



# New Jersey Avenue Corridor Safety Project

September 5<sup>th</sup>, 2023

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# New Jersey Ave NW Schedule

- **Concept Planning**
  - Mid City East Livability Study (2013)
  - MoveDC (2014)
  - MoveDC Update (2021)
- **Traffic Analysis Study (2022/23)**
- **Concept Plan (2022)**
- **ANC 6E Transportation Advisory Committee Meeting**
- **Community Consultation on Design and Engineering (Fall - Winter 2023)**
- **Design (Fall - Winter 2023)**
- **Public Comment Period- 30 business days from NOI (Fall 2023)**
- **Construction (Spring 2024)**

# Why is DC Installing Protected Bicycle Lanes?

## 2005 Bicycle Master Plan Goals

- 2000: 1% of commute trips by bike
- 2010: 3% of commute trips by bike
- 2015: 5% of commute trips by bike



## Sustainable DC goals

- 75% of all trips by walk, bike, transit by 2032
- 150 more bike share stations
- Carbon Neutrality by 2050

## Vision Zero Goals

- Zero Traffic Fatalities
- Few serious injuries
- Create safe conditions through design
- Safe & accessible streets for all users

## Safe Routes to School

- Building Safe Routes



# Why Protected Lanes?

New Jersey Ave FUTURE



New Jersey Ave TODAY



LOW STRESS  
TOLERANCE

HIGH STRESS  
TOLERANCE

## BICYCLIST DESIGN USER PROFILES

**Interested  
but Concerned**

**51%-56%** of the total  
population

Often not comfortable with bike lanes, may bike on sidewalks even if bike lanes are provided; prefer off-street or separated bicycle facilities or quiet or traffic-calmed residential roads. May not bike at all if bicycle facilities do not meet needs for perceived comfort.

**Somewhat  
Confident**

**5-9%** of the total  
population

Generally prefer more separated facilities, but are comfortable riding in bicycle lanes or on paved shoulders if need be.

**Highly  
Confident**

**4-7%** of the total  
population

Comfortable riding with traffic; will use roads without bike lanes.



# Mid City East Livability Study

## ...venue NW

...venue is designated minor arterial.  
...has four general purpose  
...in the first  
...hours, however parking is  
...hour in the peak rush direction.  
...as heavily trafficked as other minor  
...work and existing and planned  
...could be accommodated in a reduced  
...eration.  
...concerns for the corridor were to improve  
...crossings across New Jersey Avenue and  
...comfortable accommodation for cycling

...ss sections were considered:  
...me bike lane with a floating buffer and  
...off-peak times. This plan  
...a buffer, at only two feet  
...et DDOT's guide-  
...ne complexity  
...not be intuitive to

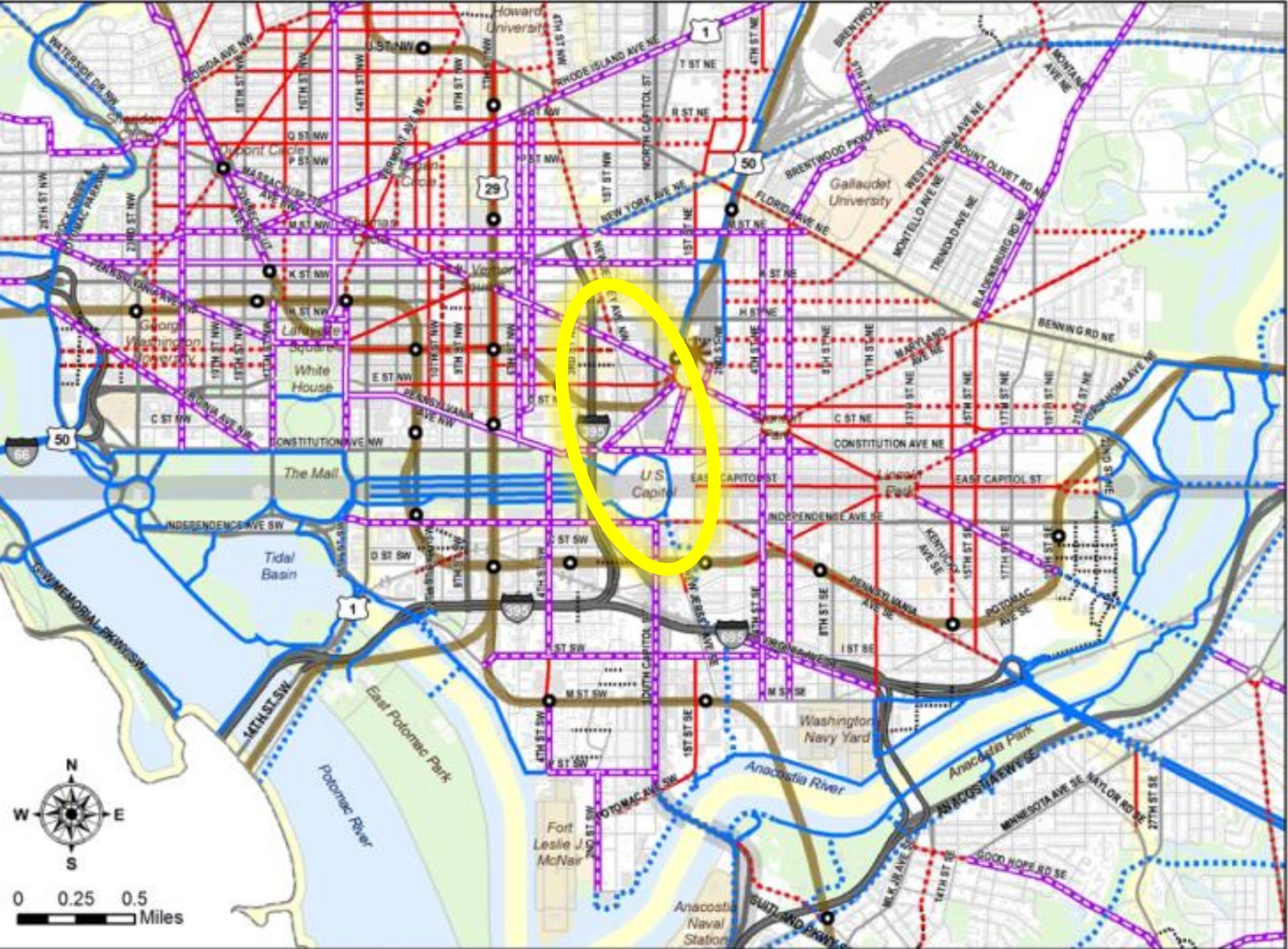
Figure 7-5 Rhode Island Bus/Bike Lane Concept Alternative



Figure 7-6 New Jersey Avenue Floating Bike Lane Concept Alternative



# moveDC Bicycle Plan 2014

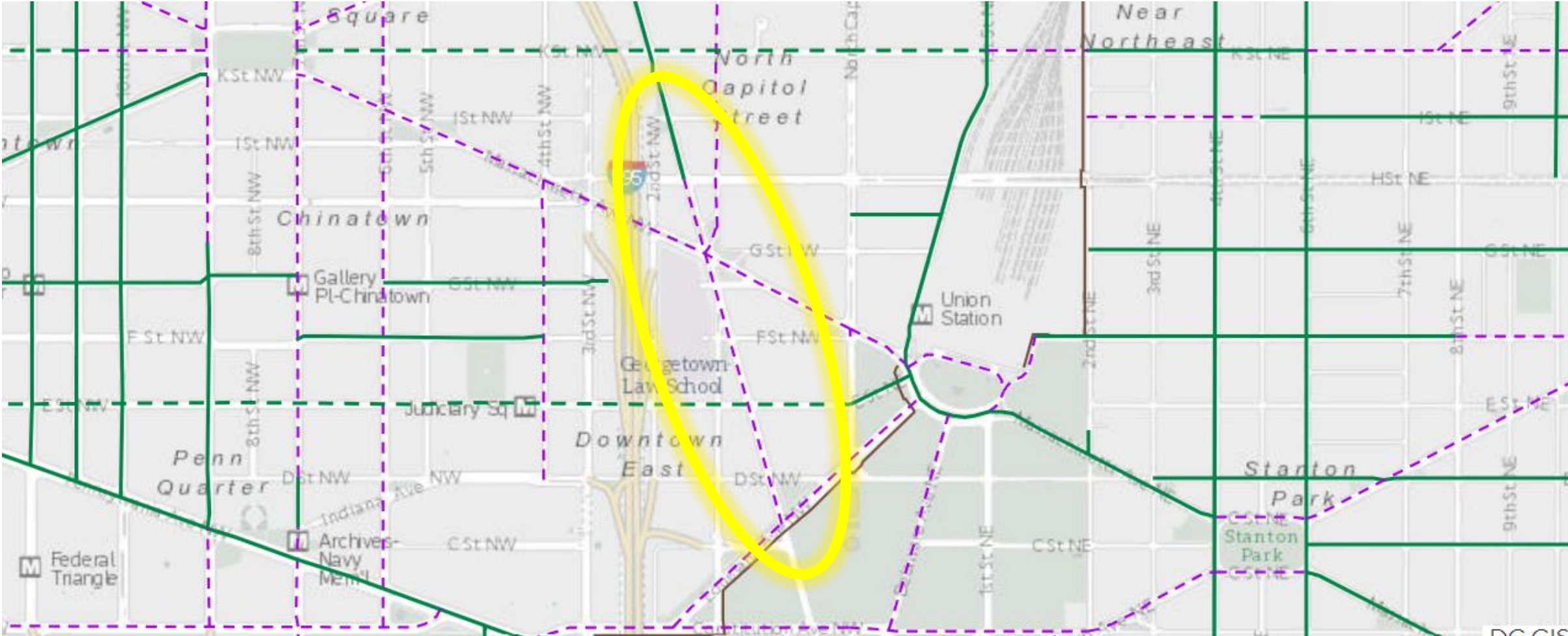


**moveDC Plan Elements (Future)**

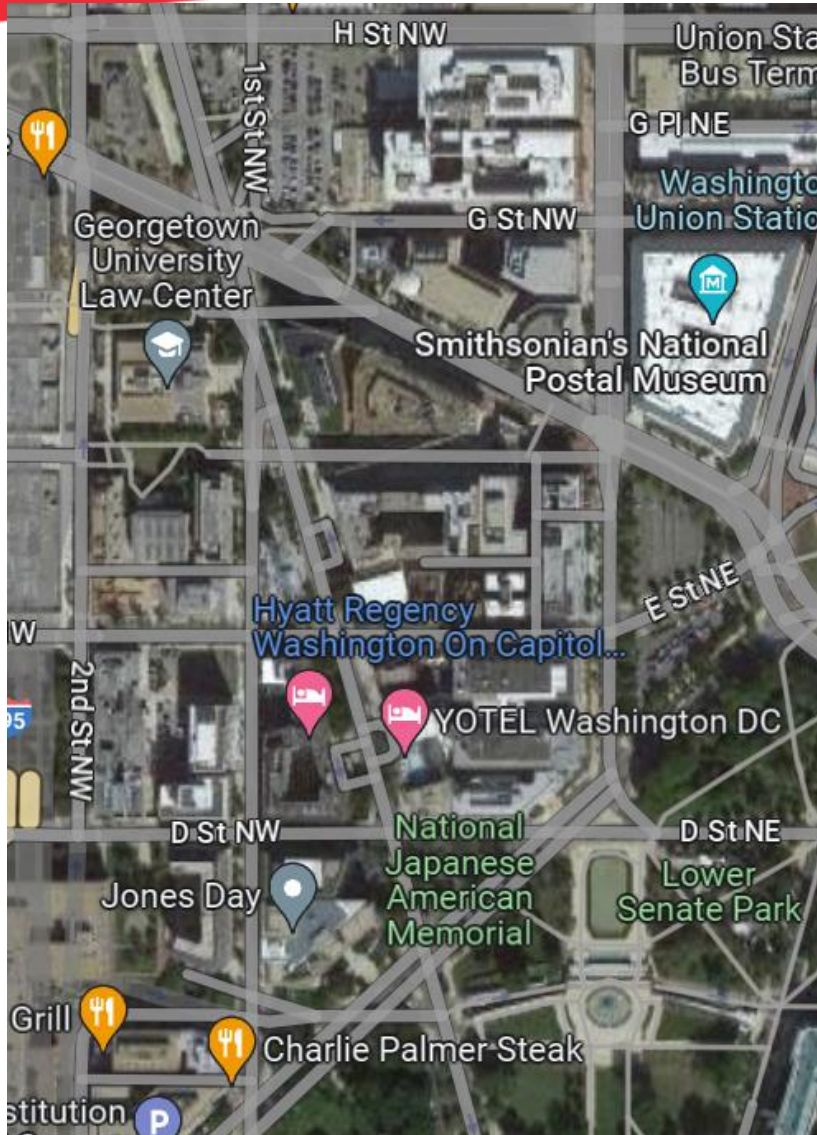
- Trail
- Bicycle Lane
- Cycle Track
- Street
- Union Station Improvements



# moveDC Bicycle Plan 2021



# Background



**Project Limits:** New Jersey Ave NW between Louisiana Avenue and H St NW

- Wide lanes & more lanes than needed for traffic volumes
- Fire Station
- High pedestrian activity (Georgetown Law, Hotels, Residential Developments)
- Missing connections in the bicycle network



# Existing Conditions – Roadway Characteristics

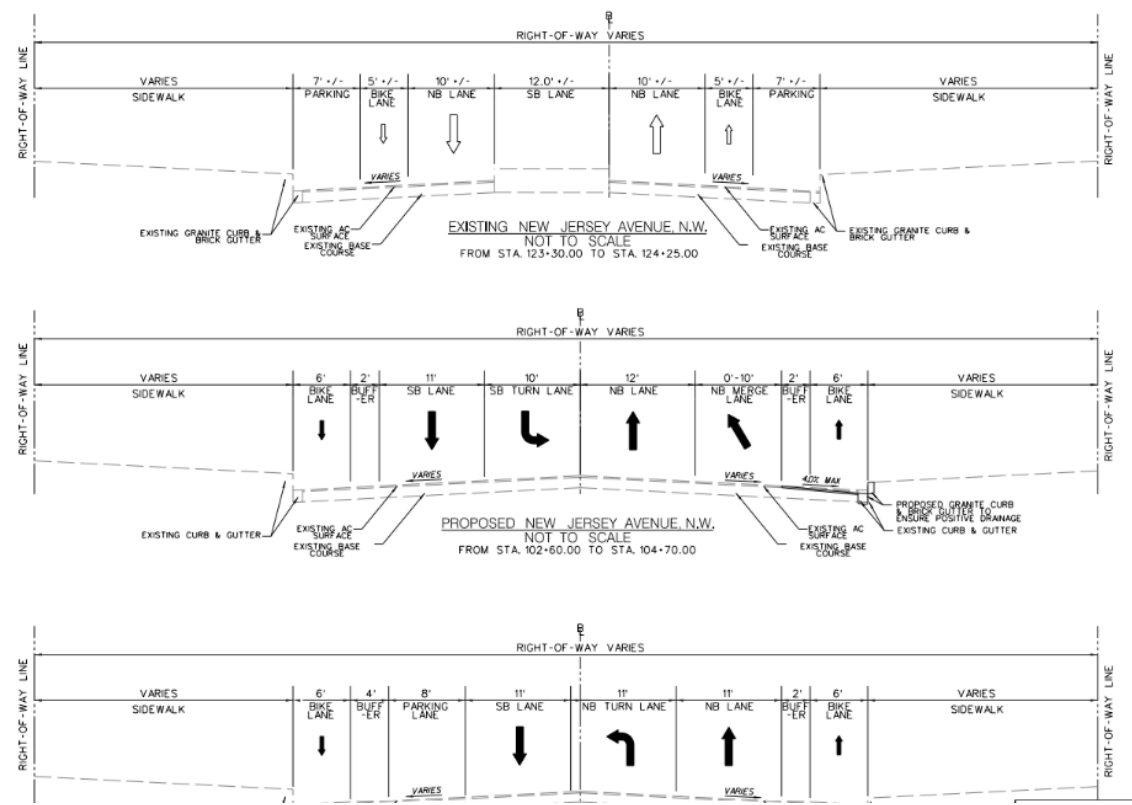
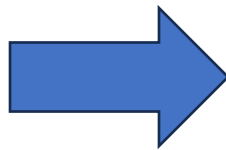
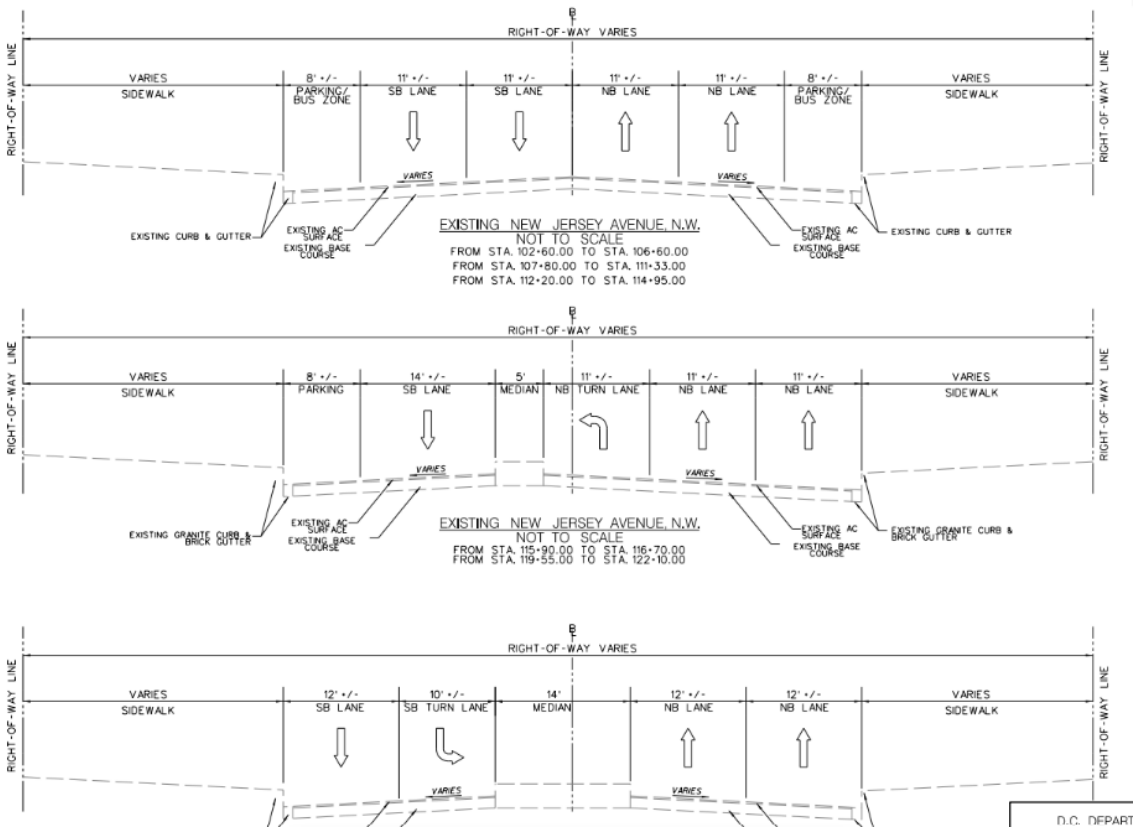
**Functional classification:** minor arterial (AADT ~ 8,300)

**Lane configuration:** 60-ft wide 4-lane roadway with parking

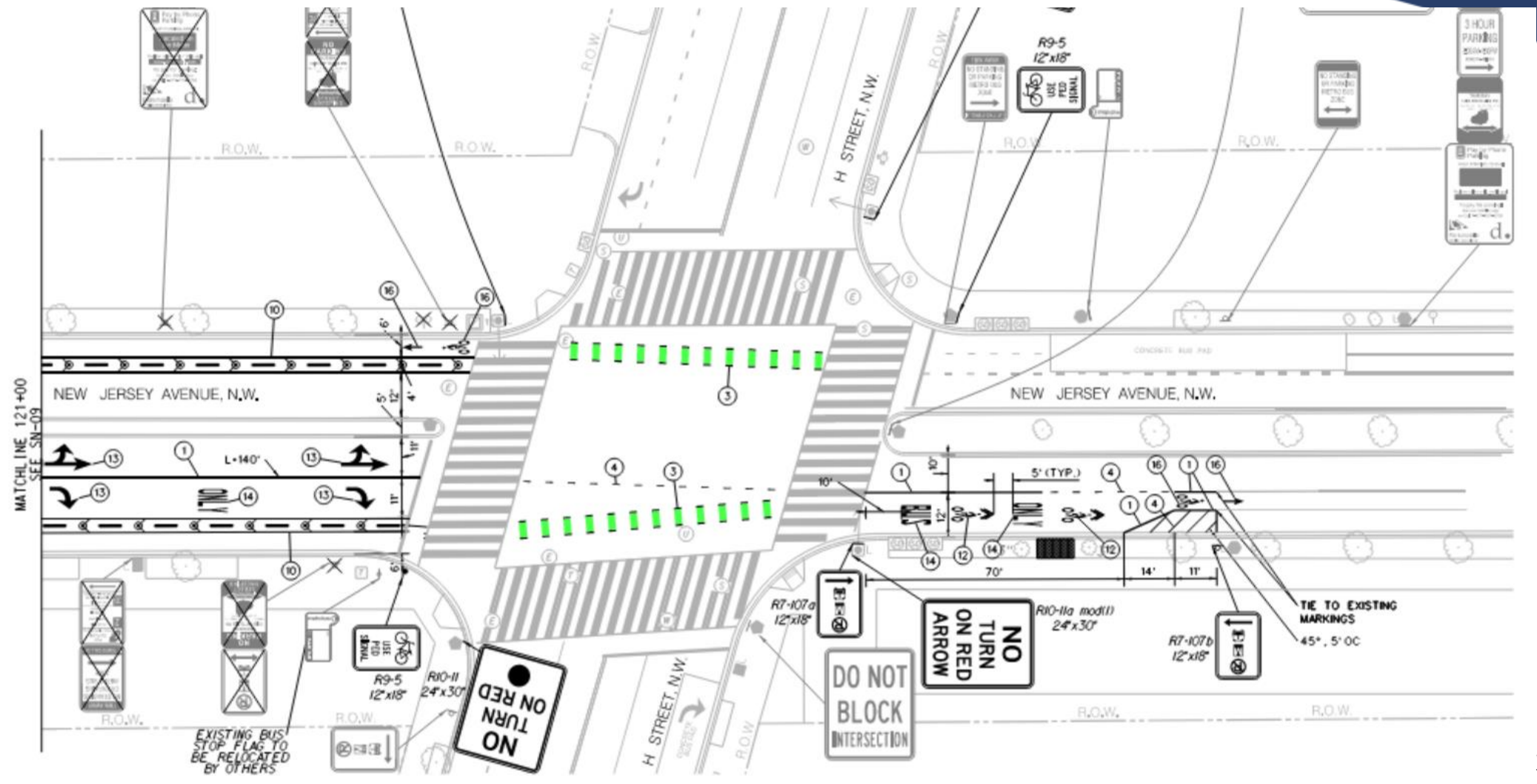
**Posted speed limit:** 25 MPH



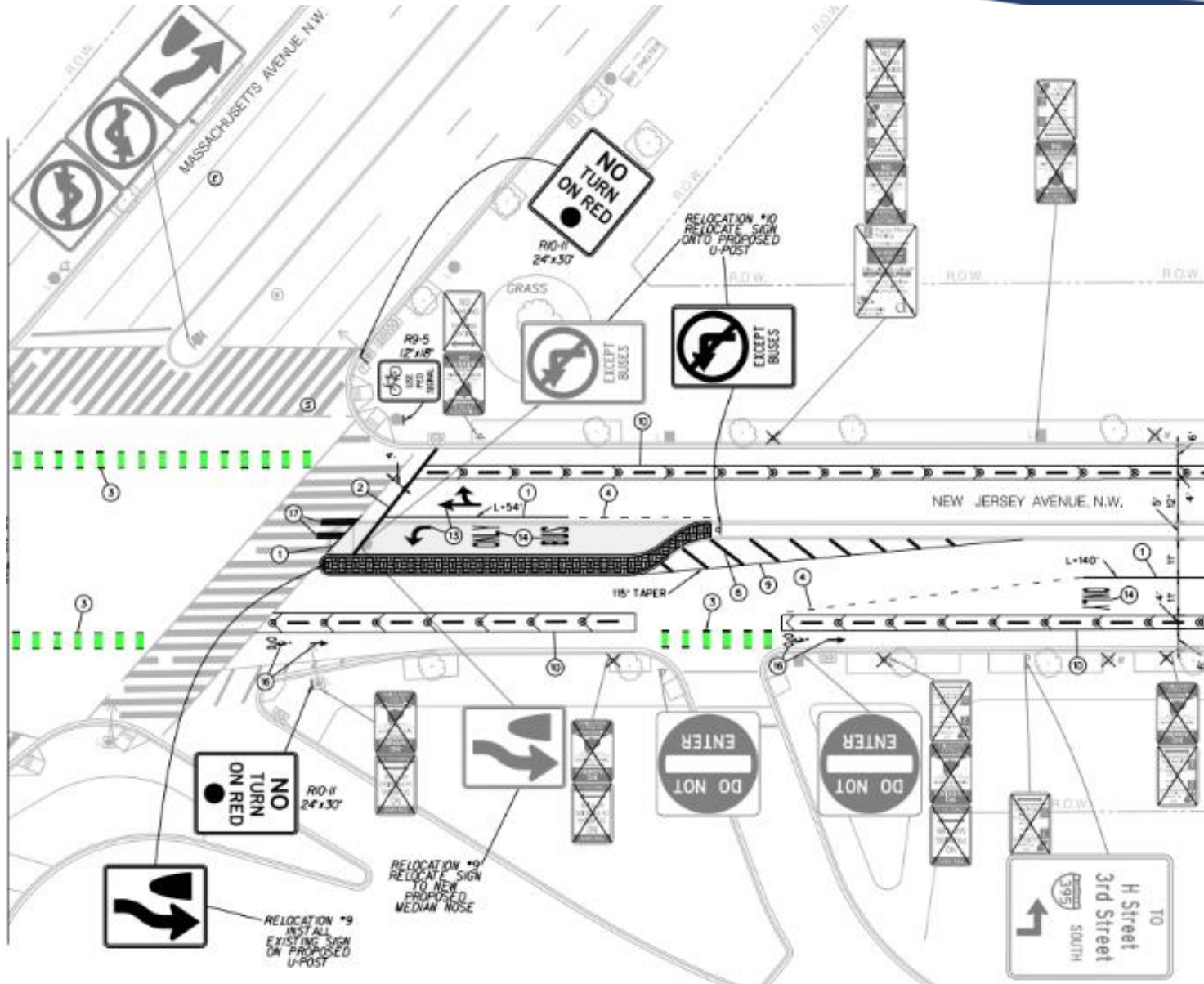
# Lane Reduction Proposed Cross Section



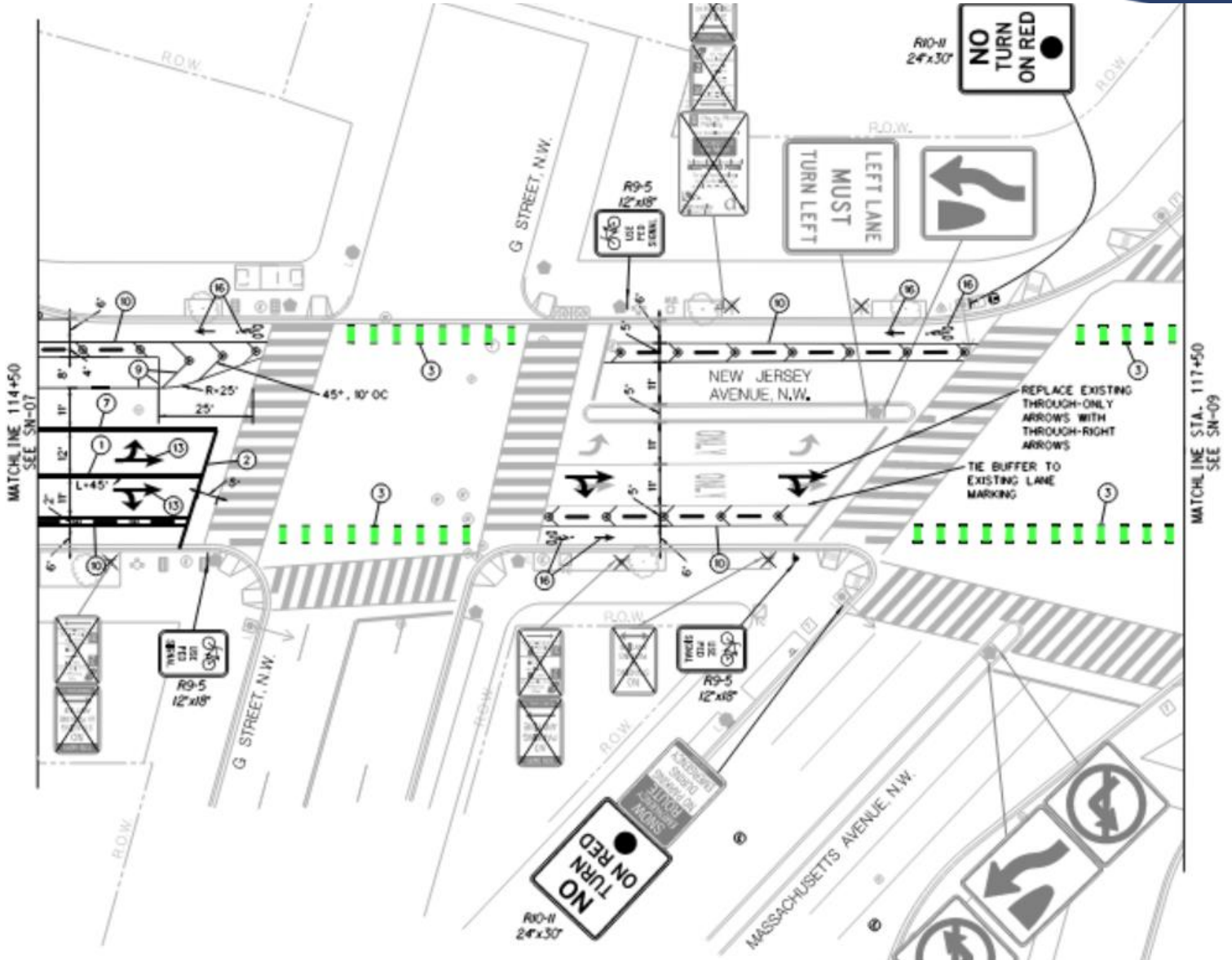
# Typical Layout



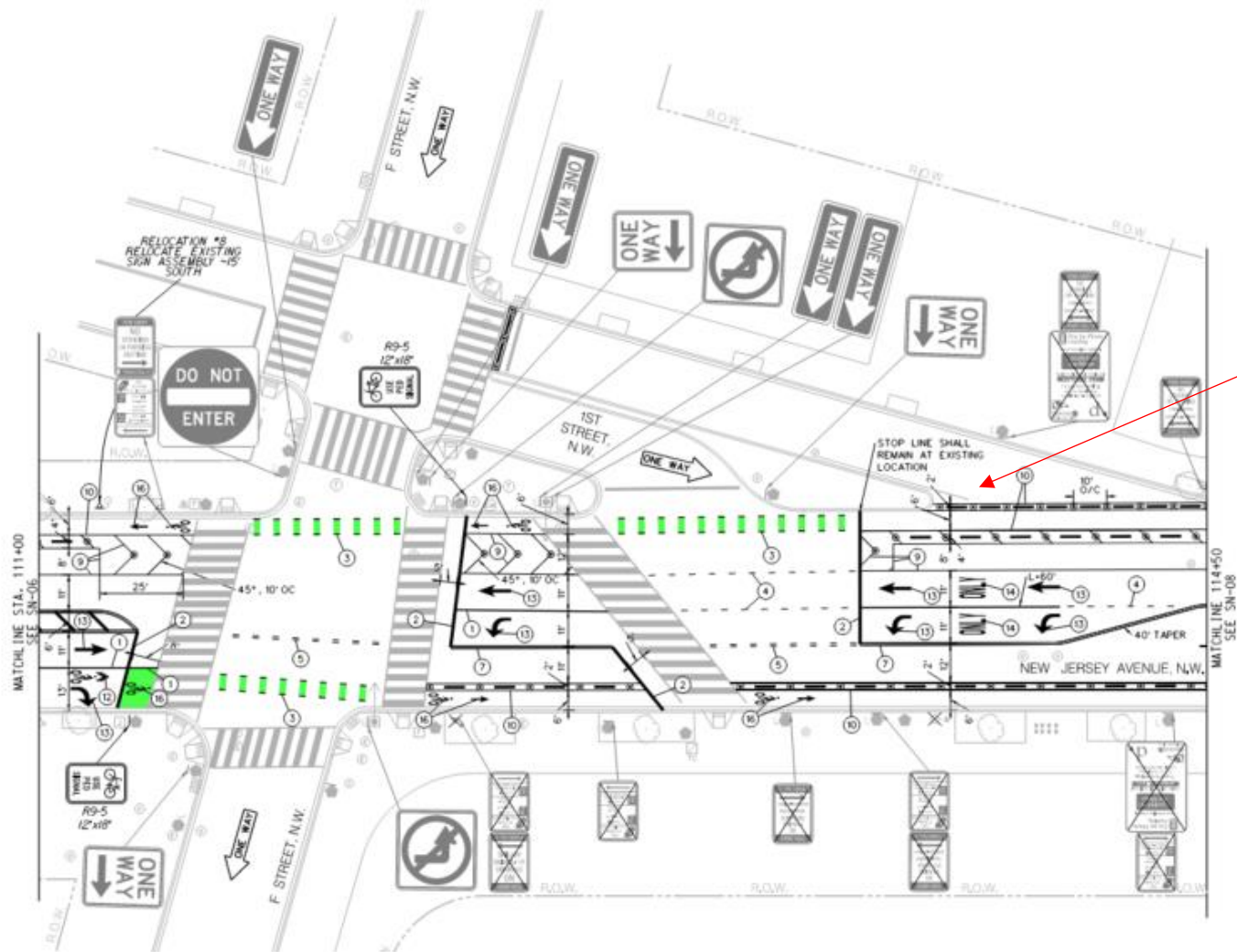
# Typical Layout



# Typical Layout



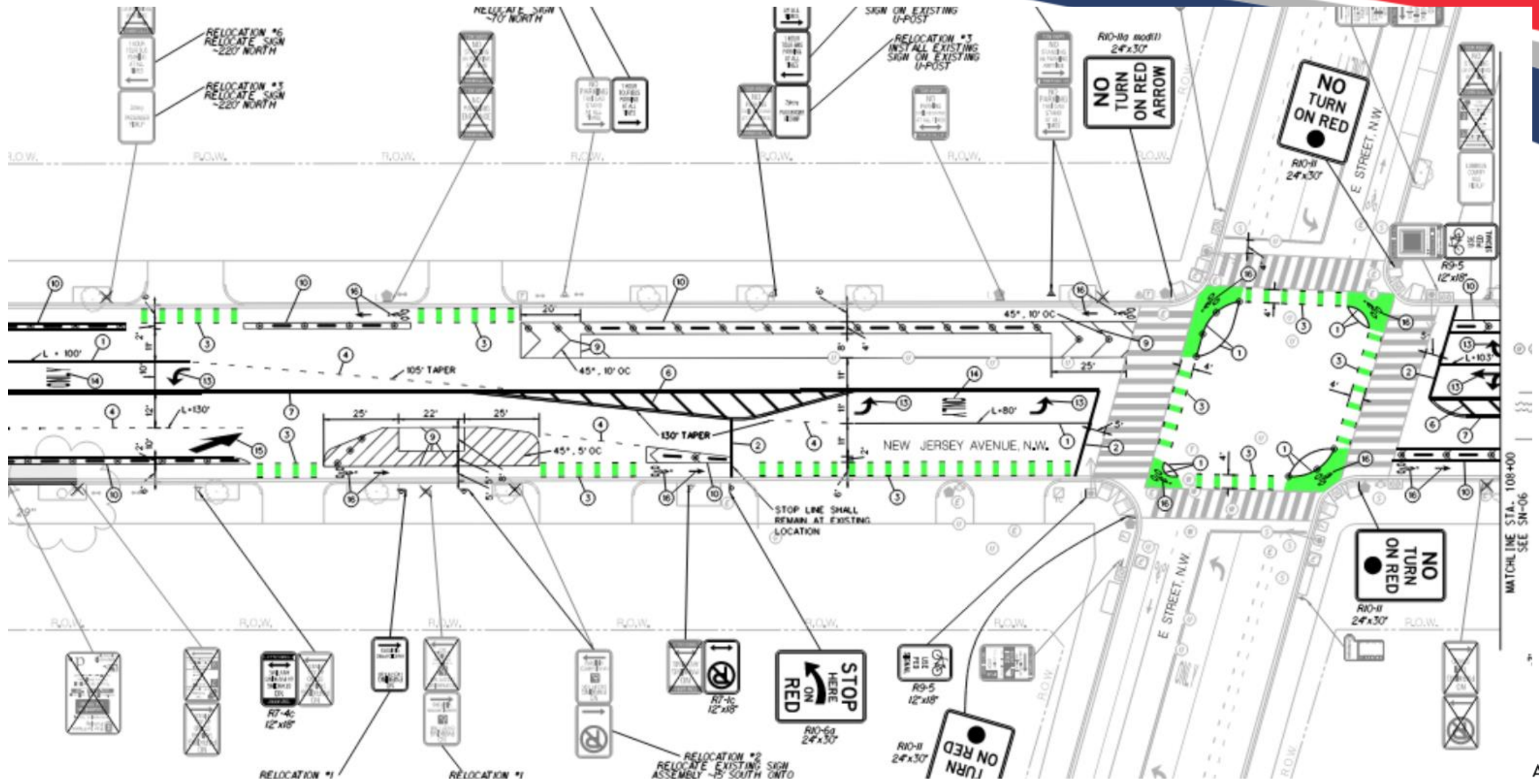
# Typical Layout



SB right turns on 1<sup>st</sup> St NE will be restricted.

Rerouted vehicles will use E & D St NW

# Typical Layout



# Road Diet Overview

- ❑ Single lane in each direction along New Jersey Avenue (with turn pockets at intersections)
- ❑ PBL that connects bike lanes on New Jersey Avenue North of H Street to Capitol Area
- ❑ Bike lane connection to E Street NW
- ❑ Shorter crossing distance via pedestrian enhancements
- ❑ Lower speeds along New Jersey Avenue due to narrowed lanes
- ❑ Estimated parking impacts
  - Existing ~ 78 unmarked peak-hour restricted spaces
  - Proposed ~ 18 marked full-time spaces



# Crash Risk & Crash Likelihood drop significantly following a road diet

## Expected Changes:

- Reduction of rear-end and left-turn crashes
- Reduced right-angle crashes
- Fewer lanes for pedestrians to cross.
- New protected bicycle lanes
- Traffic calming and more consistent speeds
- A more community-focused, Complete Streets environment that better accommodates the needs of all users.

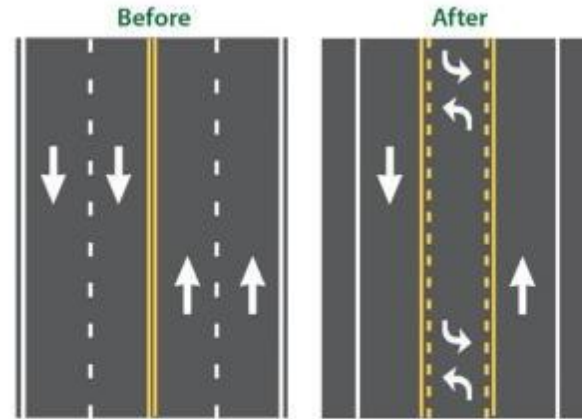


Figure 2. Typical Road Diet Basic Design

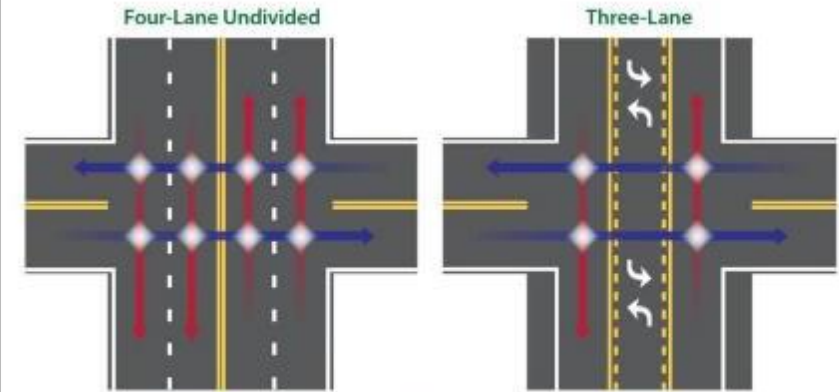


Figure 5. Crossing and Through Traffic Conflict Points at Intersections for a Four-Lane Undivided Roadway and a Three-Lane Cross Section (Adapted from Weib, 1999)

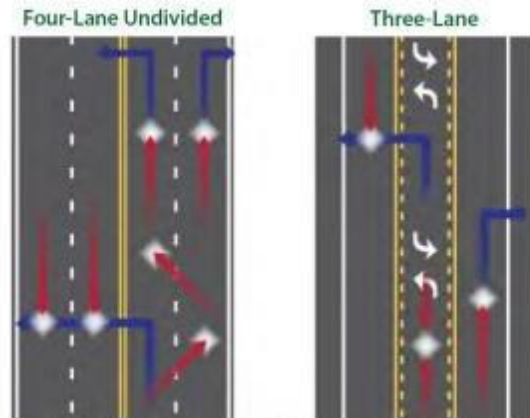


Figure 4. Mid-Block Conflict Points for Four-Lane Undivided Roadway and Three-Lane Cross Section (Adapted from Weib, 1999)

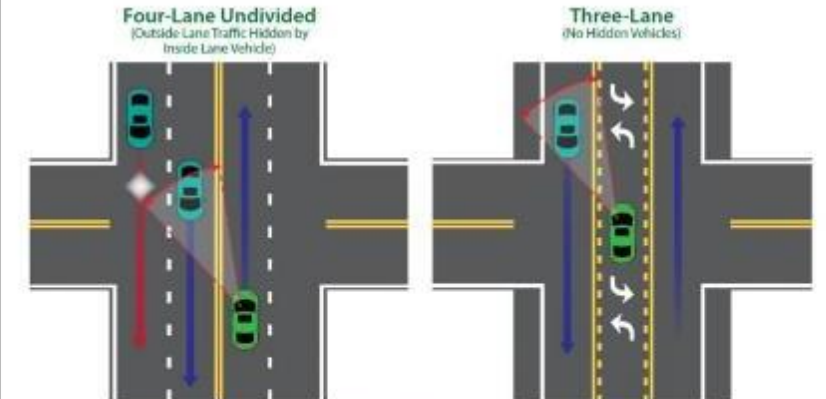


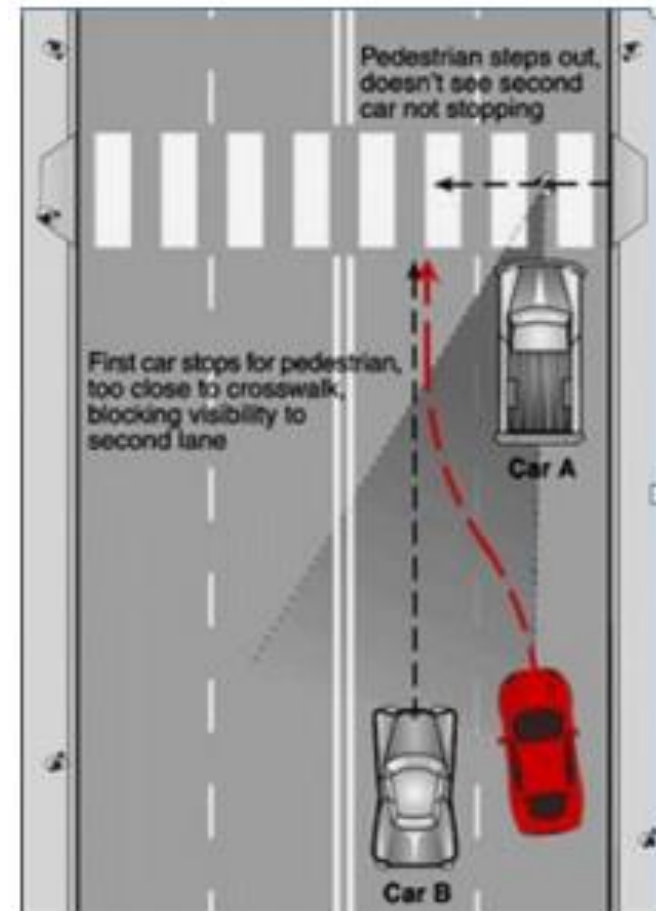
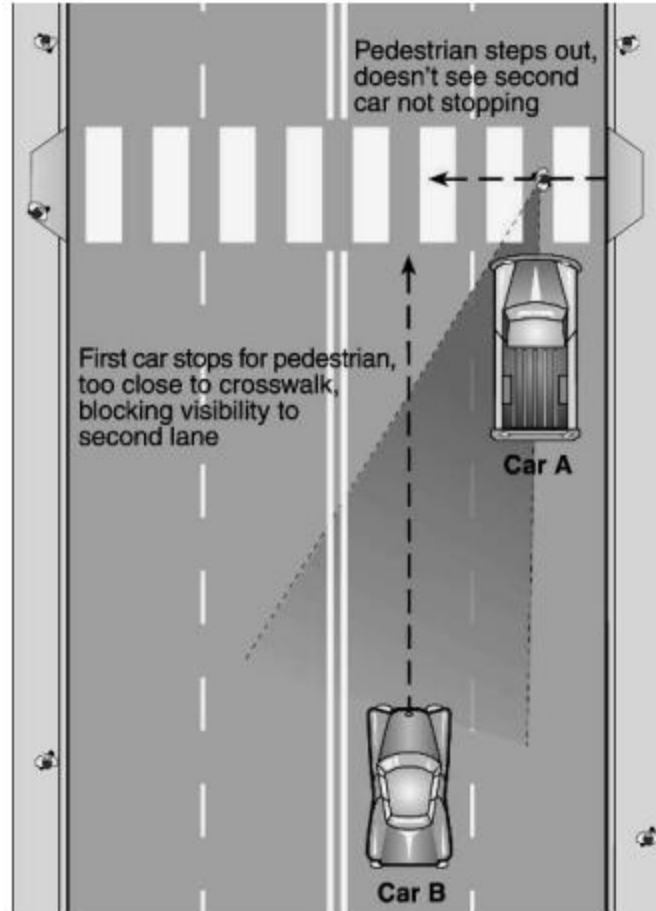
Figure 6. Major Street Left-Turn Sight Distance for Four-Lane Undivided Roadway and Three-Lane Cross Section (Adapted from Weib, 1999)

SOURCE: FHWA Road Diet Informational Guide; FHWA-SA-14-028; November 2014

# Multiple threat collisions at uncontrolled crossings

## Crash Risks:

1. 1<sup>st</sup> car stops to let pedestrian cross, blocking sight lines. 2<sup>nd</sup> car doesn't stop, hits pedestrian at high speed
2. 1<sup>st</sup> car stops to let pedestrian cross, 2<sup>nd</sup> car approaching from behind changes lanes (sideswipe), or hits pedestrian at high speed
3. 1<sup>st</sup> car stops to let pedestrian cross, 2<sup>nd</sup> car approaching from behind crashes into rear of 1<sup>st</sup> car.



# Benefits of Road Diets

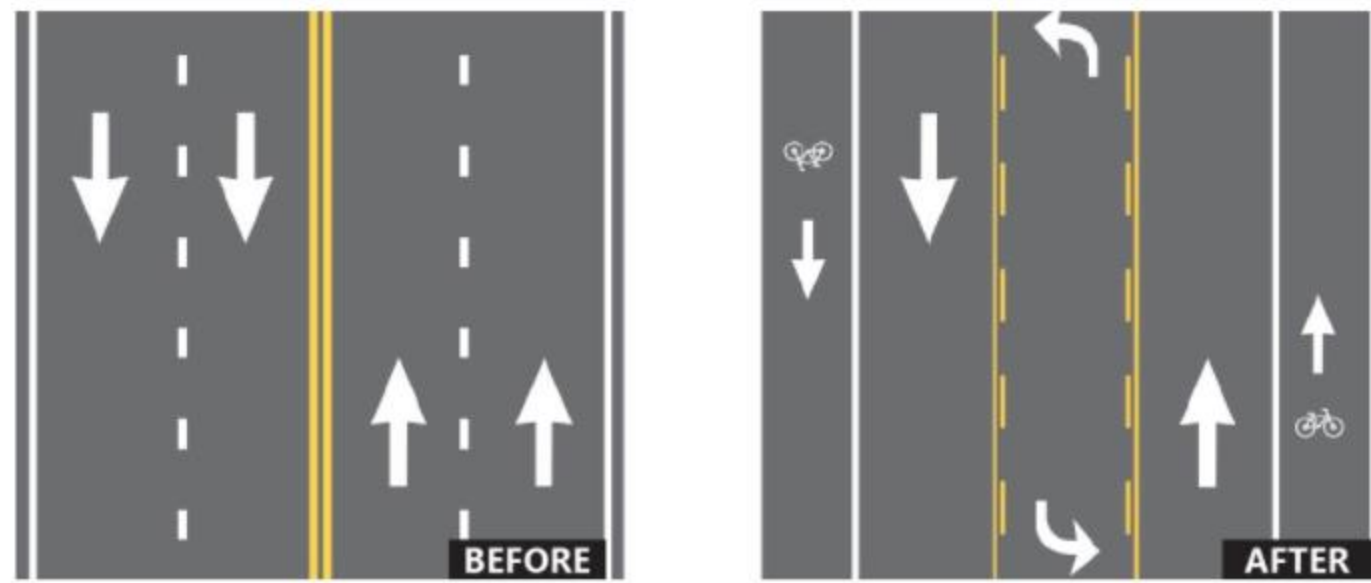
A Road Diet can be a low-cost safety solution.

Typically, a Road Diet is implemented on a roadway with a current and future average daily traffic of 25,000 or less.

Four Lanes w/o center turn lanes



center turn lanes, bike lanes, ped refuge island at bus stop



Before and after example of a Road Diet. Source: FHWA



# Contact Information

Please reach out with any comments or questions:

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District Department of Transportation