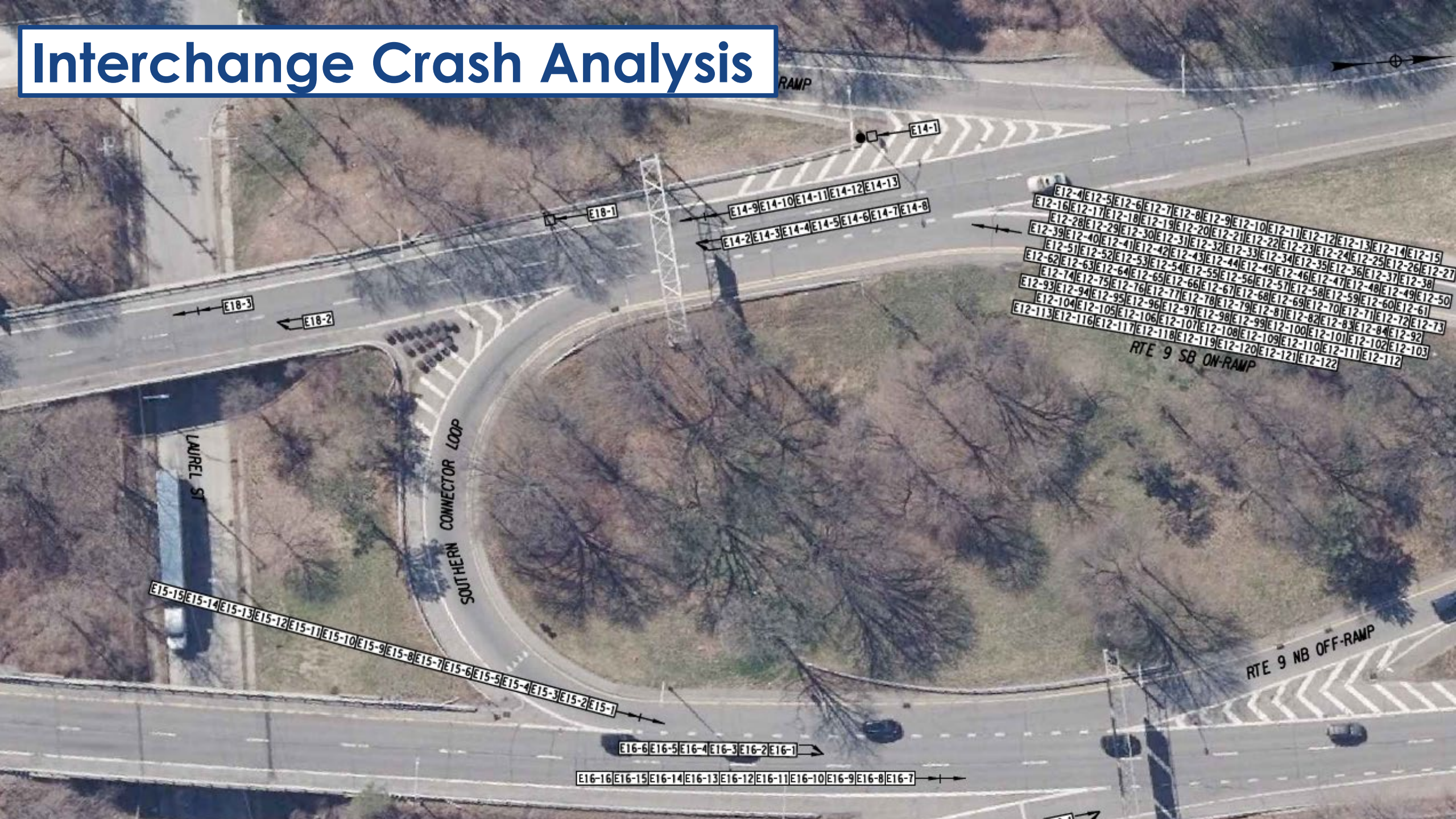
## Existing Conditions

- Left side weaves
- Closely spaced ramps
- Yield and Stop control
- Acceleration and deceleration distances
- Pedestrian facilities

LOS F at peak times



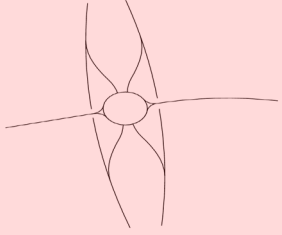
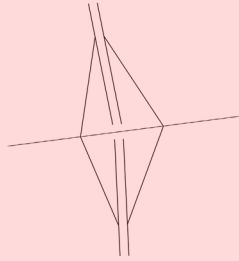
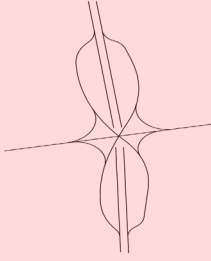
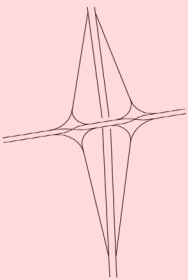
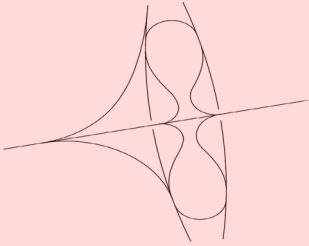
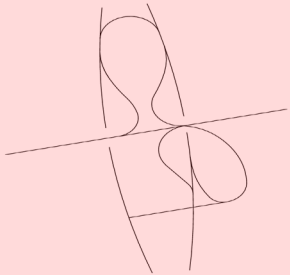
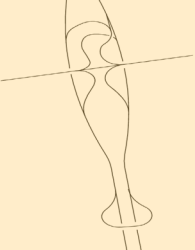
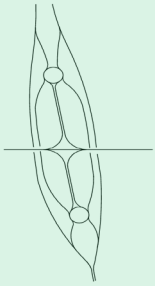
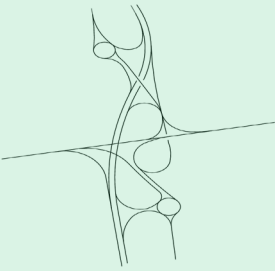
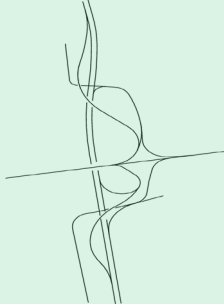
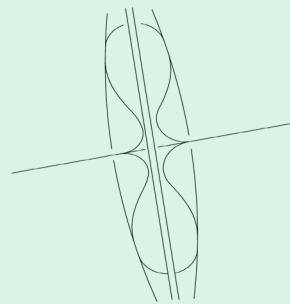
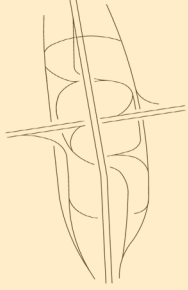
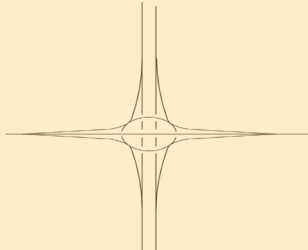
# Interchange Crash Analysis





# Interchange Concepts

# Null + 13

				
Roundabout	Diamond	SPUI	Diverging Diamond	Direct Connection
				
¼ Clover	Modified Bowtie	Roundabouts on Rt 9	Route 9 Realignment	Half Clover
			<ul style="list-style-type: none"> <li>○ Rejected six concepts due to traffic</li> <li>○ Screened out three concepts due to other criteria</li> <li>○ Progressed four concepts for further review</li> </ul>	
Rt 9 Flyover 1	Route 9 Flyover 2	Route 44/55 Flyover		

# Concepts for Review

No-Build



Roundabouts  
on Route 9



Route 9  
Realignment



Half  
Clover



Route 9  
Flyover



# Evaluation Criteria

## Address known safety concerns

- Improve ramp spacing, eliminate left-side weaves, reduce speed on Route 9, provide an intuitive design, and improve accel/decel areas

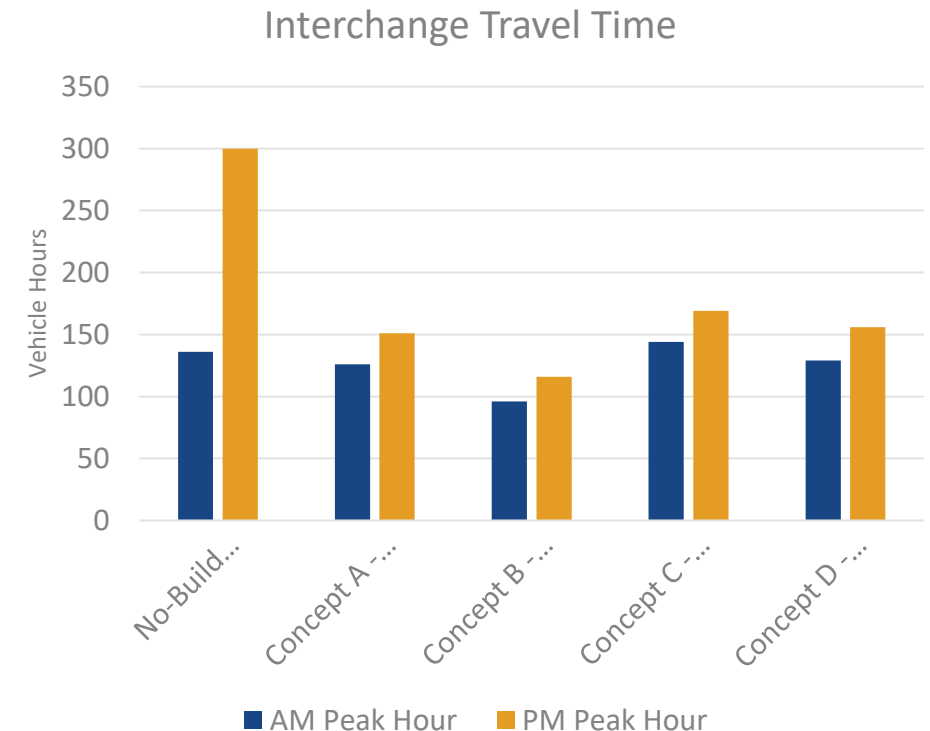
## Improve traffic operations

- Maintain free-flow on Mid-Hudson Bridge
- Minimize diversions

## Promote community character

- Preserve historic district and avoid private property

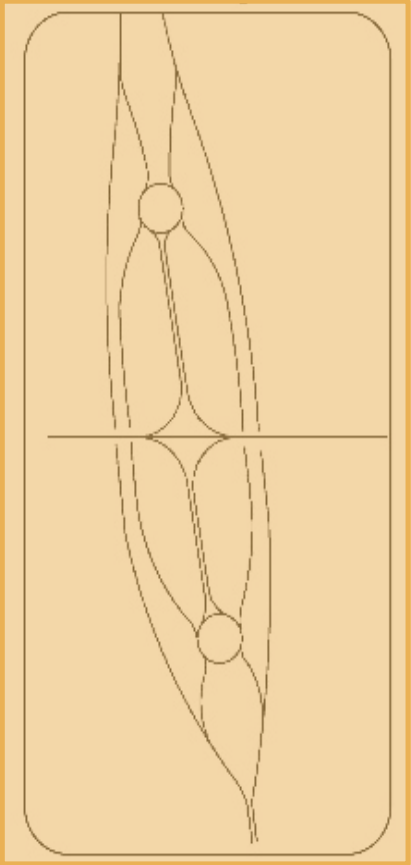
## Consider cost & constructability





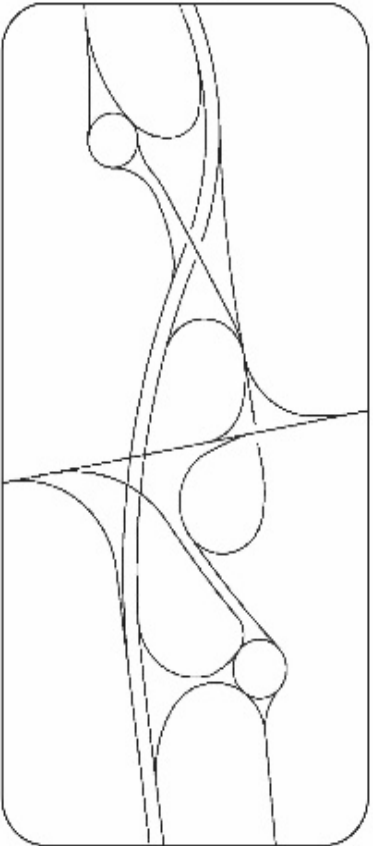
# Interchange Concepts

**Concept A**



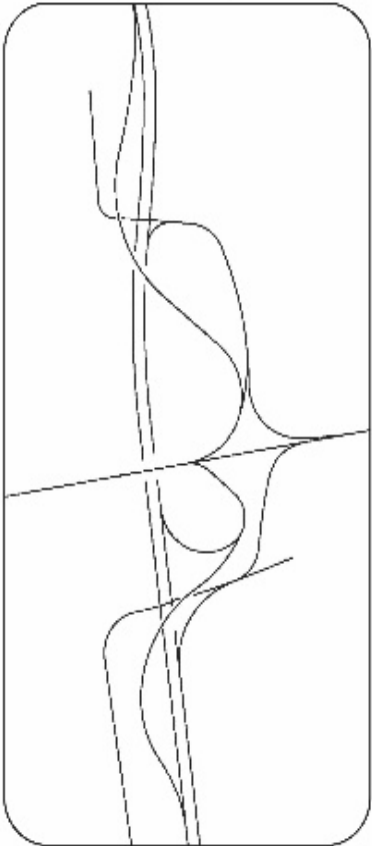
**Roundabouts  
on Route 9**

**Concept B**



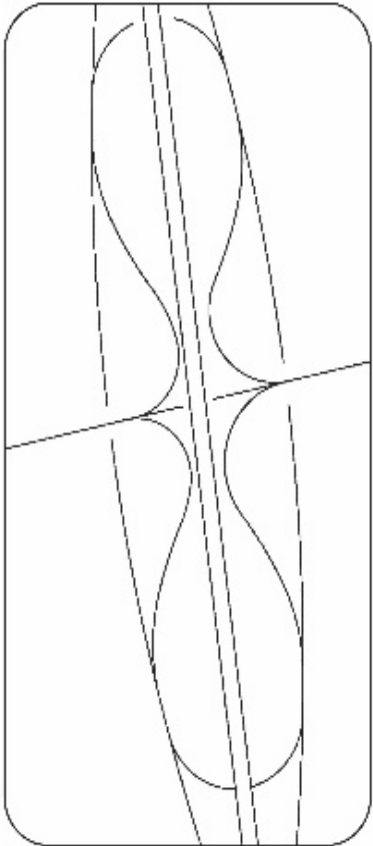
**Route 9  
Realignment**

**Concept C**



**Half  
Clover**

**Concept D**



**Route 9  
Flyover**

# Interchange Concept A





# Arterials

# Arterials Existing Conditions

Pedestrian crossings are 3 or 4 lanes wide

Loud, Unpleasant Experience to Walk

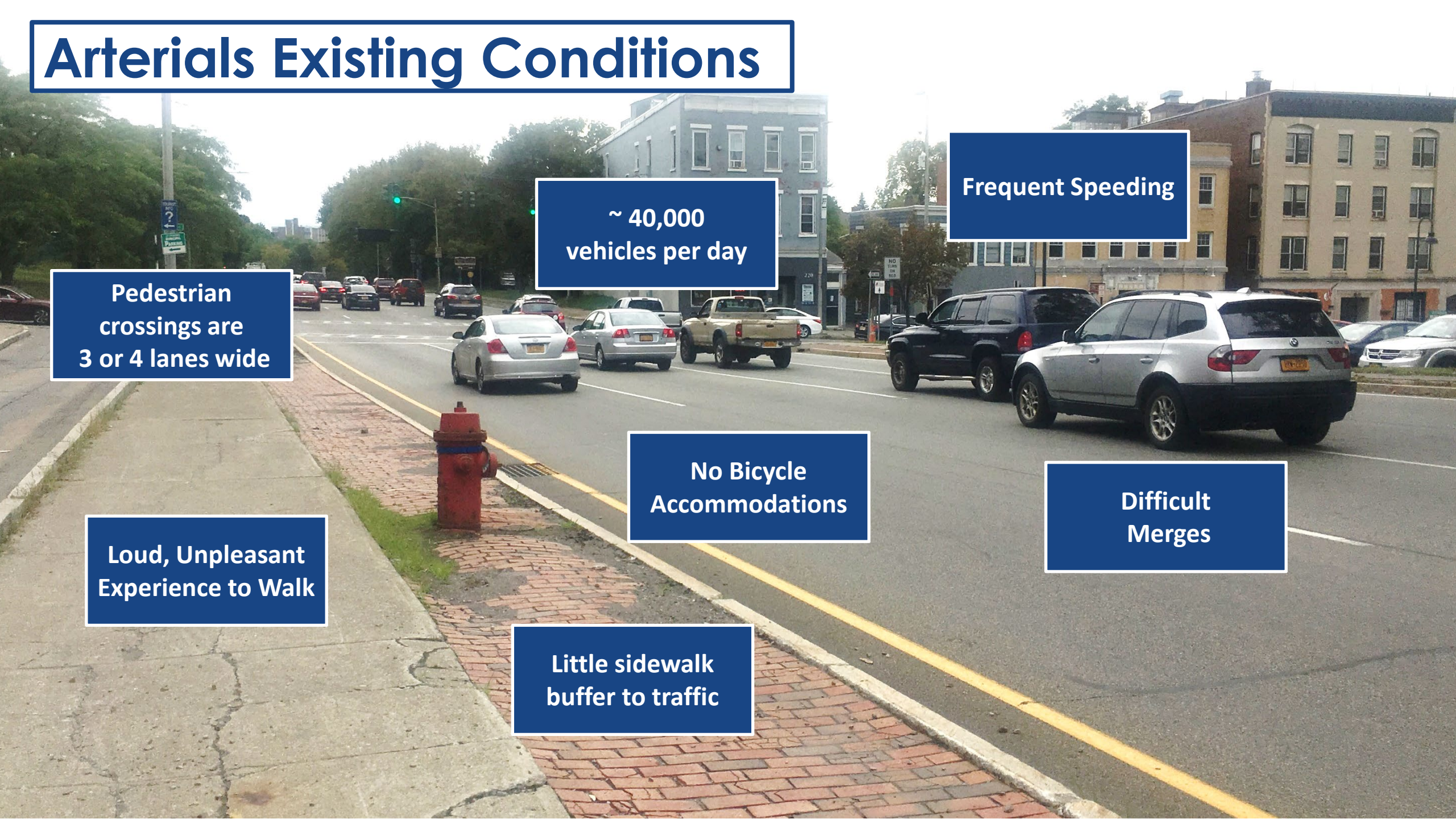
~ 40,000 vehicles per day

No Bicycle Accommodations

Little sidewalk buffer to traffic

Frequent Speeding

Difficult Merges



# Previous Planning Ideas

*Tame the Arterials*

*Redesign the Arterials to be more walkable*

*Mitigate the impact of Arterial traffic on pedestrians and reduce speeds*

*Convert the Arterials into pedestrian friendly boulevards*

*Improve the walking and biking environment*

# Key Considerations



**Crash rates are above average**



**Measured speeds are about 10 MPH over the speed limit**

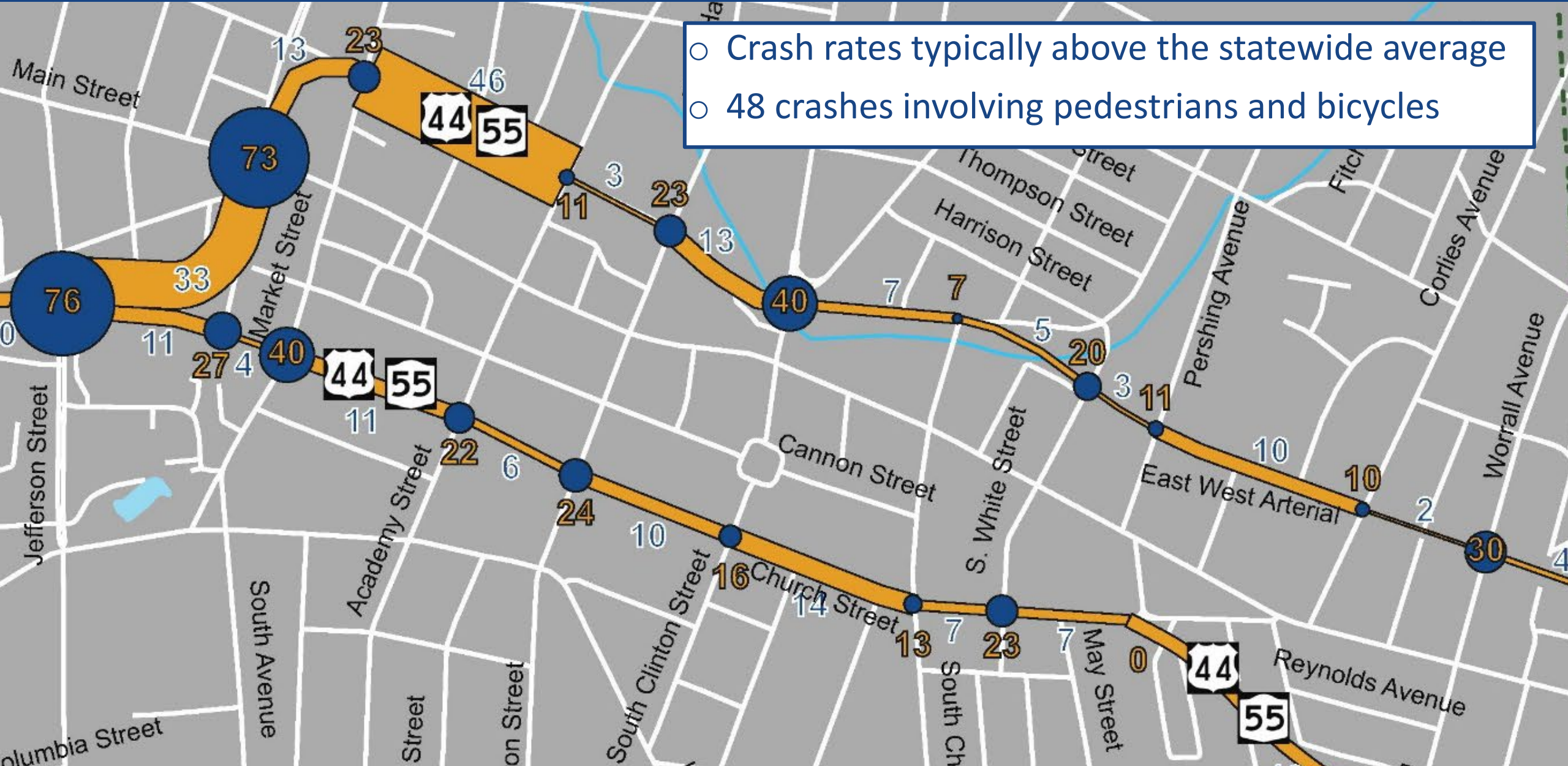


**Census data shows 40% to 65% of households do not have access to a car rely on other modes**



**Arterials separate neighborhoods from one another, and residences from commercial areas**

# Arterials Crash Analysis

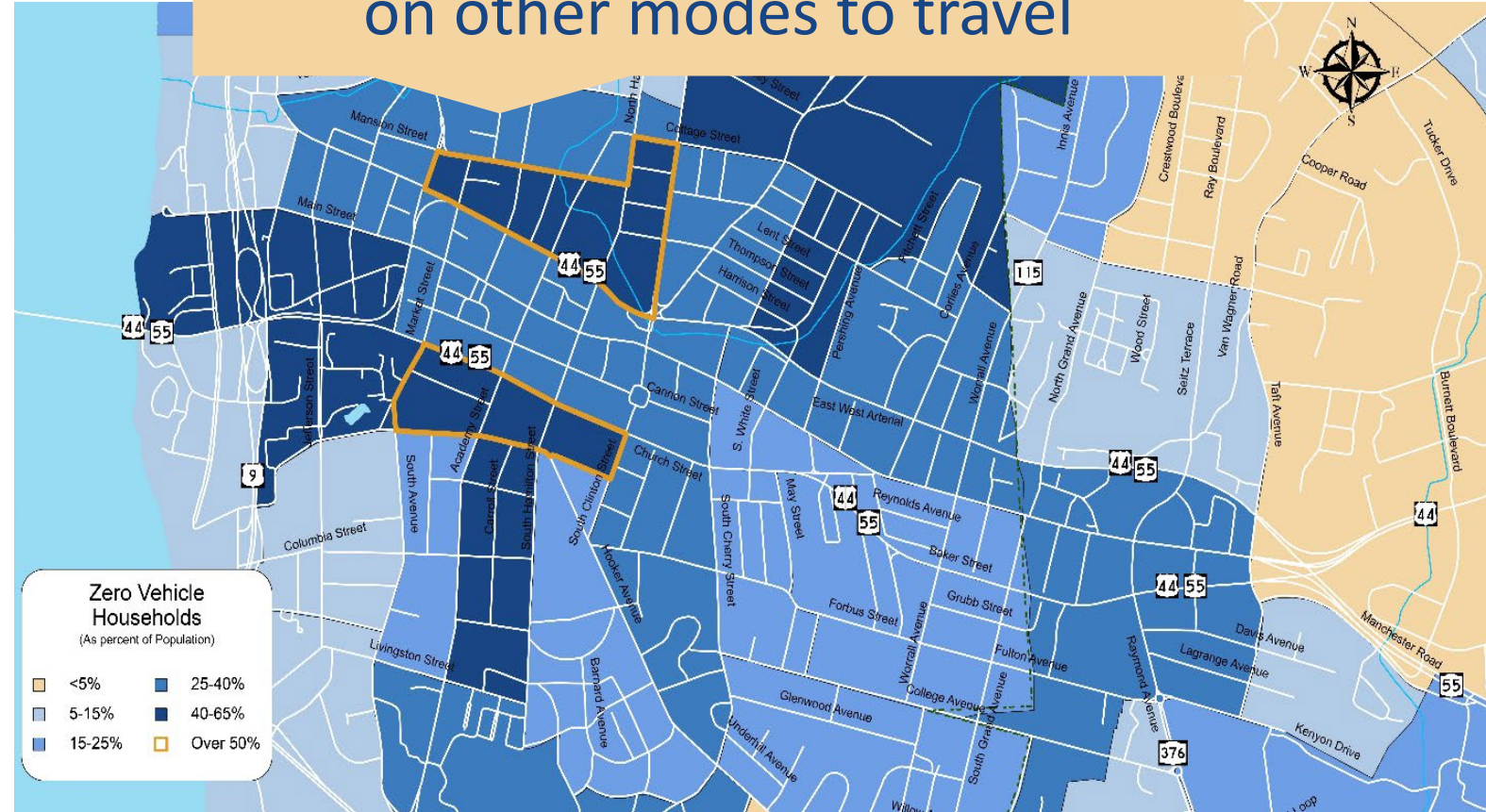


- Crash rates typically above the statewide average
- 48 crashes involving pedestrians and bicycles

# Demographics

- Population
  - Older & younger adults
  - Minority
- Households in Poverty
- Zero Vehicle Households



A high share of area households do not have access to a vehicle or rely on other modes to travel

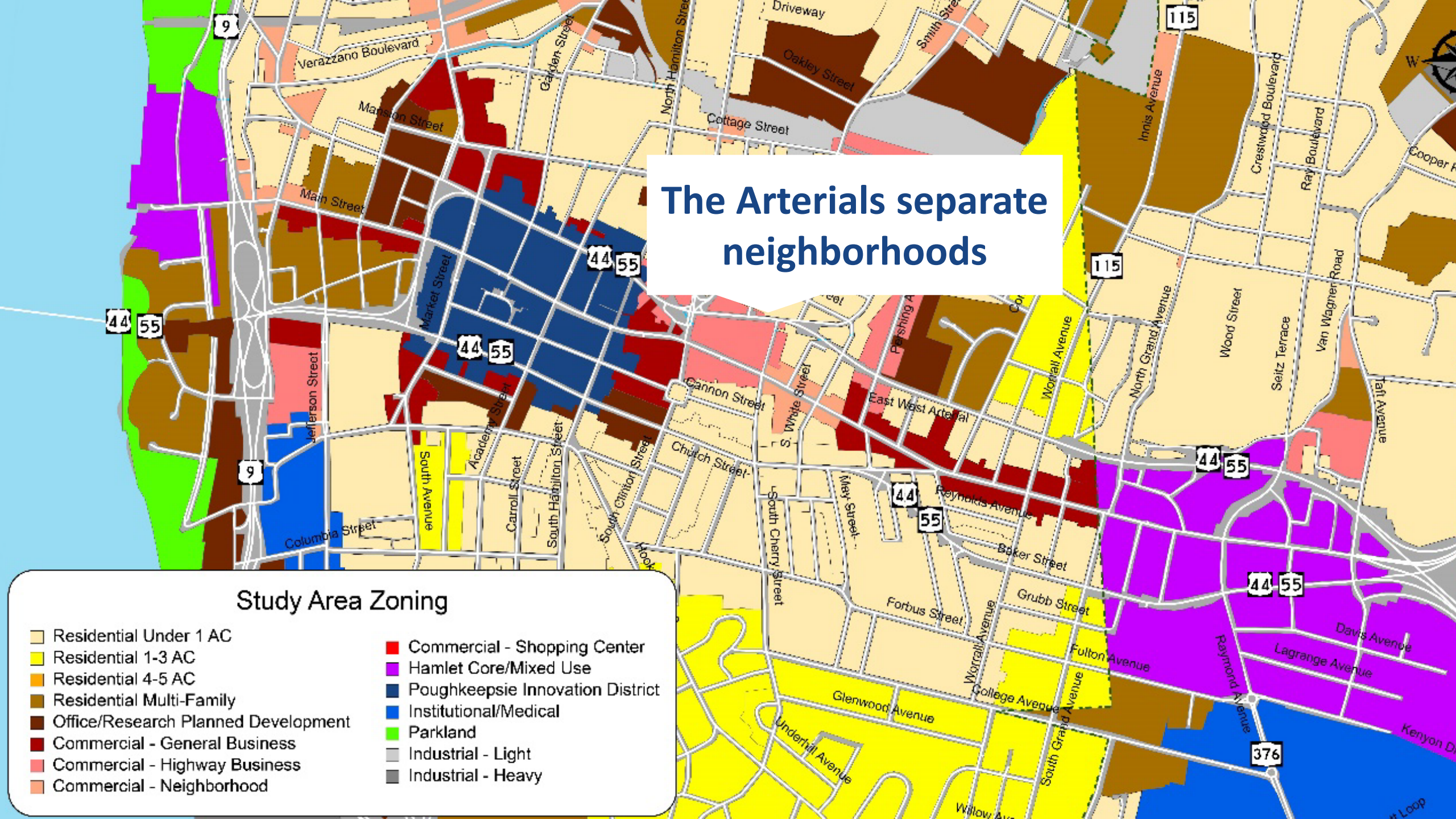




The Arterials separate neighborhoods

### Study Area Zoning

- |   |  |
|---|--|
|  Residential Under 1 AC              |  Commercial - Shopping Center     |
|  Residential 1-3 AC                  |  Hamlet Core/Mixed Use            |
|  Residential 4-5 AC                  |  Poughkeepsie Innovation District |
|  Residential Multi-Family            |  Institutional/Medical            |
|  Office/Research Planned Development |  Parkland                         |
|  Commercial - General Business       |  Industrial - Light               |
|  Commercial - Highway Business       |  Industrial - Heavy               |
|  Commercial - Neighborhood           |  |

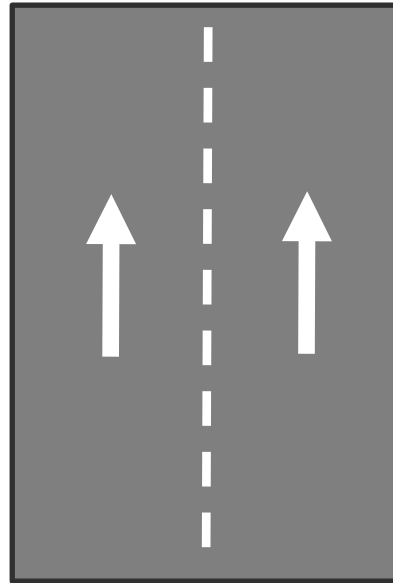




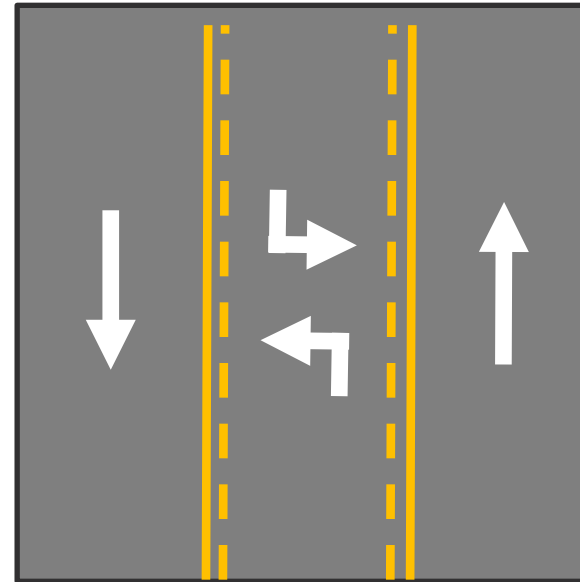
# Redesign Concepts

# Two Arterial Concepts

Complete work within existing roadway



3 to 2

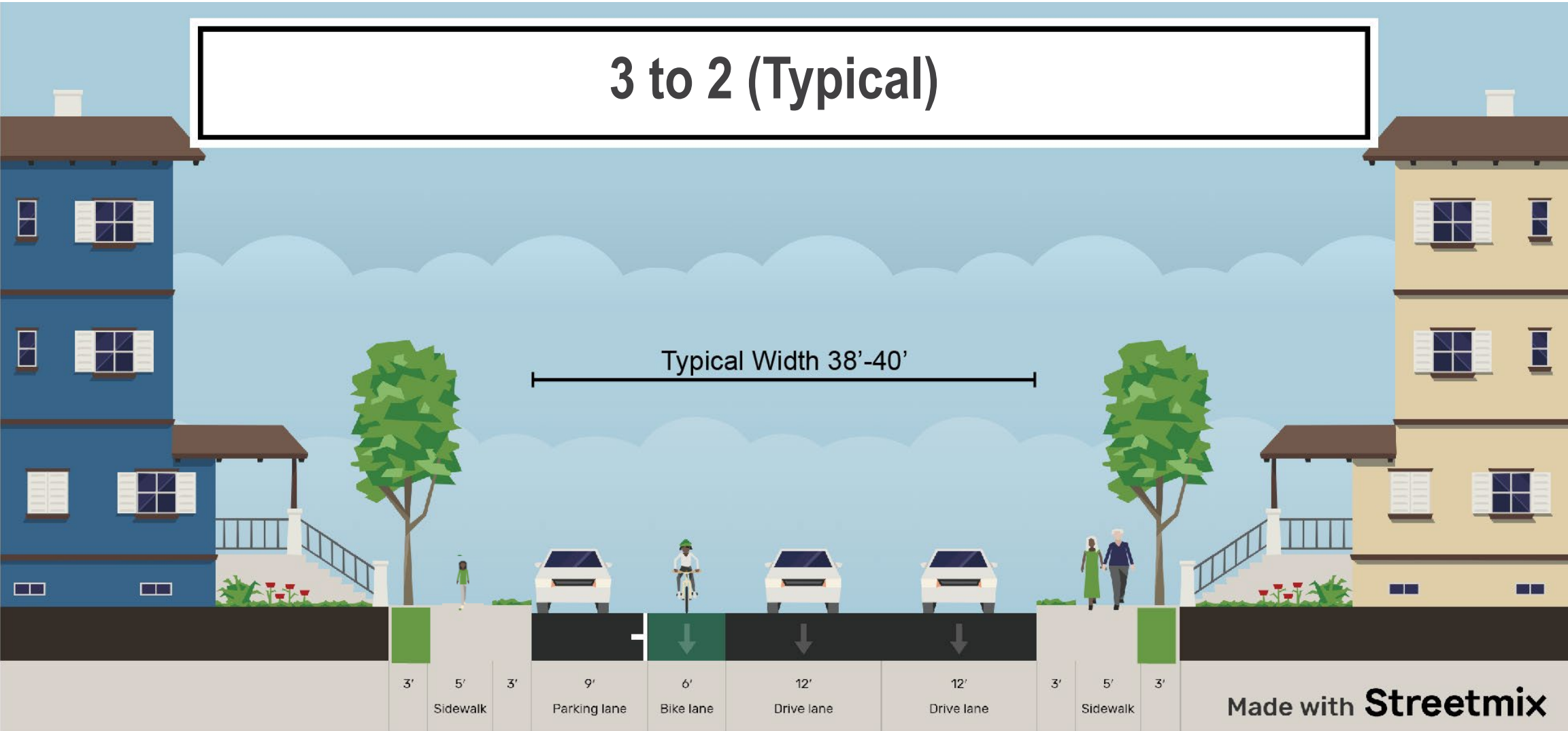


Two-way

# 3 to 2 Concept

3 to 2 (Typical)

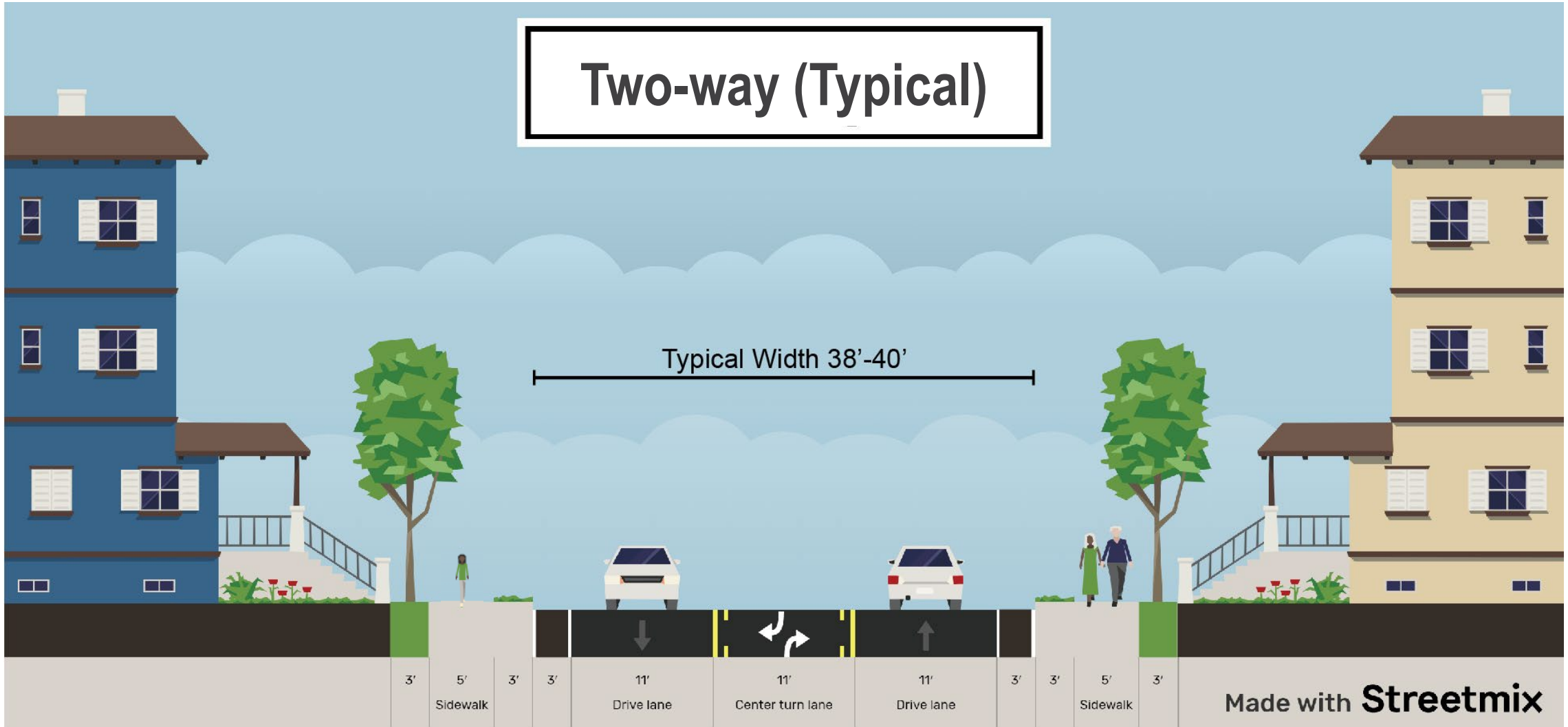
Typical Width 38'-40'



Made with **Streetmix**

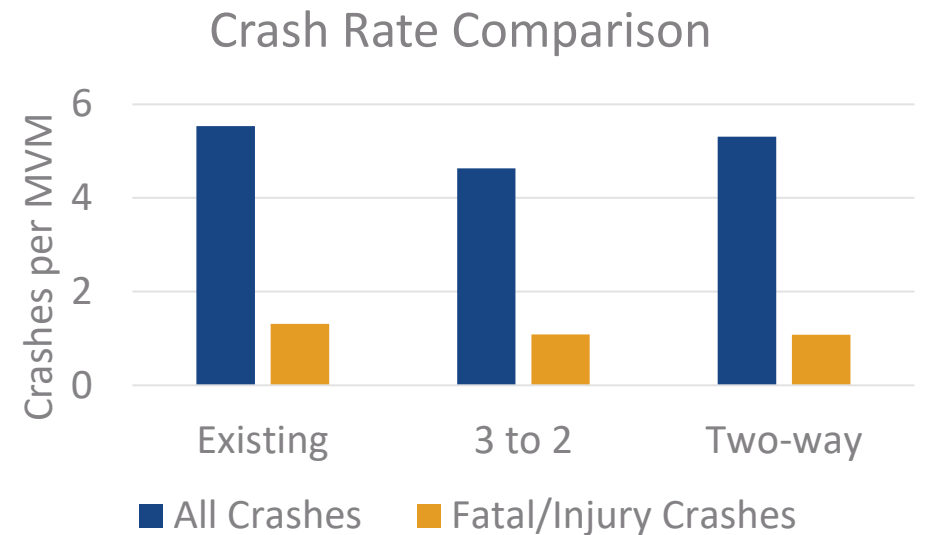
# Two Way Concept

## Two-way (Typical)

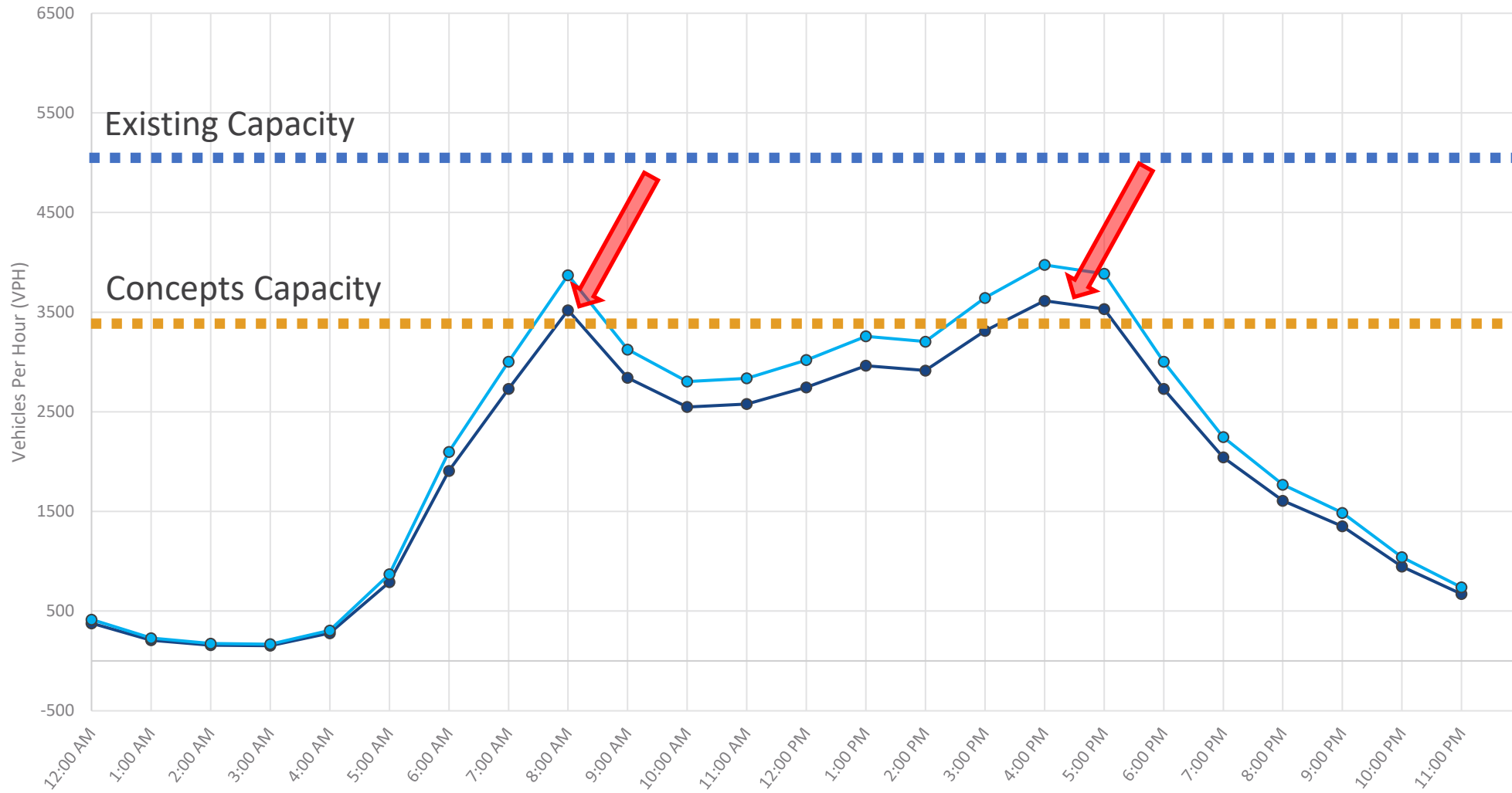


# Concept Evaluation Criteria

- Provides reasonable **travel time** (through traffic)
- Reduces **speeds**
- Allows **freedom of movement** (Local Access)
- Provides **curbside options** (streetscape)
- Increases **walking comfort** (buffer space to sidewalk, shorter crossing distances)
- Improves **safety**
- Provides **dedicated space for bicycles**
- Reduces **emissions**
- Constructible at a reasonable **cost**.



# Theoretical Capacity Illustration

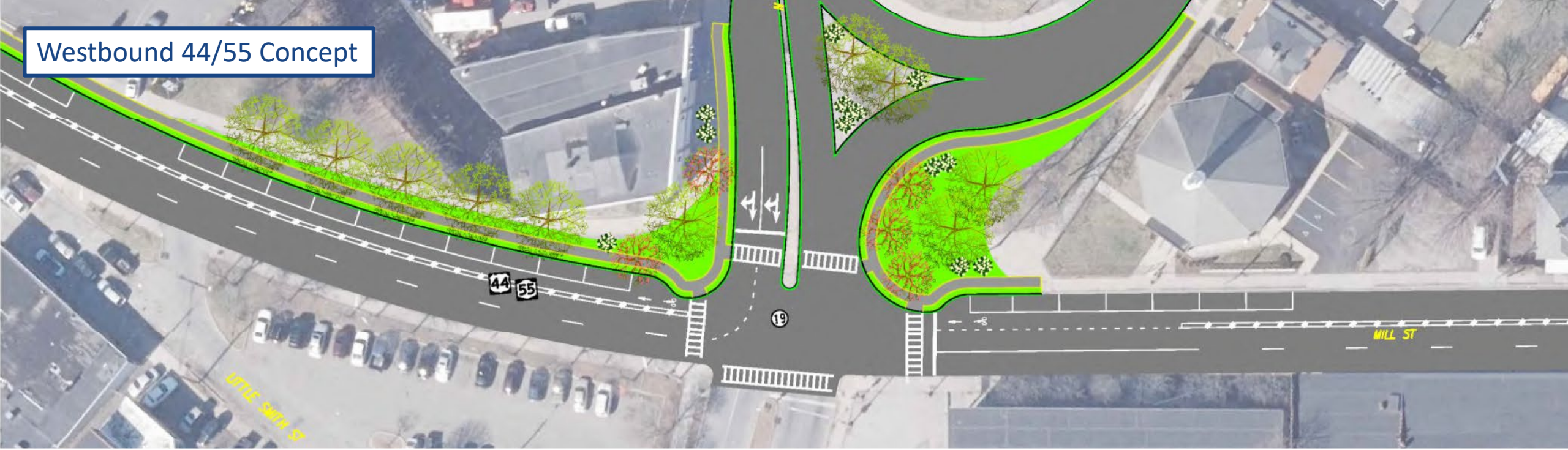


# Summary of Pros and Cons

Performance Factors	3 to 2	Two-way
Provides reasonable travel times	+	-
Reduces Speeds	+	++
Allows freedom of movement	-	+
Provides opportunity for curbside options	+	-
Increases walking comfort	+	-
Improves Safety	+	+
Provides dedicated space for bicycles	+	-
Reduces emissions	-	--
Constructible at a reasonable cost	+	-



Westbound 44/55 Concept



Eastbound 44/55 Concept



# Post Study

- Pilot/Demonstration Project
- Maintain steering committee
- Building block approach (Embrace project phasing)
- Look at 'independent utility' projects
  - E.g., Follow-on sub-area study (Columbus Dr weave)
- Carry ideas over to other planning products
  - E.g., Recommendation in Long Range Transportation Plan

## Components of a Pilot Project

- Draft a project plan
  - Establish purpose
  - Set time frame
  - Temporary Traffic Control Plan
  - Decide how success is measured
  - Identify data to be gathered
  - Public involvement/education
- Final report to summarize the results





**Thank You**