



Allwood Road (CR 602) Safety Improvements

*NJTPA Local Safety Program (HSIP Funded)
Project Sponsor: Passaic County*

*City of Clifton
Passaic County*

Public Information Center
June 26th, 2024



Meeting Agenda

- Introduction
- Project Overview
- Corridor Design
- Road Diet Analysis
- Next Steps

Project Overview

Allwood Road (CR 602)

Signalized Intersections

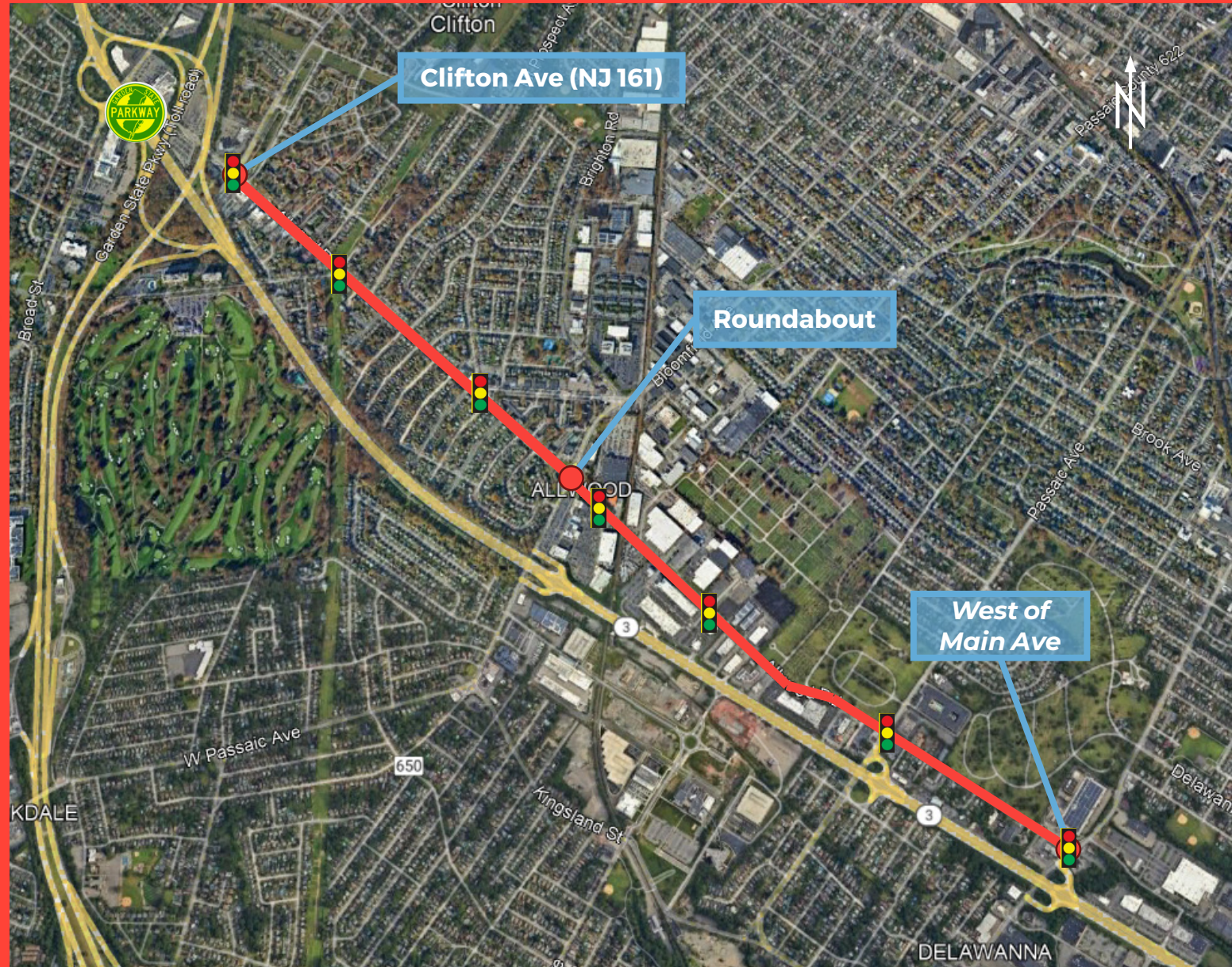
Clifton Ave.

Hepburn Road

Styertowne
Shopping Center

Book Court

Passaic Ave.



Project Overview

Allwood Road (CR 602)

Proposed Improvements

Bike Lane

Crosswalk Visibility Enhancement

Ped Refuge, RRFB and ADA Compliance

Road Diet with CTL

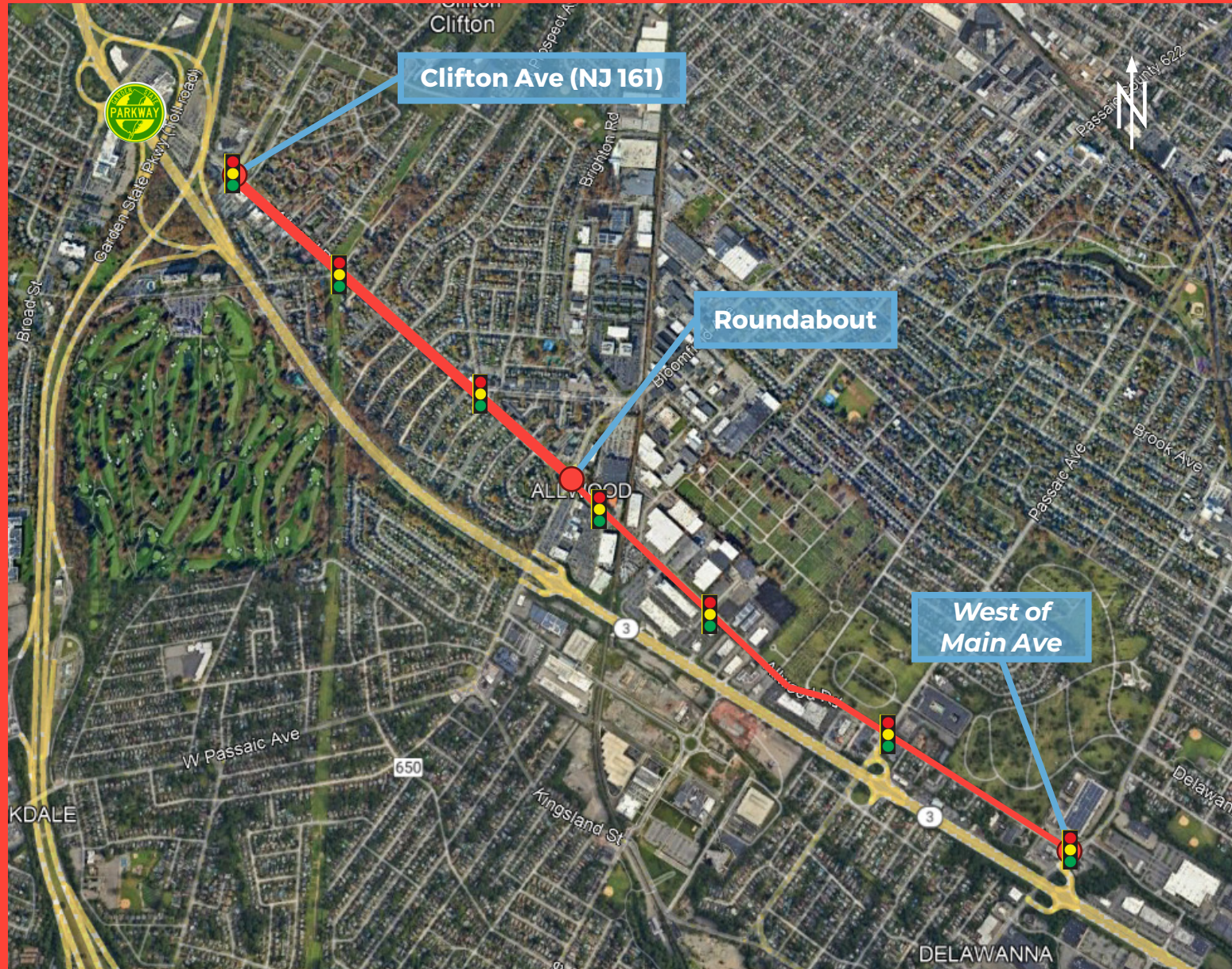
Lighting

Dedicated Right and Left Turn Lanes

Signal Optimization and Upgraded Equipment

Lighting

Pavement Friction Course



Project Overview

Allwood Road (CR 602)

Local Safety Program Process



Allwood Road Identified as a High Crash Network



Passaic County Applies and Receives funding from NJTPA



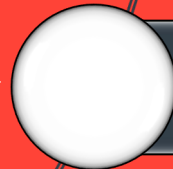
WSP selected as the Design Consultant



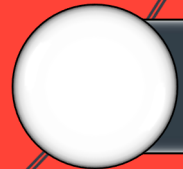
Analyzation of Crashes along Roadway



Incorporation of FHWA Safety Measures into Proposed Design



Public Information Center and Redesign with Comments Received

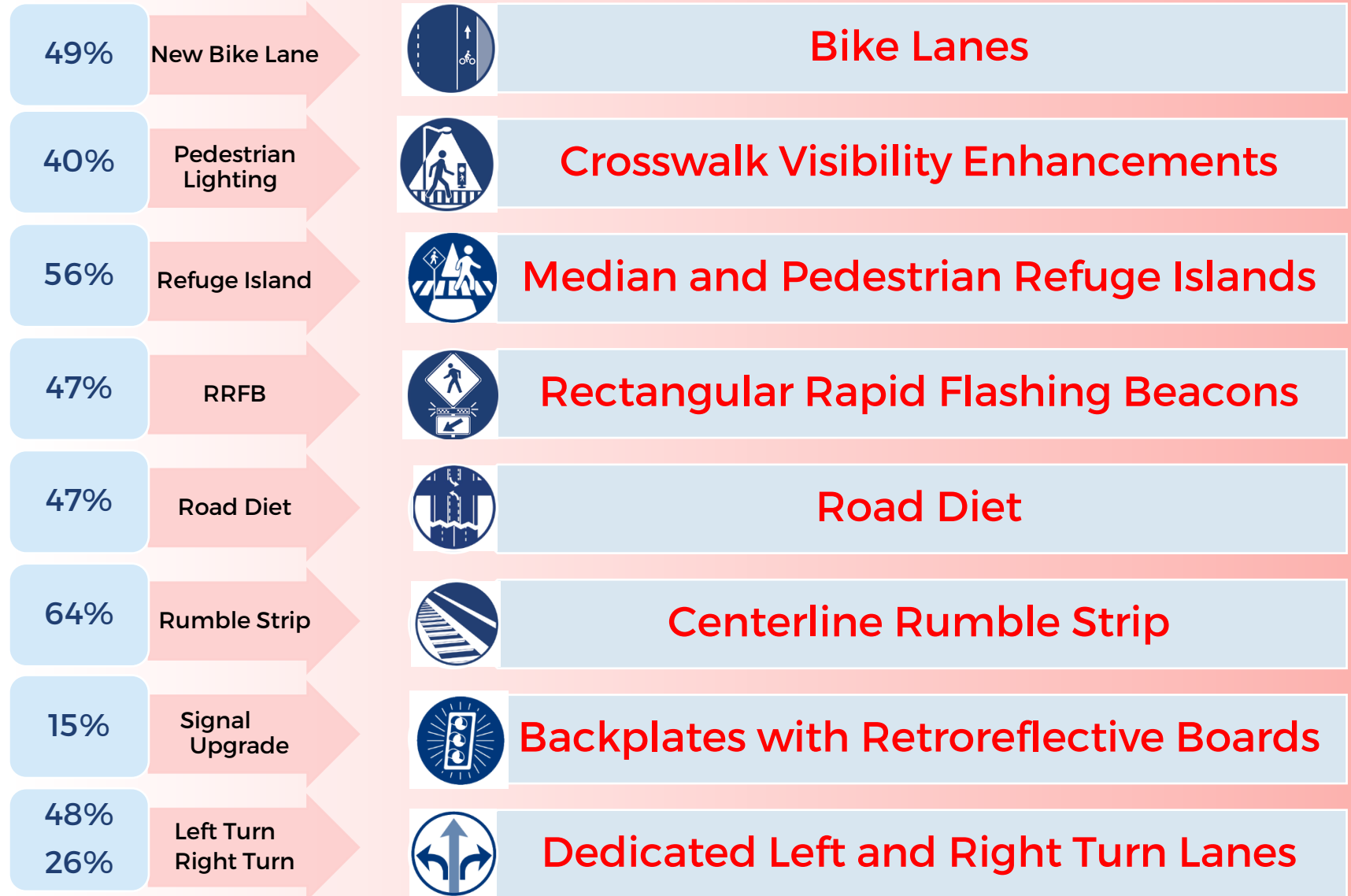


Approval of Preliminary Design

Impacts and Outcomes

Crash Reduction*

FHWA Safety Measure

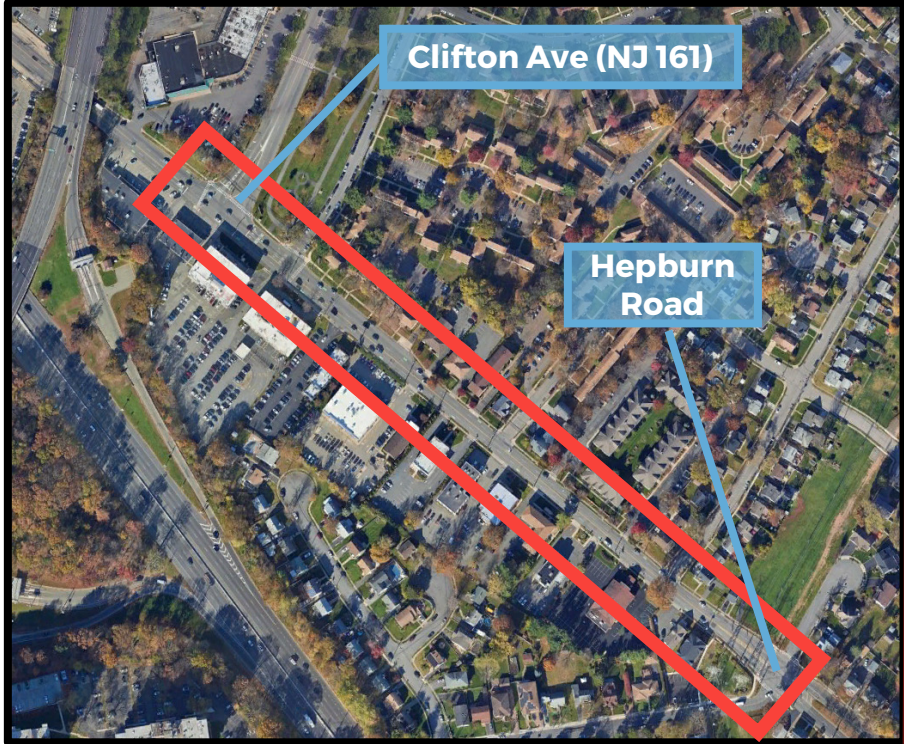


*Reference FHWA-SA-21-038 for more information on potential crash reduction percentages. These reductions are averages and not guaranteed



Corridor Design

Section 1



Crash Study

Section 1

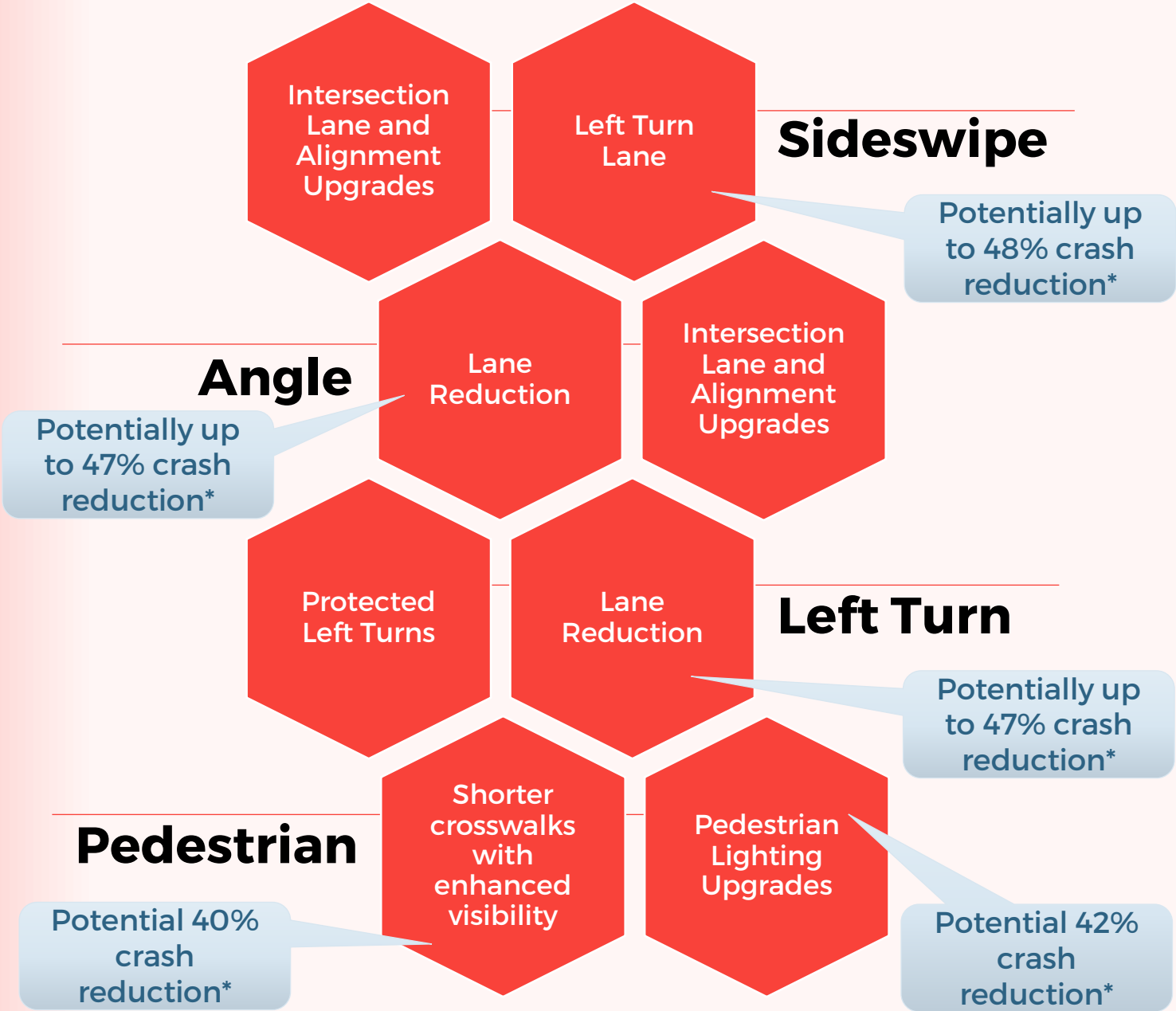
(CLIFTON AVE TO HEPBURN RD)

Milepost 0.31-Milepost 0.64

CRASH TYPE	Allwood Road	Statewide Average
Same Dir- Rear End	24% (14)	32%
Same Dir- Sideswipe*	20% (12)	13%
Angle*	27% (16)	19%
Head On	0% (0)	3%
Parked Vehicle	3% (3)	6%
Left Turn / U Turn*	17% (10)	4%
Fixed Object	3% (2)	10%
Pedestrian*	3% (2)	2%
Pedalcycle	0% (0)	1%
Other	2% (1)	10%

*Crash type higher than the Statewide average.

*Reference FHWA-SA-21-038 for more information on potential crash reduction percentages. These reductions are averages and not guaranteed

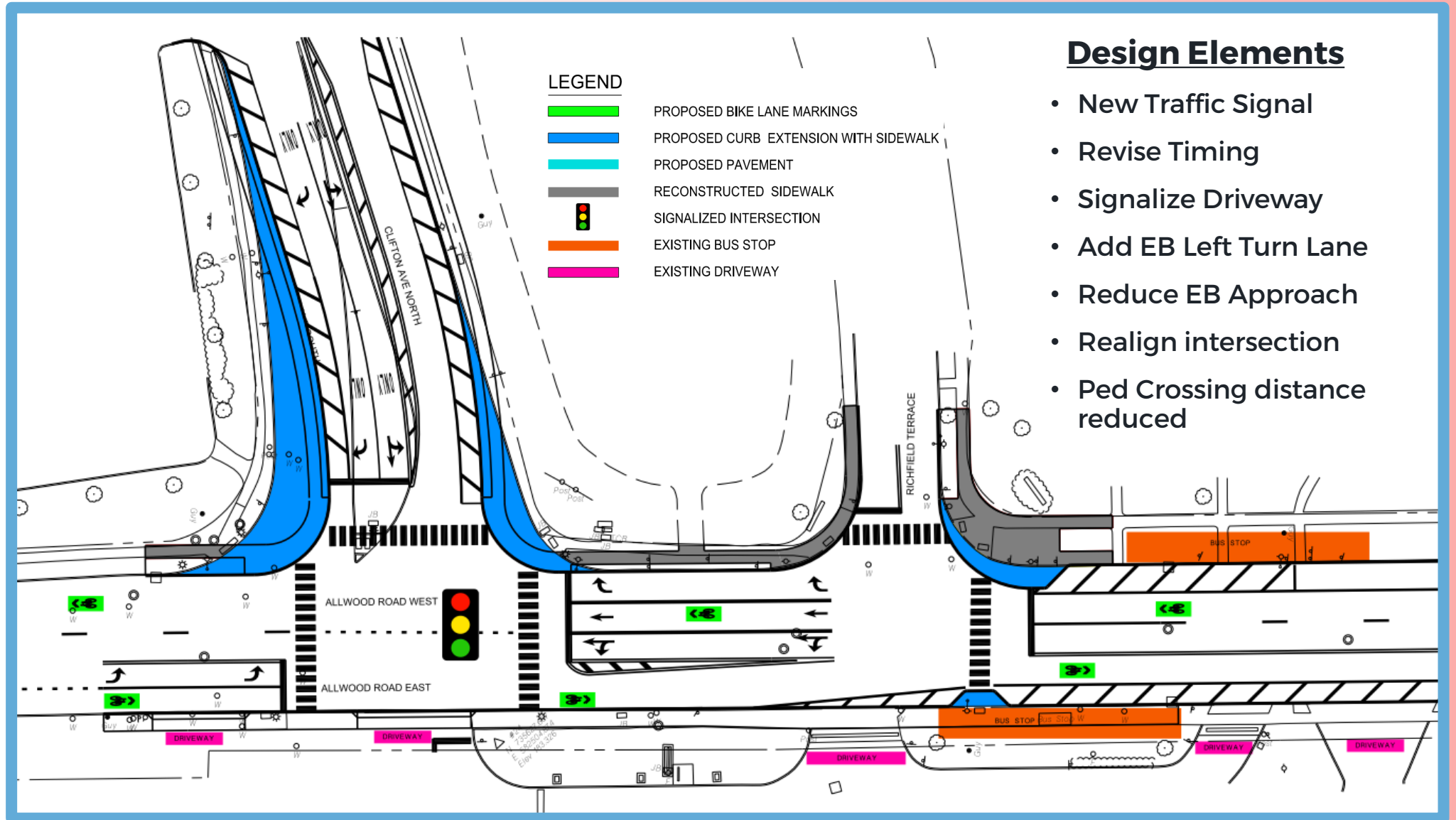


FHWA Proven Countermeasures

Corridor Design

Section 1

Clifton Ave Intersection



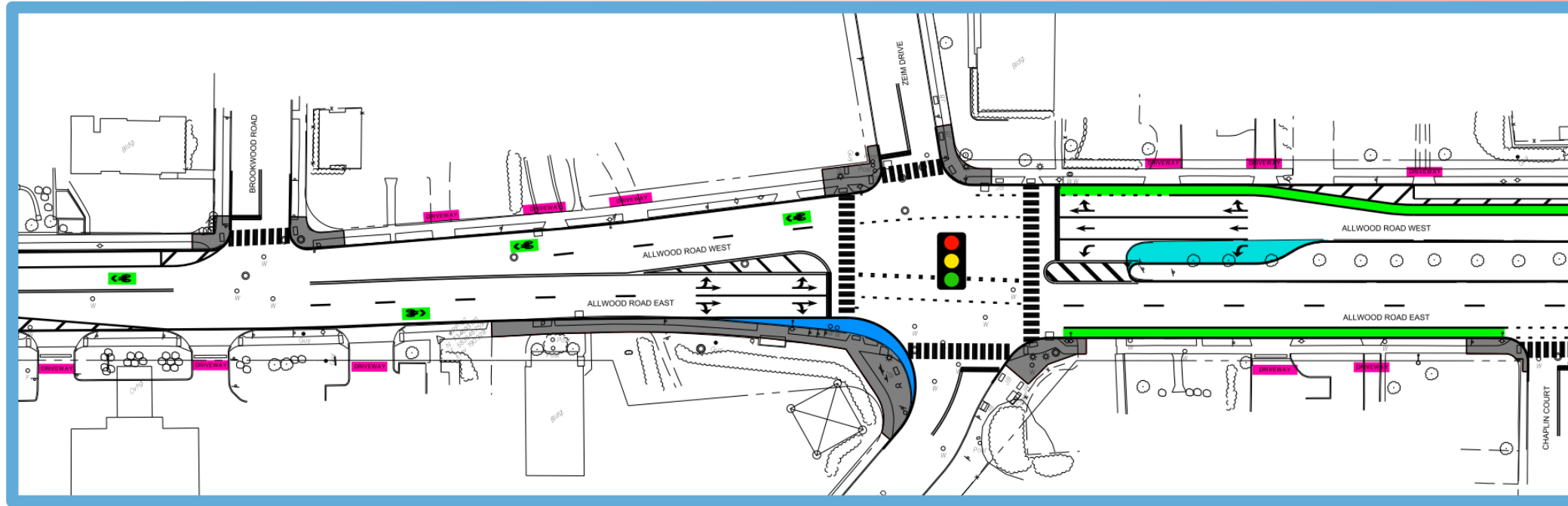
Design Elements

- New Traffic Signal
- Revise Timing
- Signalize Driveway
- Add EB Left Turn Lane
- Reduce EB Approach
- Realign intersection
- Ped Crossing distance reduced








Corridor Design

Section 1

Hepburn Road Intersection



LEGEND

-  PROPOSED BIKE LANE MARKINGS
-  PROPOSED CURB EXTENSION WITH SIDEWALK
-  PROPOSED PAVEMENT
-  RECONSTRUCTED SIDEWALK
-  SIGNALIZED INTERSECTION
-  EXISTING BUS STOP
-  EXISTING DRIVEWAY

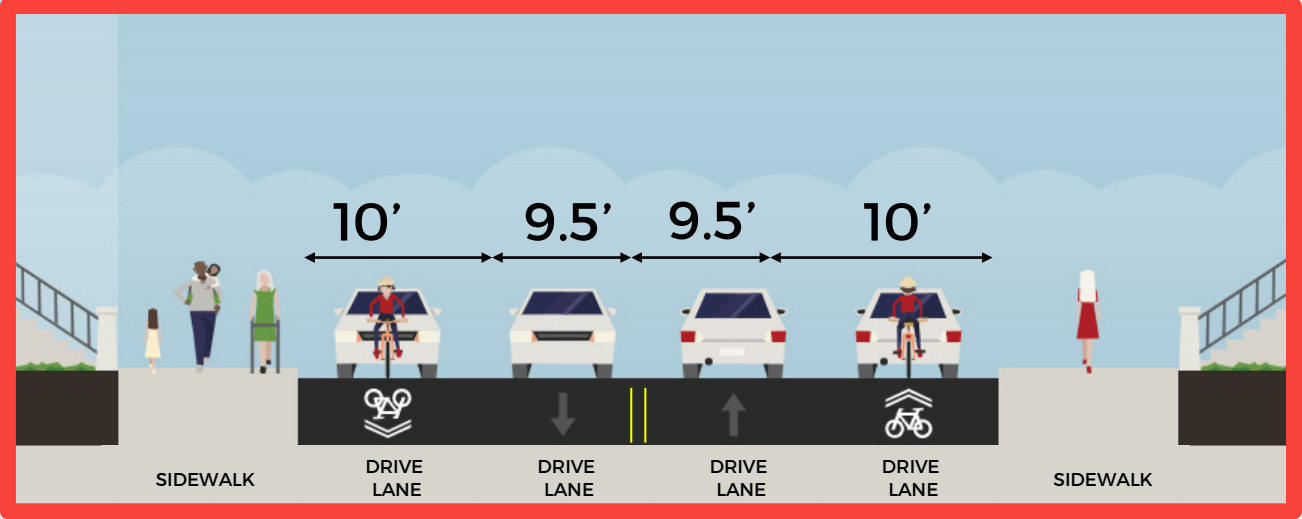
Design Elements

- Upgrade Existing Traffic Signal
- Add WB left turn lane
- Maintain two through lanes
- Revise signal timings

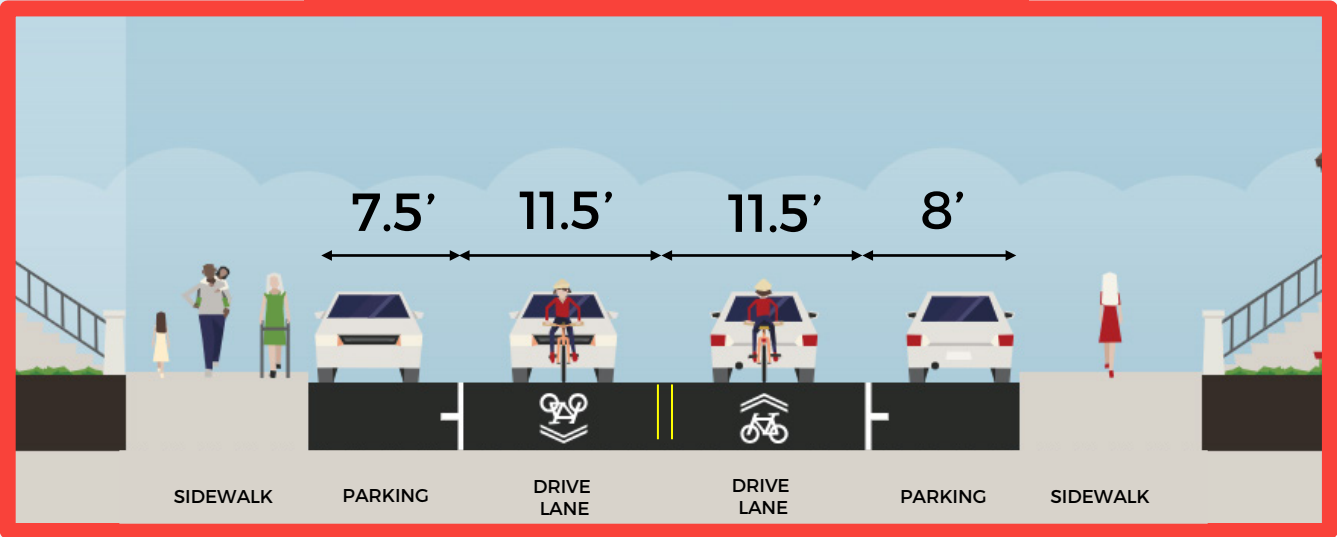
Corridor Design

Section 1

EXISTING CROSS SECTION

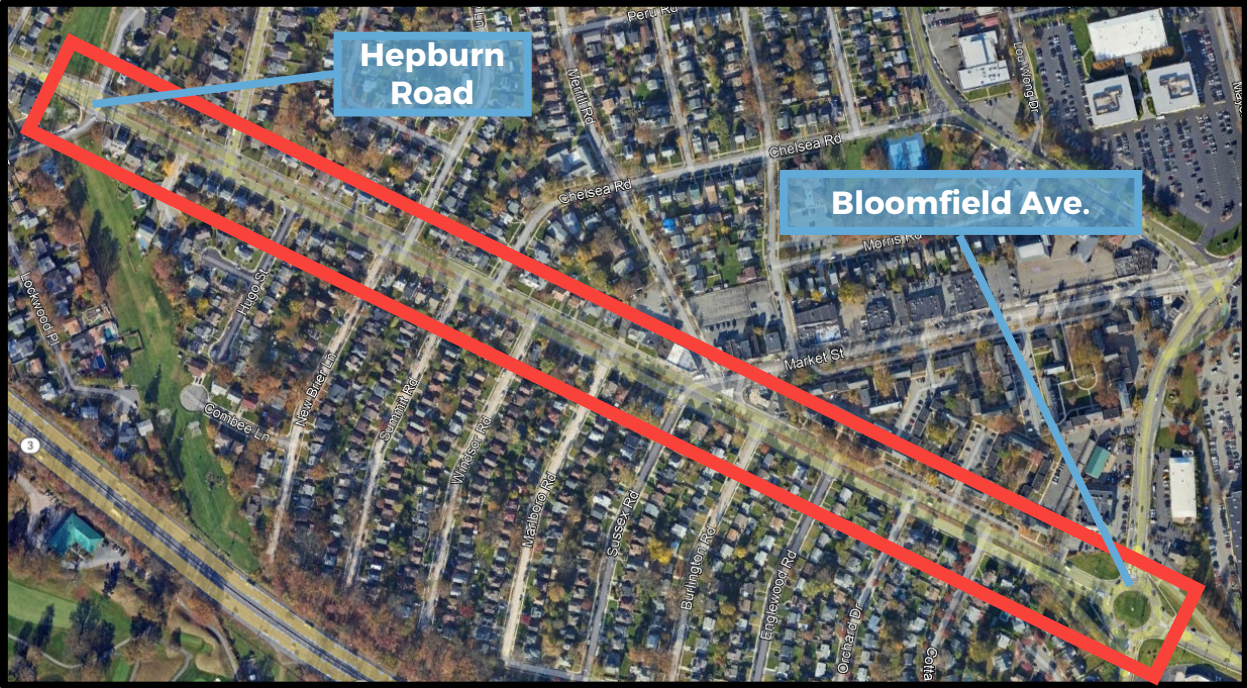


PROPOSED CROSS SECTION



Corridor Design

Section 2



CRASH STUDY

SECTION 2

(HEPBURN RD to BLOOMFIELD AVE)

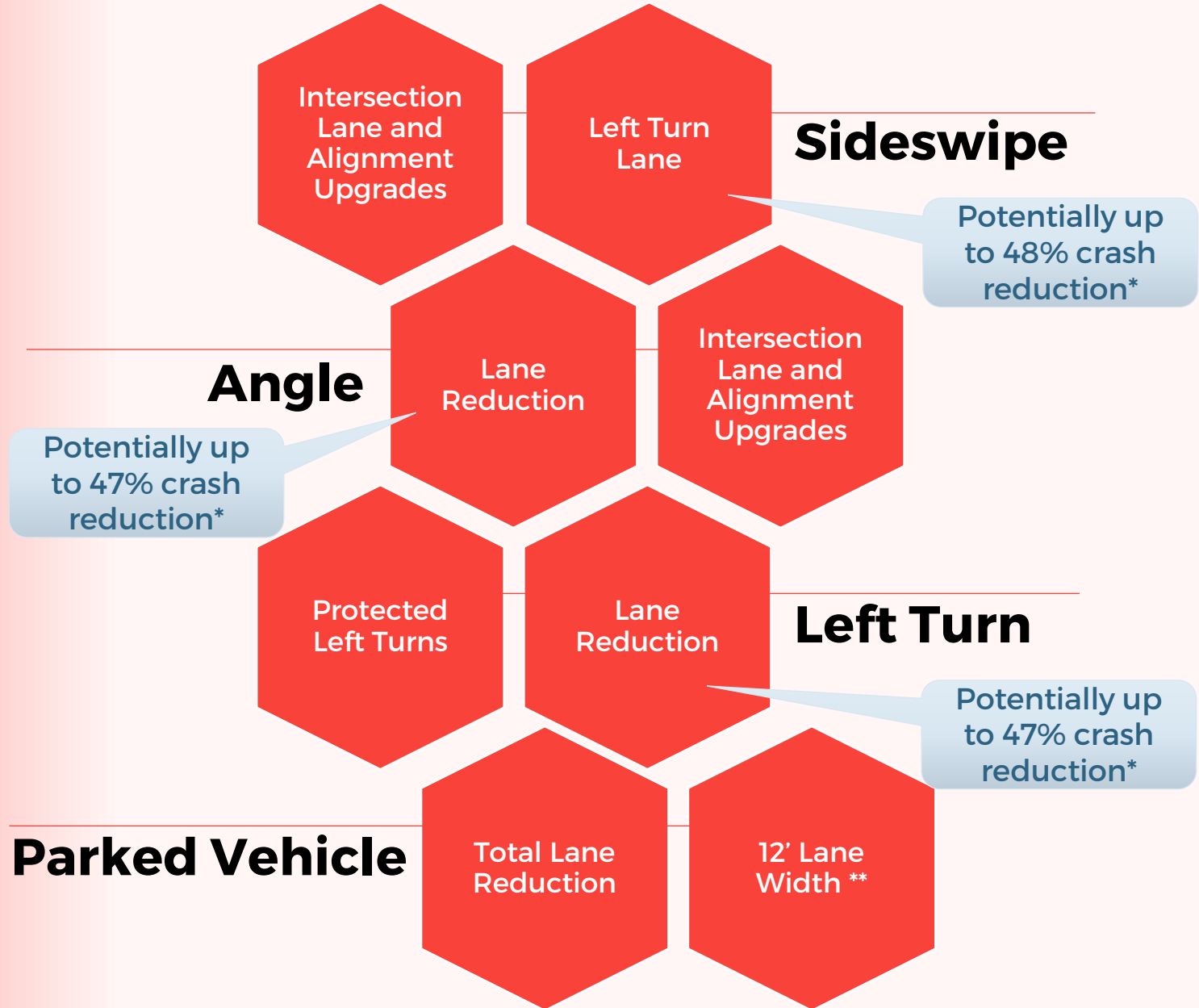
Milepost 0.65-Milepost 1.29

CRASH TYPE	Allwood Road	Statewide Average
Same Dir- Rear End	18% (8)	32%
Same Dir- Sideswipe*	20% (9)	13%
Angle*	34% (15)	19%
Head On	0% (0)	3%
Parked Vehicle*	11% (5)	6%
Left Turn / U Turn*	7% (3)	4%
Fixed Object	7% (3)	10%
Pedestrian	0% (0)	2%
Pedalcycle	0% (0)	1%
Other	2% (1)	10%

*Crash type higher than the Statewide average.

*Reference FHWA-SA-21-038 for more information on potential crash reduction percentages. These reductions are averages and not guaranteed

** Not a proven countermeasure

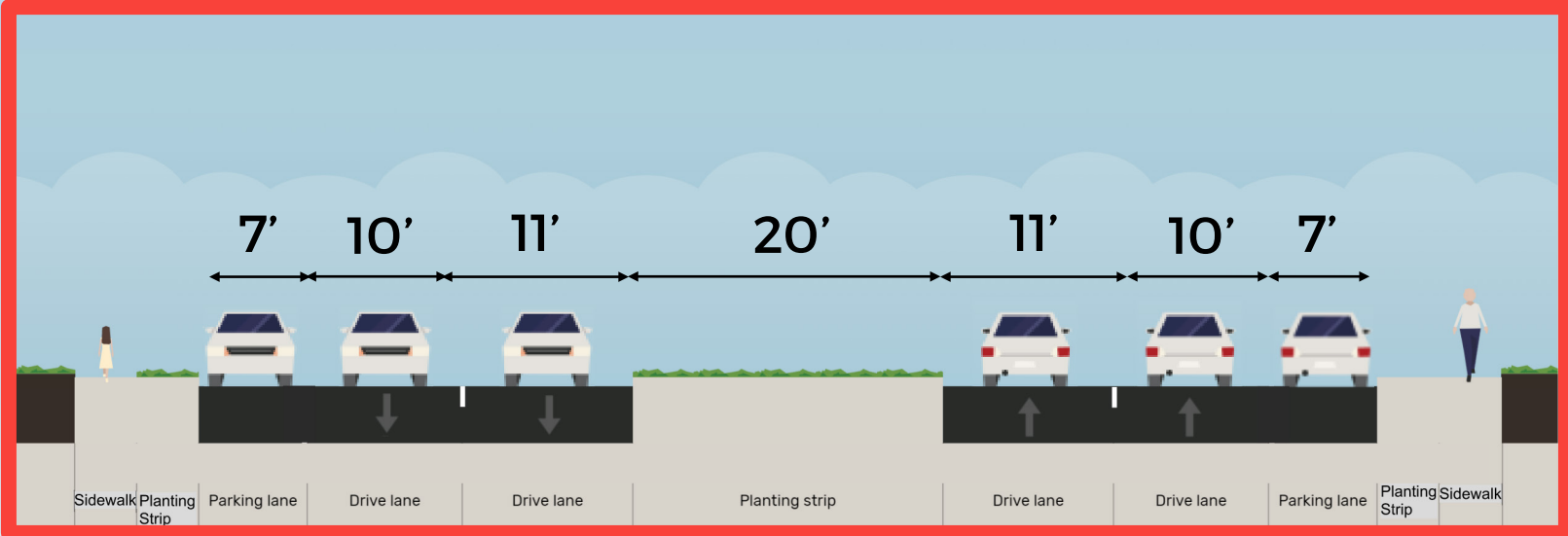


FHWA Proven Countermeasures

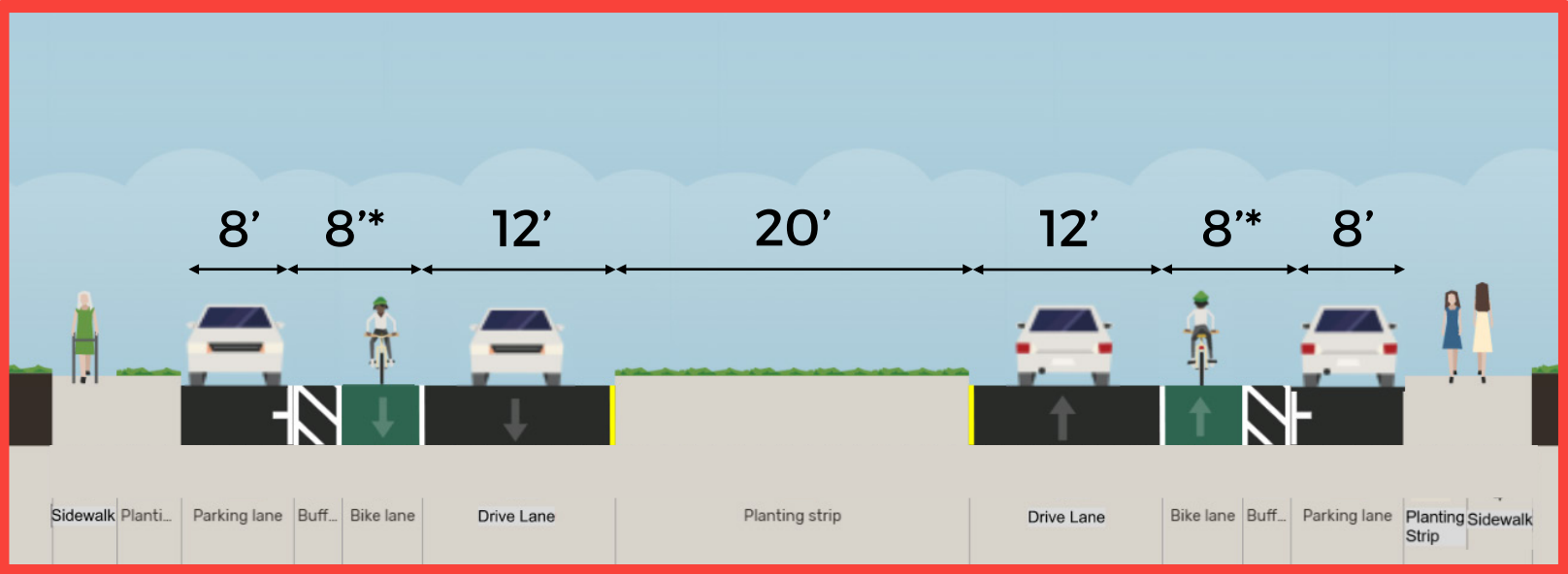
Corridor Design

Section 2

EXISTING CROSS SECTION



PROPOSED CROSS SECTION



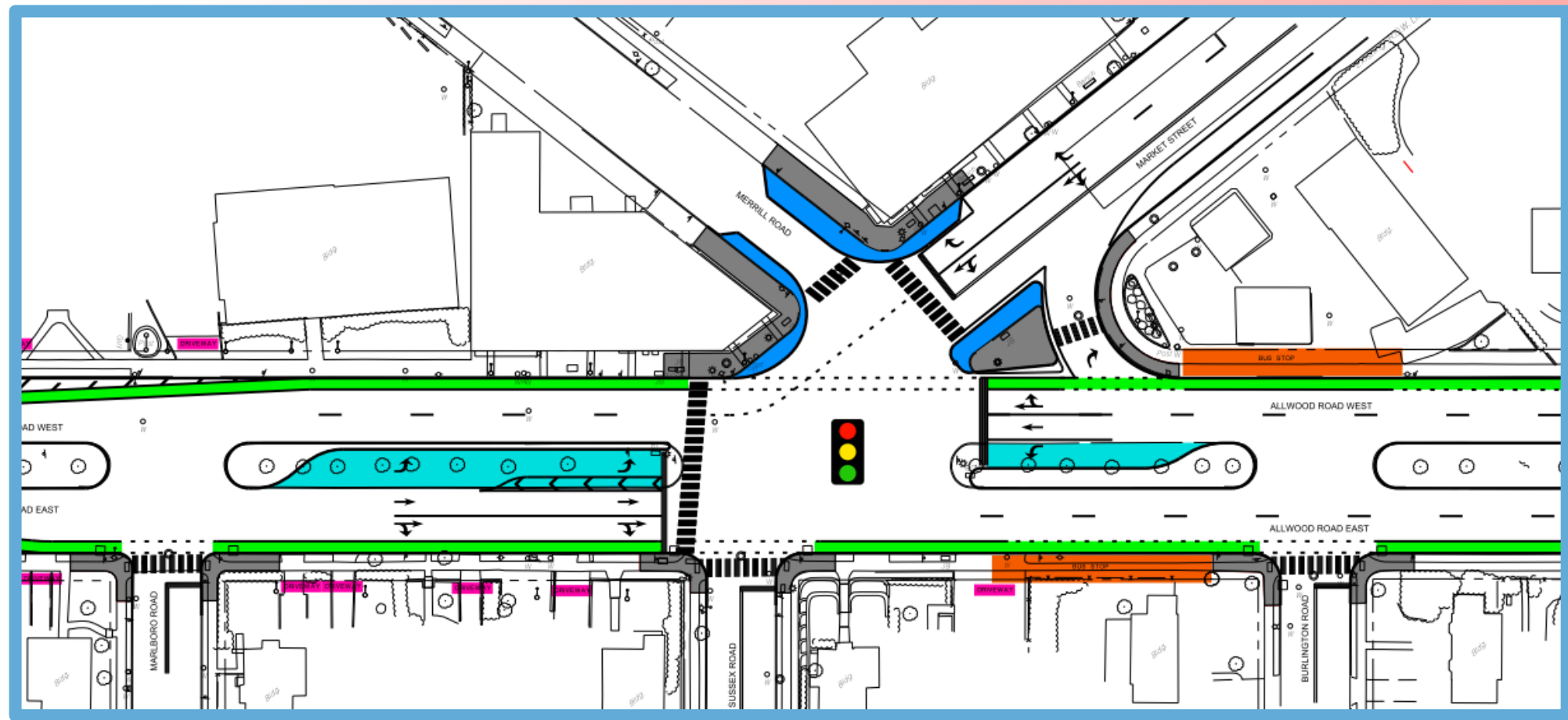
* 3' buffer and 5' bike lane










Corridor Design

Section 2

Market St Intersection



LEGEND

-  PROPOSED BIKE LANE MARKINGS
-  PROPOSED CURB EXTENSION WITH SIDEWALK
-  PROPOSED PAVEMENT
-  RECONSTRUCTED SIDEWALK
-  SIGNALIZED INTERSECTION
-  EXISTING BUS STOP
-  EXISTING DRIVEWAY

Design Elements

- Upgrade Existing Traffic Signal & replace median traffic signal poles
- Add EB & WB left turn lane
- Maintain two through lanes
- Revise signal timings

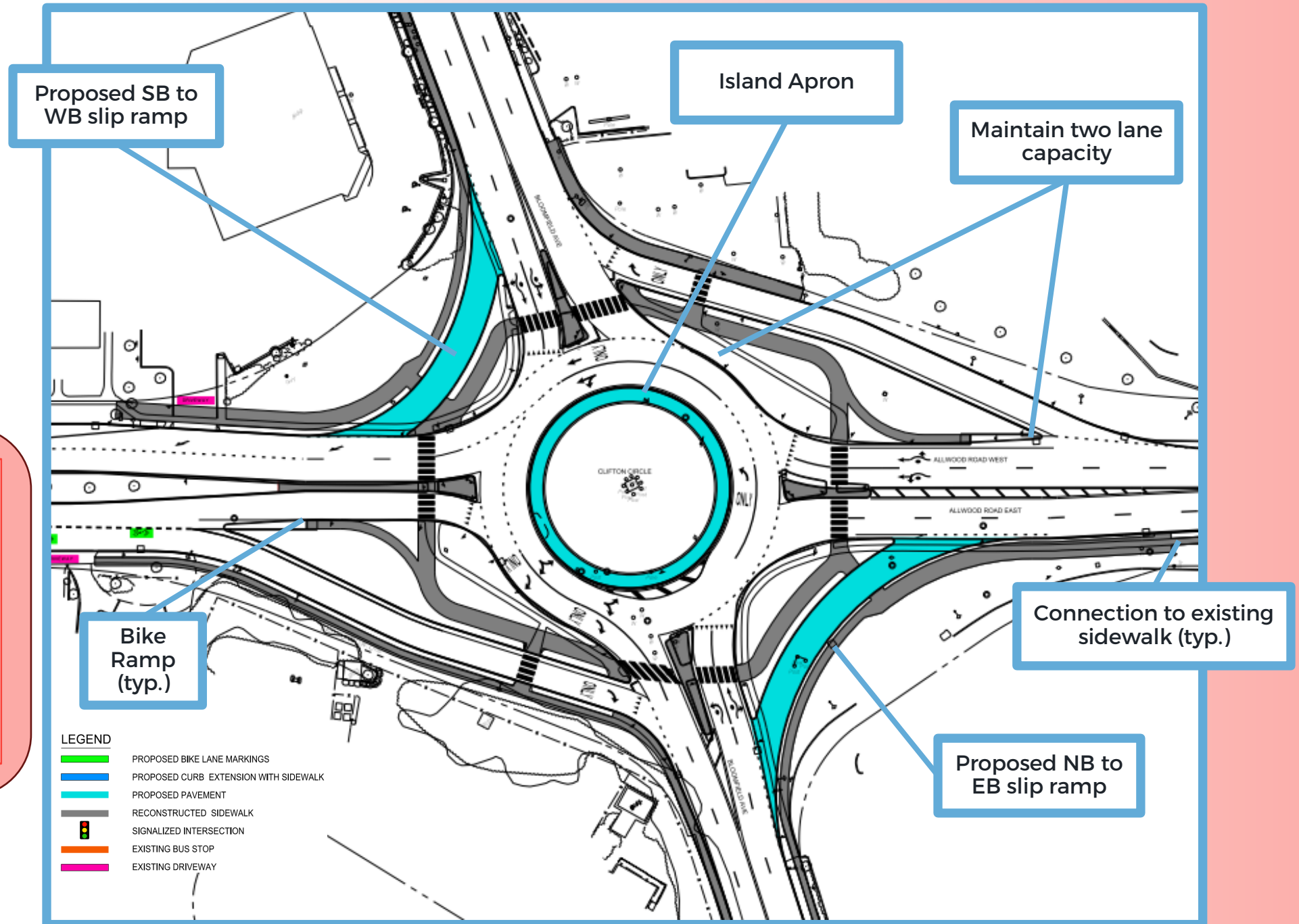
Corridor Design

Section 2

Bloomfield Ave

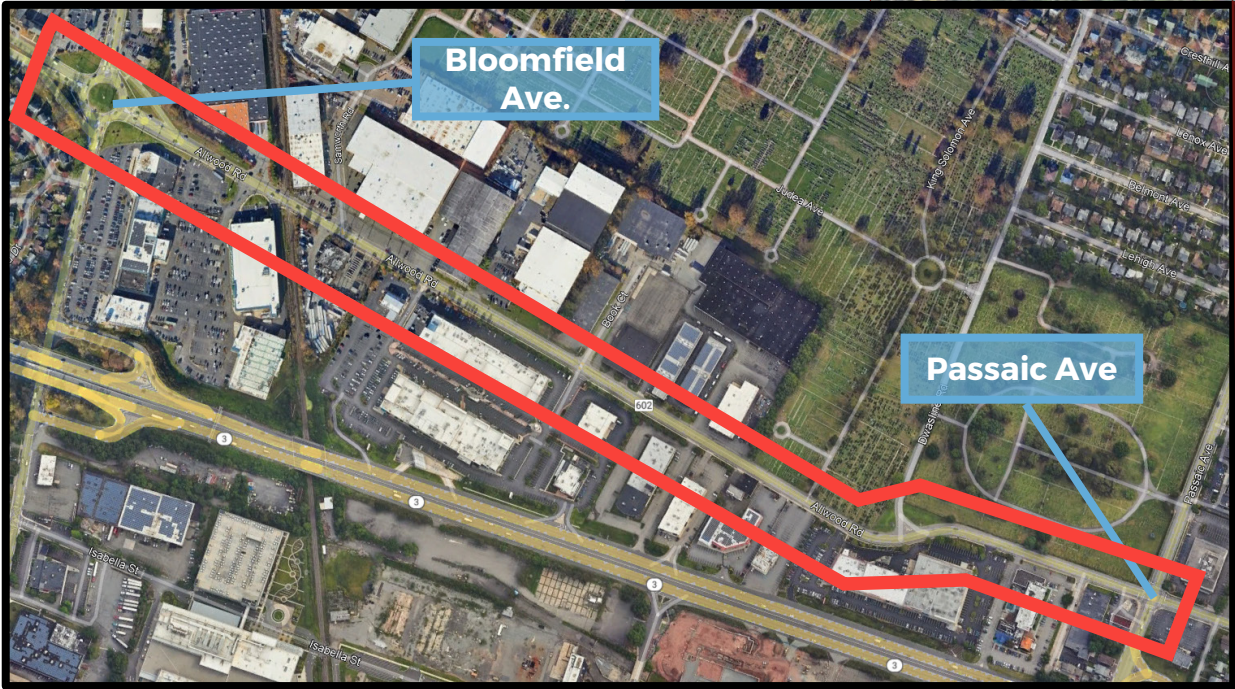
Design Elements

- Upgraded Striping
- Visible and clear directional signage
- Two Proposed Slip Ramps
- Safer Bike Ped Connectivity



Corridor Design

Section 3



Crash Study

Section 3

(BLOOMFIELD AVE to PASSAIC AVE)

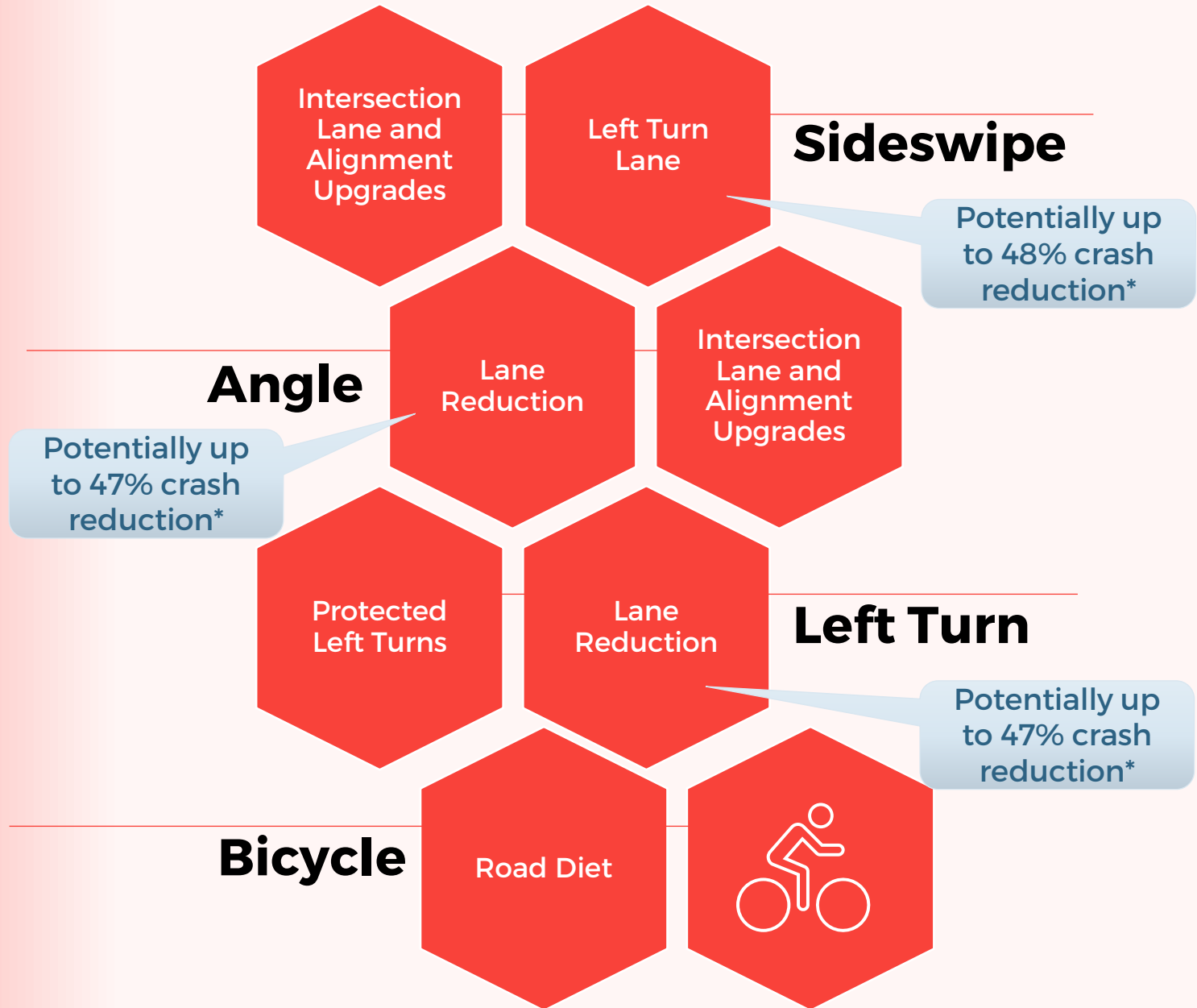
Milepost 1.30-Milepost 2.13

CRASH TYPE	Allwood Road	Statewide Average
Same Dir- Rear End	18% (18)	32%
Same Dir- Sideswipe*	20% (20)	13%
Angle*	40% (39)	19%
Head On	3% (3)	3%
Parked Vehicle	1% (1)	6%
Left Turn / U Turn*	7% (7)	4%
Fixed Object	4% (4)	10%
Pedestrian	0% (0)	2%
Pedalcycle*	1% (1)	1%
Other	5% (5)	10%

*Crash type higher than the Statewide average.

*Reference FHWA-SA-21-038 for more information on potential crash reduction percentages. These reductions are averages and not guaranteed

** Not a proven countermeasure



FHWA Proven Countermeasures

Road Diet

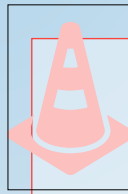


Safety Benefits:

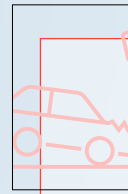
4-Lane to 3-Lane
Road Diet Conversions

19-47%

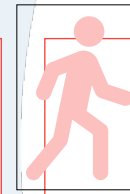
reduction in total crashes.¹



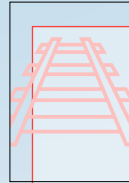
Reduce of rear-end
and left-turn crashes



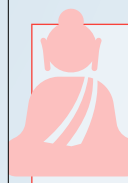
Reduced right-angle
crashes



Safer Pedestrian
Crossing



Room in cart width
for Ped. Refuge
Island

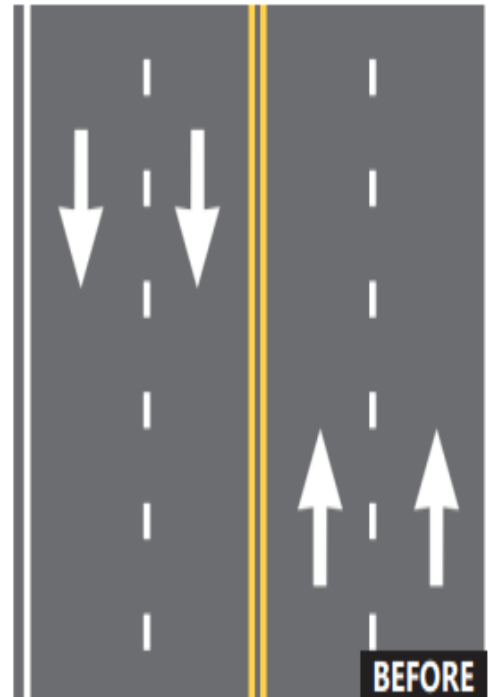


Traffic Calming and
more consistent
speeds

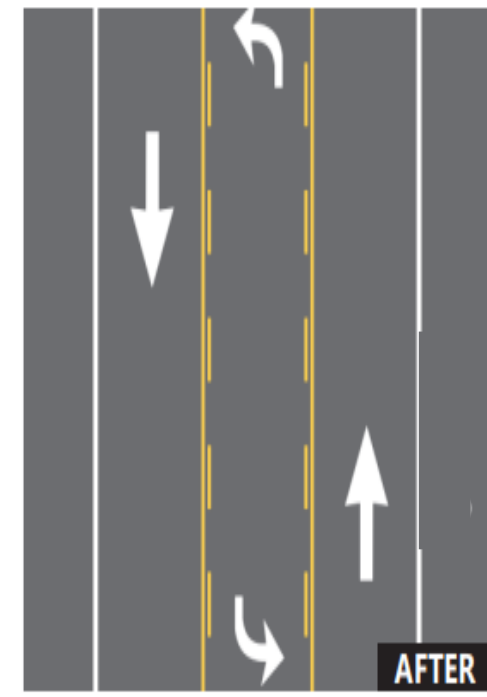


Community Focused
and Complete Streets
Environment

BEFORE



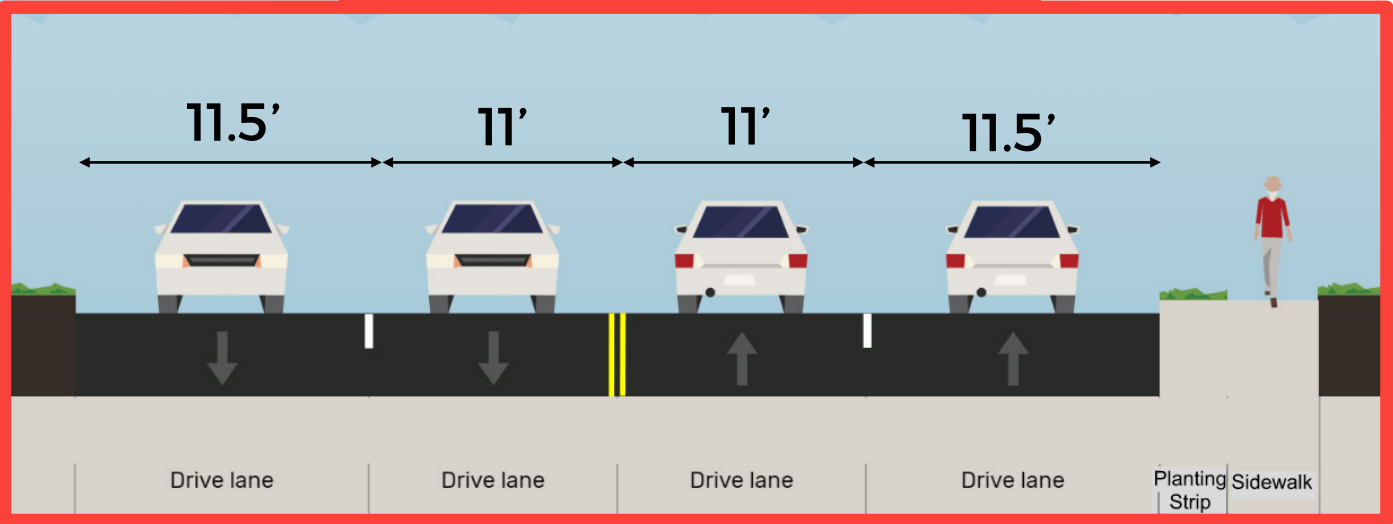
AFTER



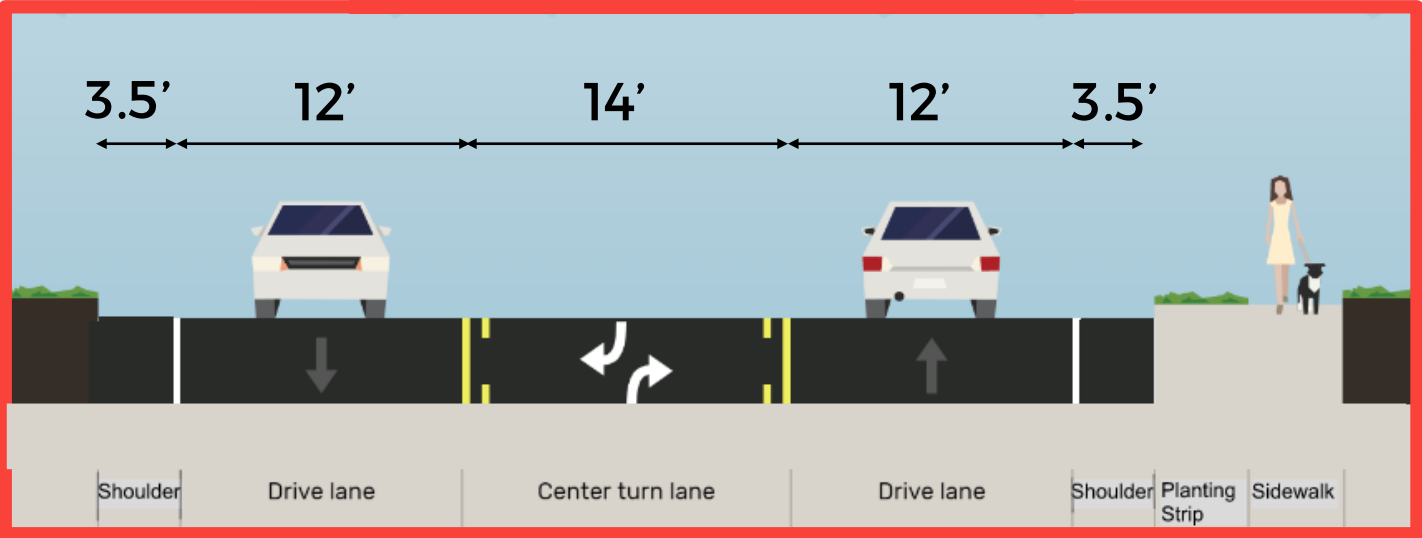
Corridor Design

Section 3

EXISTING CROSS SECTION



PROPOSED CROSS SECTION



Corridor Design








Section 3

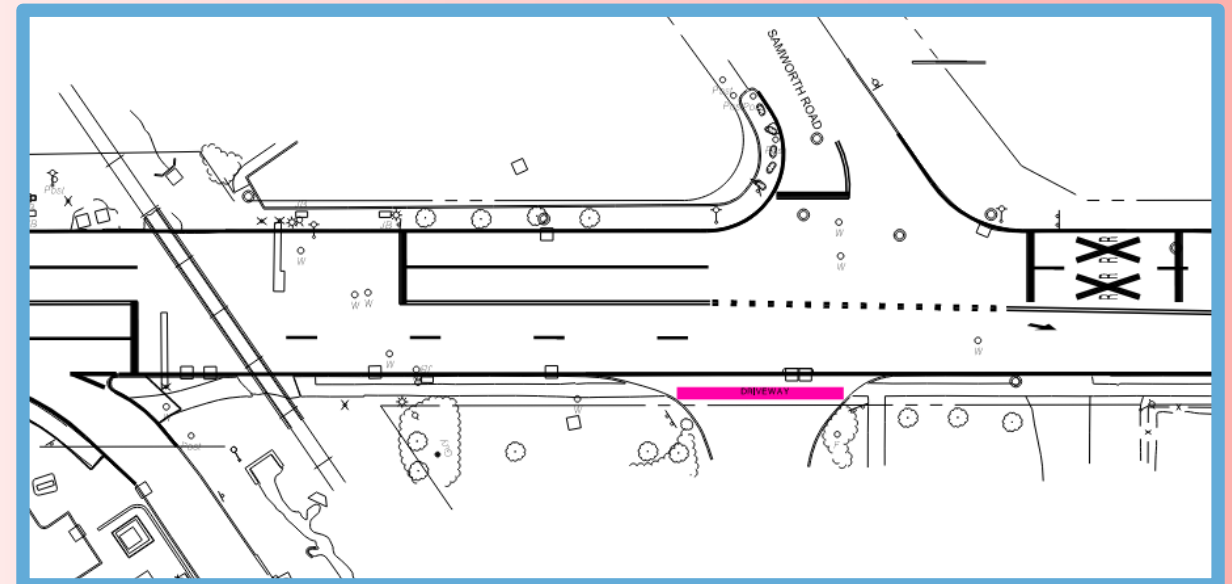
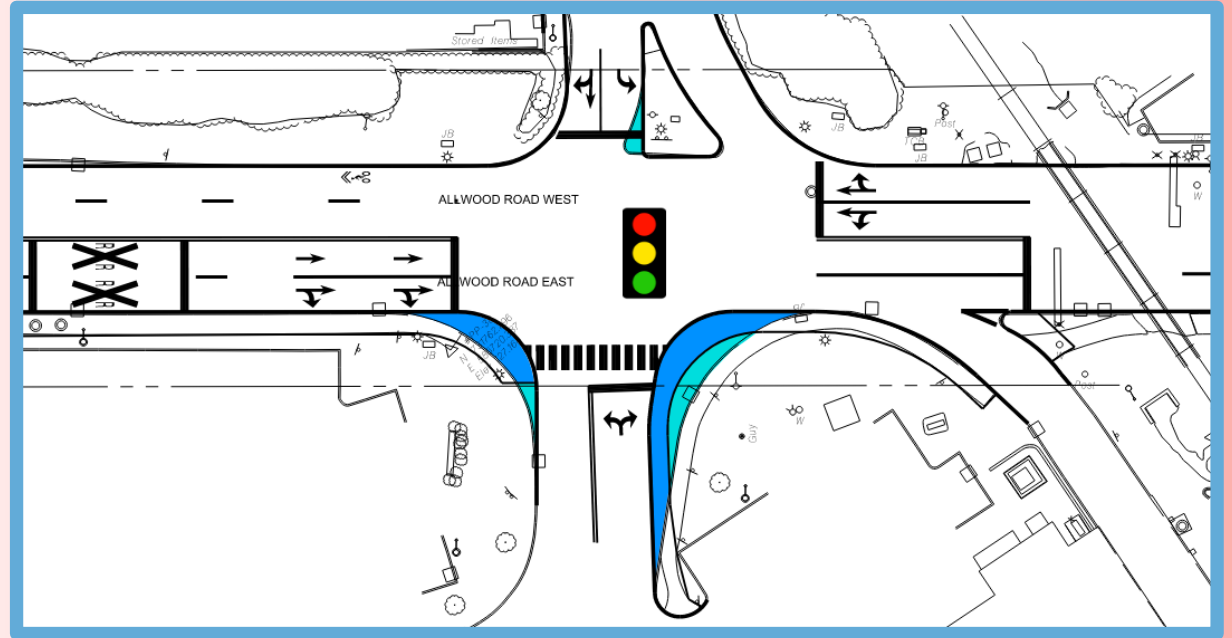
Styertowne Shopping Center

Design Elements

- Upgrade Existing Traffic Signal & replace median traffic signal poles
- Add SB left turn lane
- Reduce NB Approach from 2 through lanes to 1

LEGEND

-  PROPOSED BIKE LANE MARKINGS
-  PROPOSED CURB EXTENSION WITH SIDEWALK
-  PROPOSED PAVEMENT
-  RECONSTRUCTED SIDEWALK
-  SIGNALIZED INTERSECTION
-  EXISTING BUS STOP
-  EXISTING DRIVEWAY



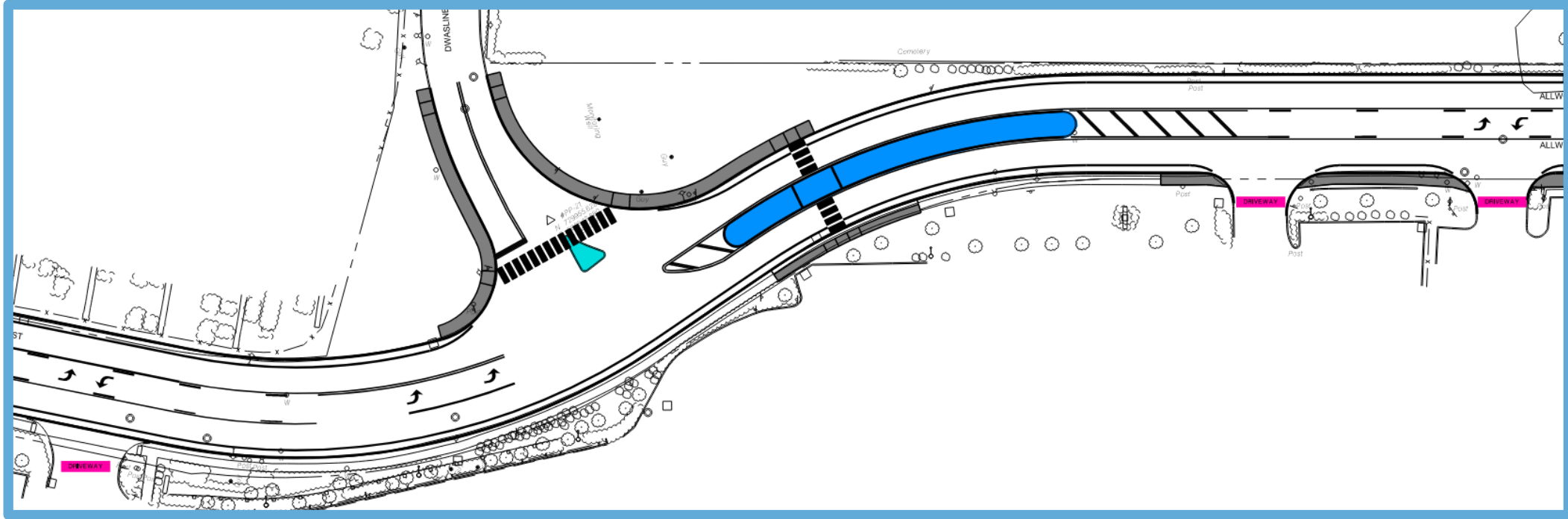
MATCHLINE

MATCHLINE

Corridor Design

Section 3

Dwasline Road



LEGEND

- PROPOSED BIKE LANE MARKINGS
- PROPOSED CURB EXTENSION WITH SIDEWALK
- PROPOSED PAVEMENT
- RECONSTRUCTED SIDEWALK
- SIGNALIZED INTERSECTION
- EXISTING BUS STOP
- EXISTING DRIVEWAY

Design Elements

- High Friction Surface Course Pavement Treatment (HFSC)
- New crosswalks with ped refuge
- Rectangular Rapid Flashing Beacon

Potentially up to 48% crash reduction*

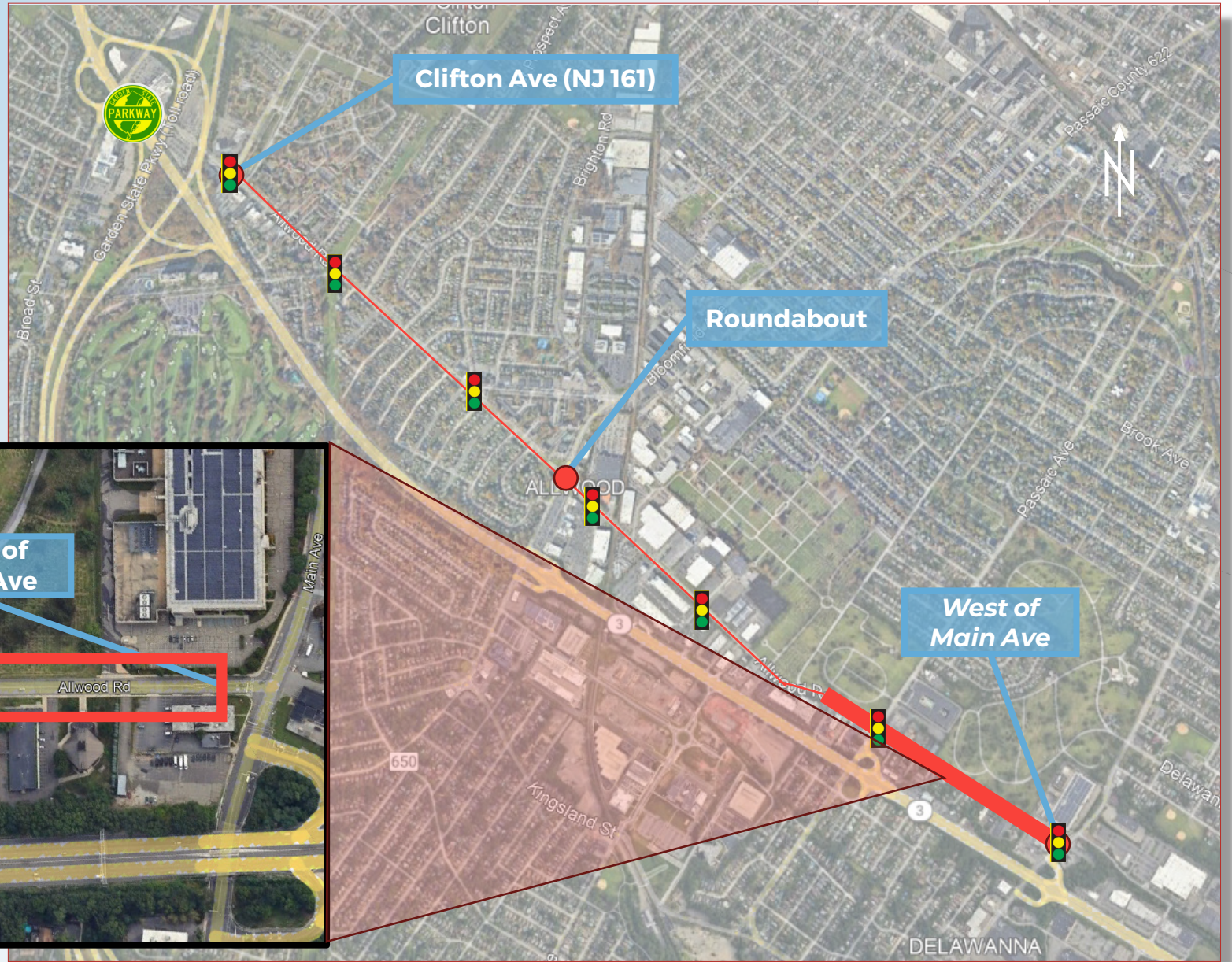
Potentially up to 56% crash reduction*

Potentially up to 47% crash reduction and increase motorist yielding rates up to 98%*

*Reference FHWA-SA-21-038 for more information on potential crash reduction percentages. These reductions are averages and not guaranteed

Corridor Design

Section 4



Crash Study

Section 4

(BLOOMFIELD AVE to PASSAIC AVE)

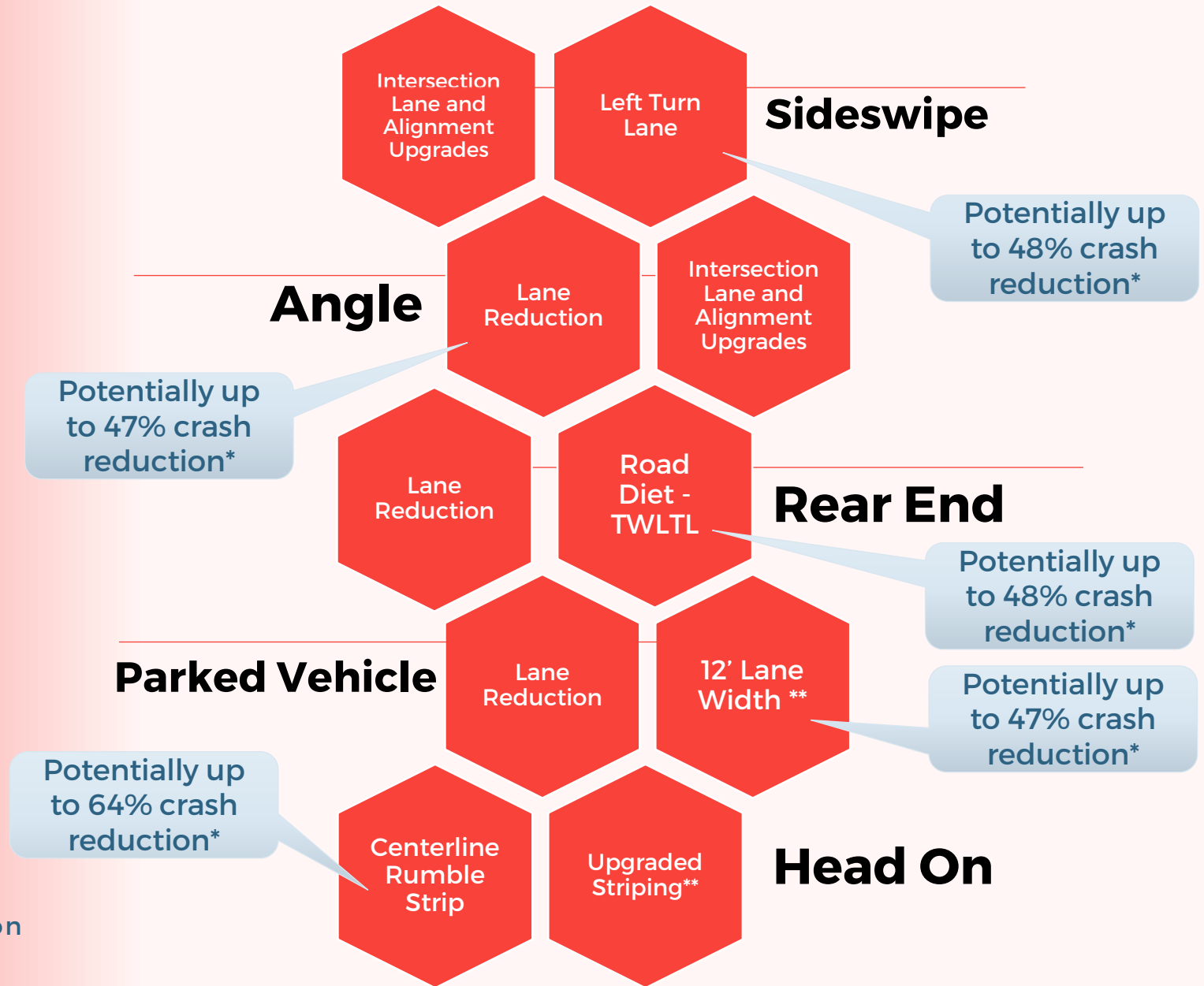
Milepost 2.14- Milepost 2.55

CRASH TYPE	Allwood Road	Statewide Average
Same Dir- Rear End*	35% (7)	32%
Same Dir- Sideswipe*	20% (4)	13%
Angle*	20% (4)	19%
Head On*	5% (1)	3%
Parked Vehicle*	10% (2)	6%
Left Turn / U Turn	0% (0)	4%
Fixed Object	0% (0)	10%
Pedestrian	0% (0)	2%
Pedalcycle	0% (0)	1%
Other	10% (2)	10%

*Crash type higher than the Statewide average.

*Reference FHWA-SA-21-038 for more information on potential crash reduction percentages. These reductions are averages and not guaranteed

** Not a proven countermeasure

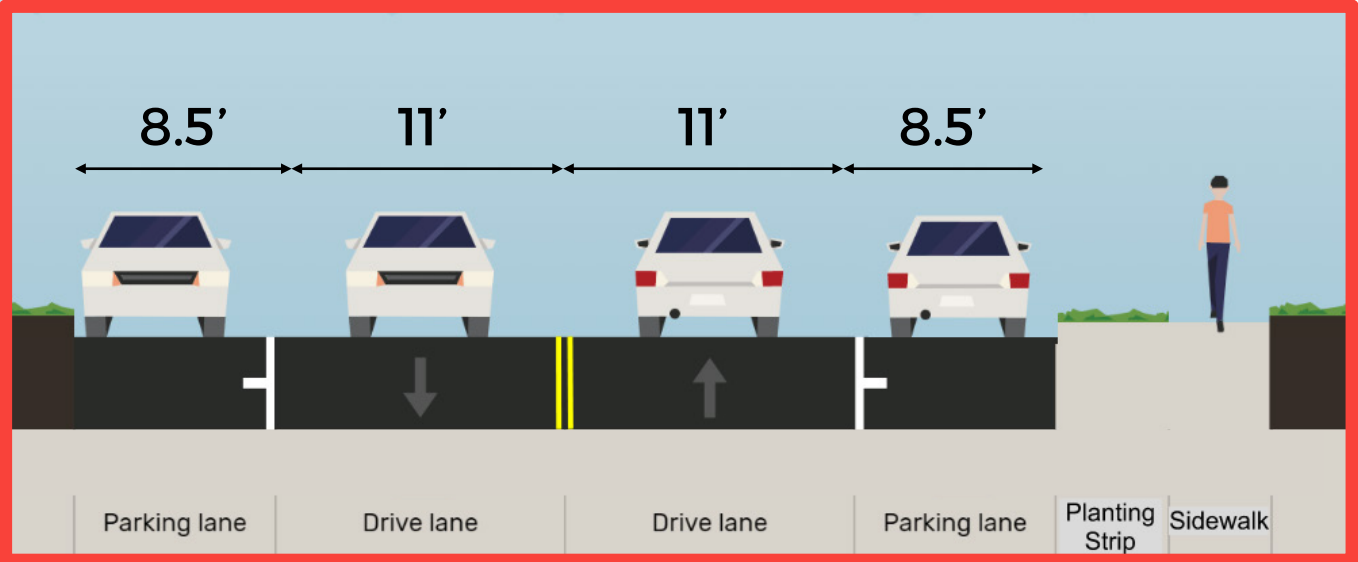


FHWA Proven Countermeasures

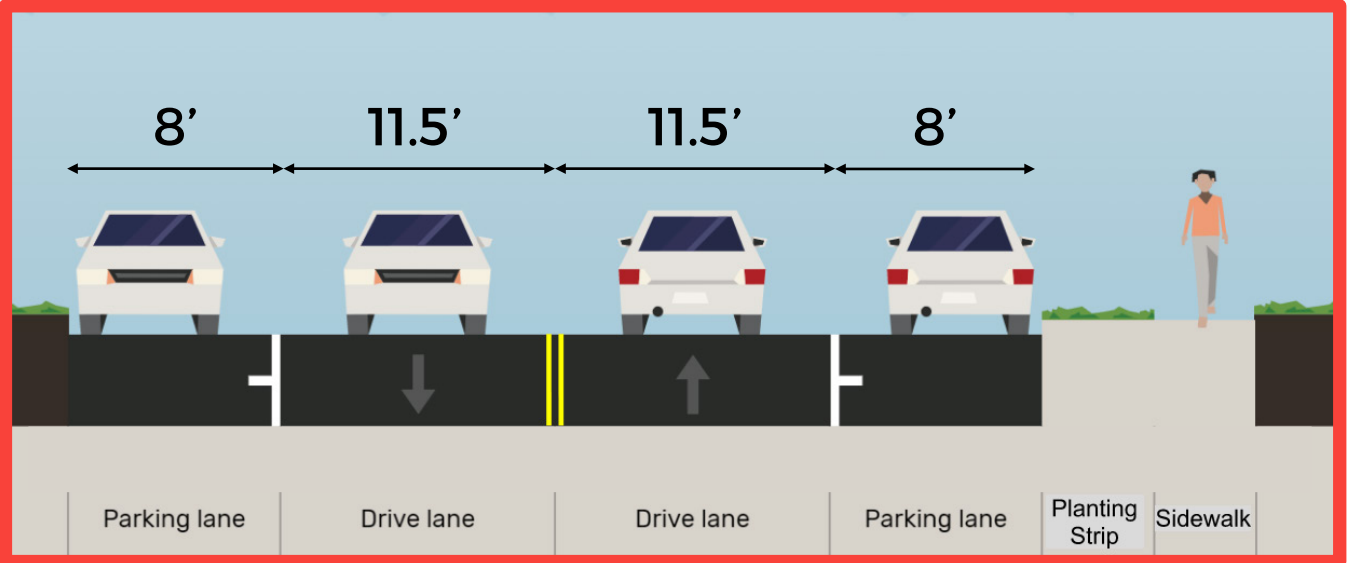
Corridor Design

Section 4

EXISTING CROSS SECTION



PROPOSED CROSS SECTION



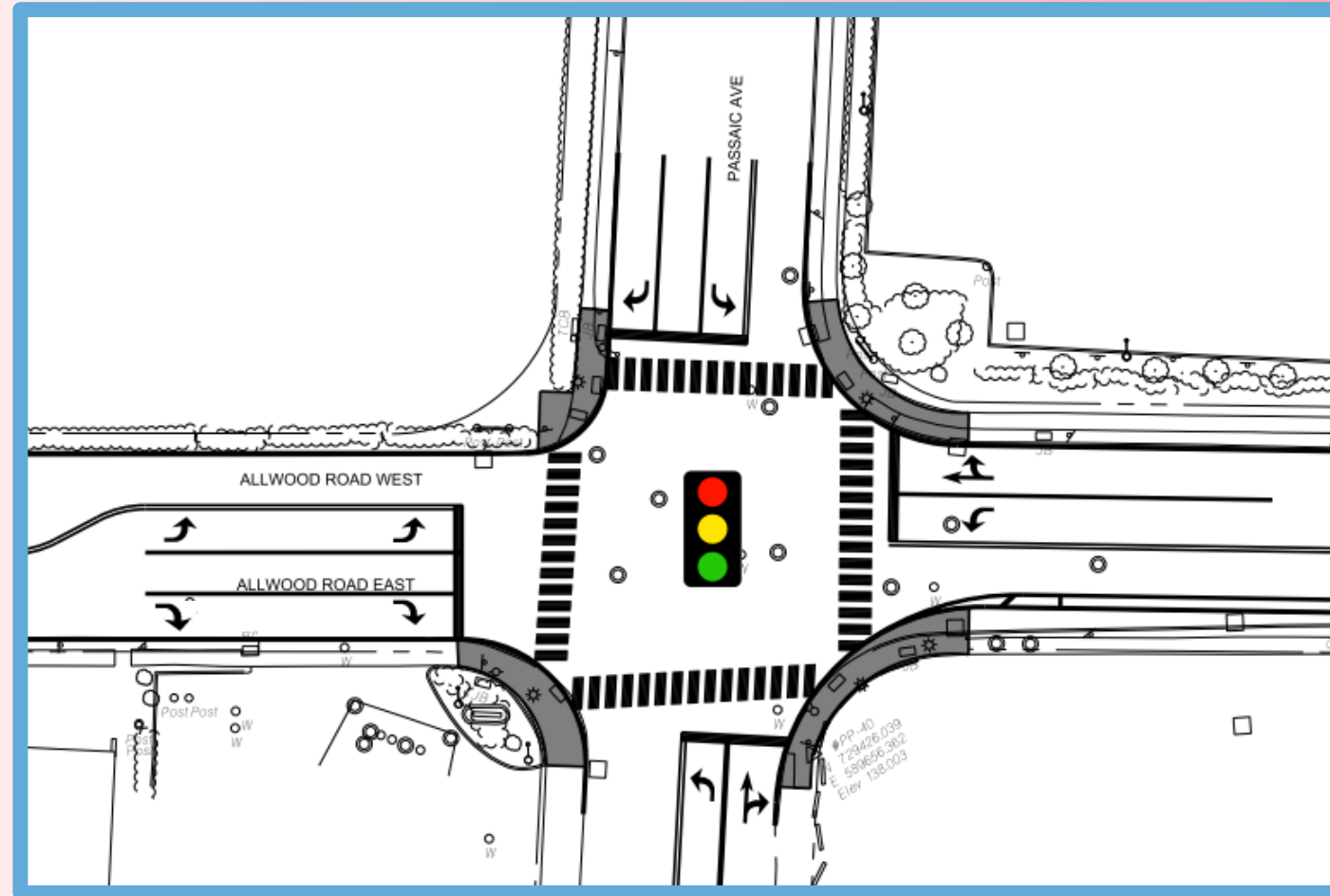
Corridor Design

Section 4

Passaic Ave

Design Elements

- New Traffic Signal
- Reconfigure approach lanes to optimize intersection
- **Eastbound:** exclusive left turn lane, through lane and right turn lane
 - **Westbound:** exclusive left turn lane, shared through/right turn lane;
 - **Northbound:** Left turn lane and shared through/right turn lane;
 - **Southbound:** exclusive left turn lane, through lane, and right turn lane

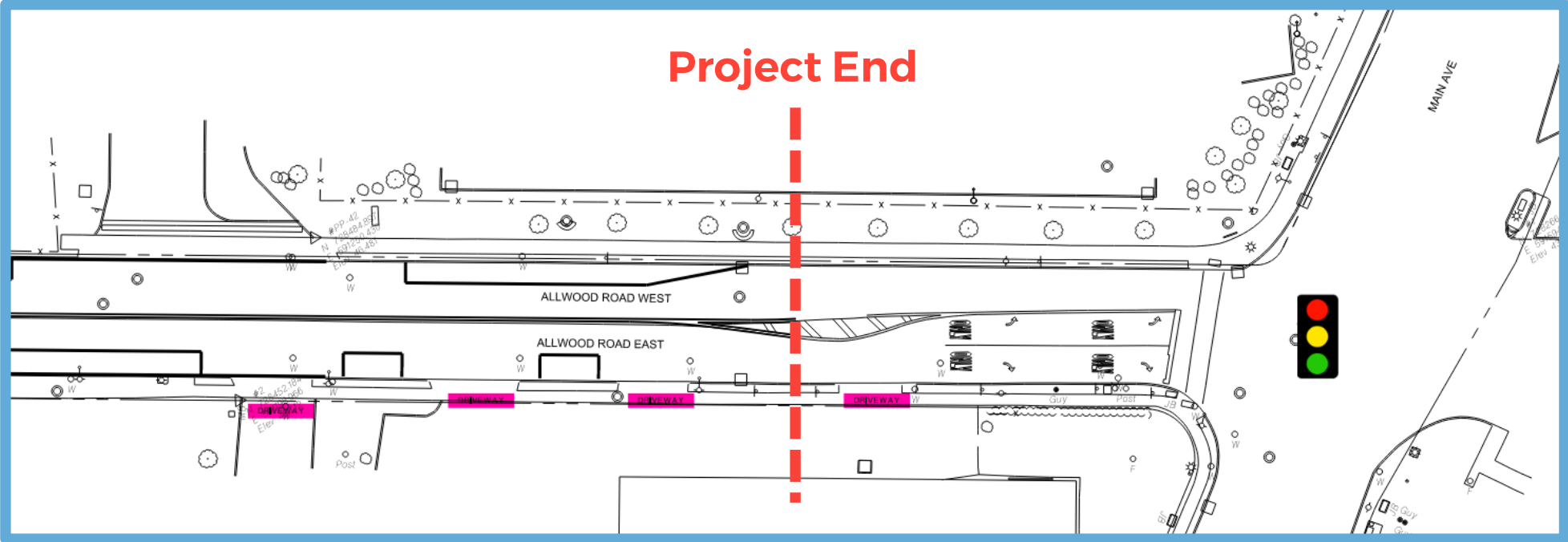









LEGEND	
	PROPOSED BIKE LANE MARKINGS
	PROPOSED CURB EXTENSION WITH SIDEWALK
	PROPOSED PAVEMENT
	RECONSTRUCTED SIDEWALK
	SIGNALIZED INTERSECTION
	EXISTING BUS STOP
	EXISTING DRIVEWAY

Corridor Design

Section 4

West of Main Ave

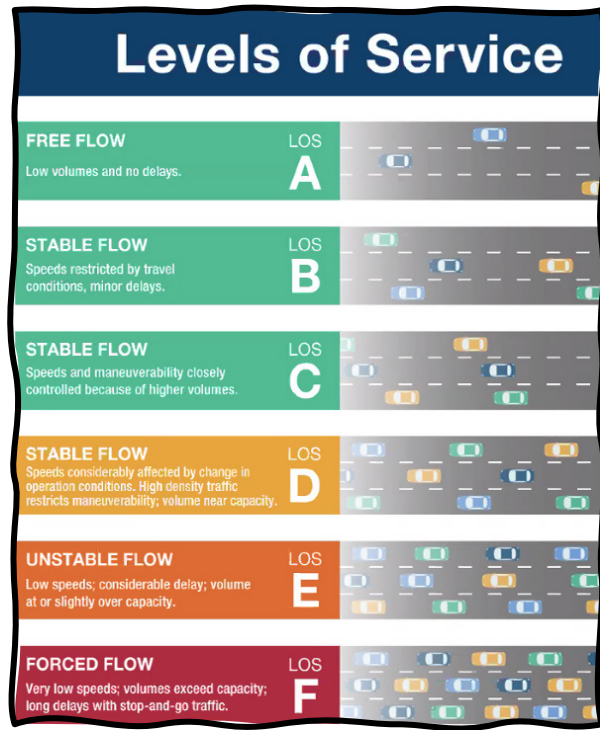


LEGEND	
	PROPOSED BIKE LANE MARKINGS
	PROPOSED CURB EXTENSION WITH SIDEWALK
	PROPOSED PAVEMENT
	RECONSTRUCTED SIDEWALK
	SIGNALIZED INTERSECTION
	EXISTING BUS STOP
	EXISTING DRIVEWAY



Future Level of Service Analysis

The capacity of the corridor will not be affected significantly by the proposed improvements based on traffic projections.



Additional delay due to Dwasline Road Safety Measures and Passaic Ave Signal Upgrades

Additional delay due to extra Clifton Ave Signal Phase for Driveway

Allwood Rd Eastbound	Cross Street	Level of Service	
		2040 No Build	2040 Build
	Clifton Ave	-	-
	Hepburn Rd/Zeim Rd	C	C
	Market St/Sussex Rd	B	B
	Bloomfield Rd. (Roundabout)	E	E
	Shopping Center	A	A
	Book Court	C	C
	Passaic Ave	B	C
	TOTAL:	C	C

Allwood Rd Westbound	Cross Street	Level of Service	
		2040 No Build	2040 Build
	Passaic Ave	-	-
	Book Court	A	A
	Book Court	C	C
	Bloomfield Rd. (Roundabout)	F	E
	Market St/Sussex Rd	C	C
	Hepburn Rd/Zeim Rd	B	B
	Clifton Ave	C	D
	TOTAL:	C	C

Project Schedule & Next Steps



Questions/Comments



Defining the Vision. Shaping the Future.

