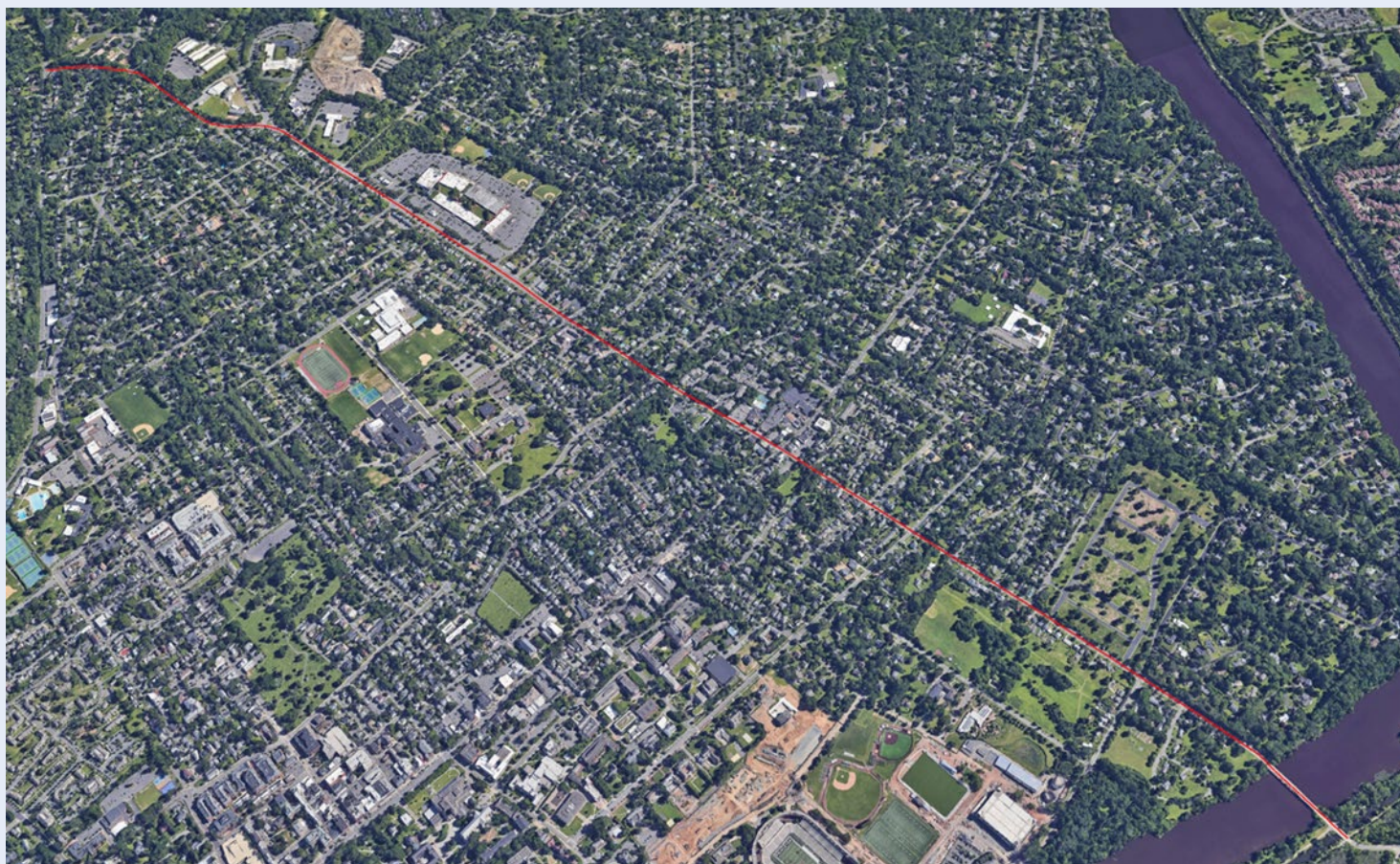


Harrison Street Corridor Study

▪ D&R Canal Towpath to U.S. 206 ▪

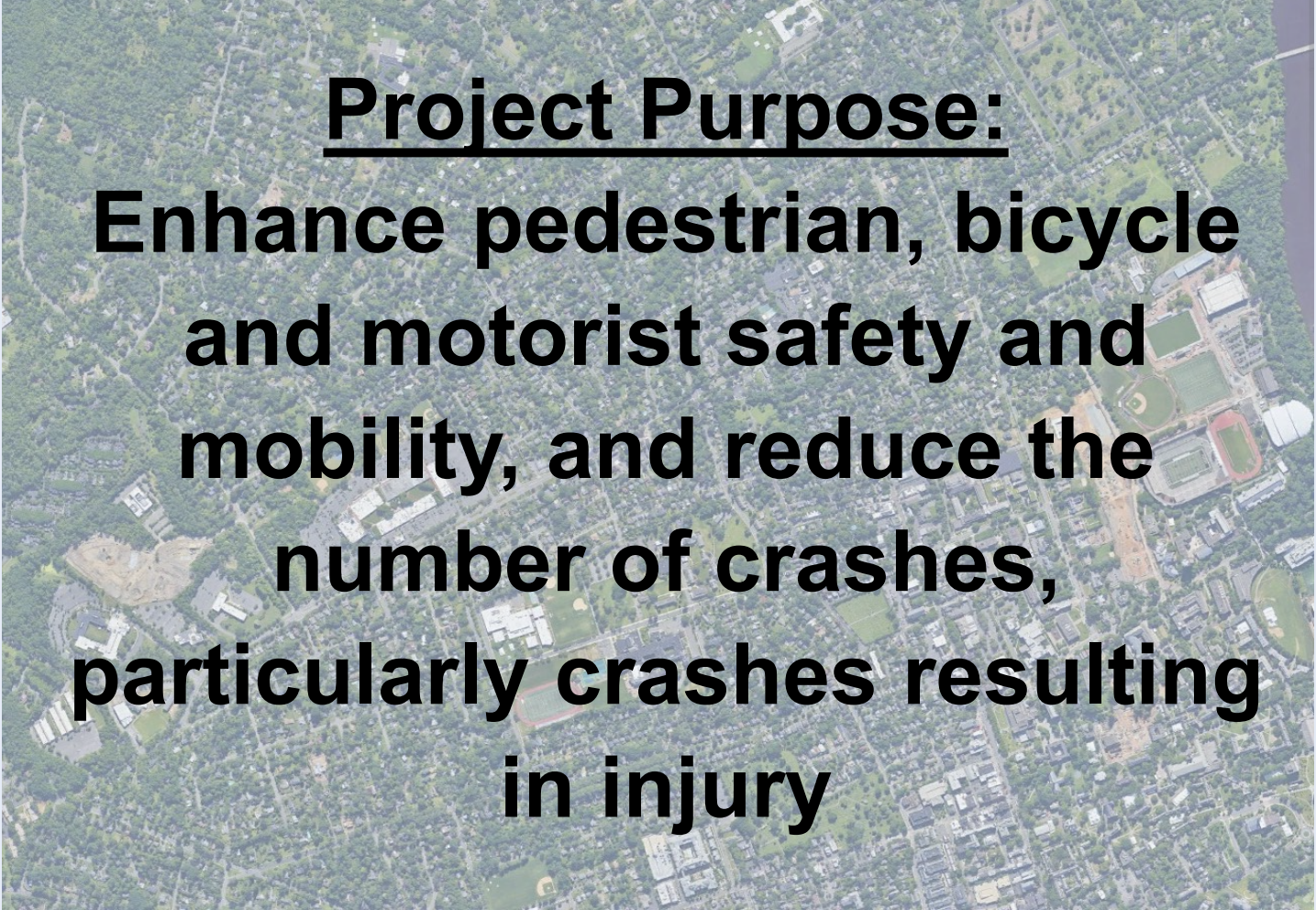
Municipality of Princeton

November 12, 2024



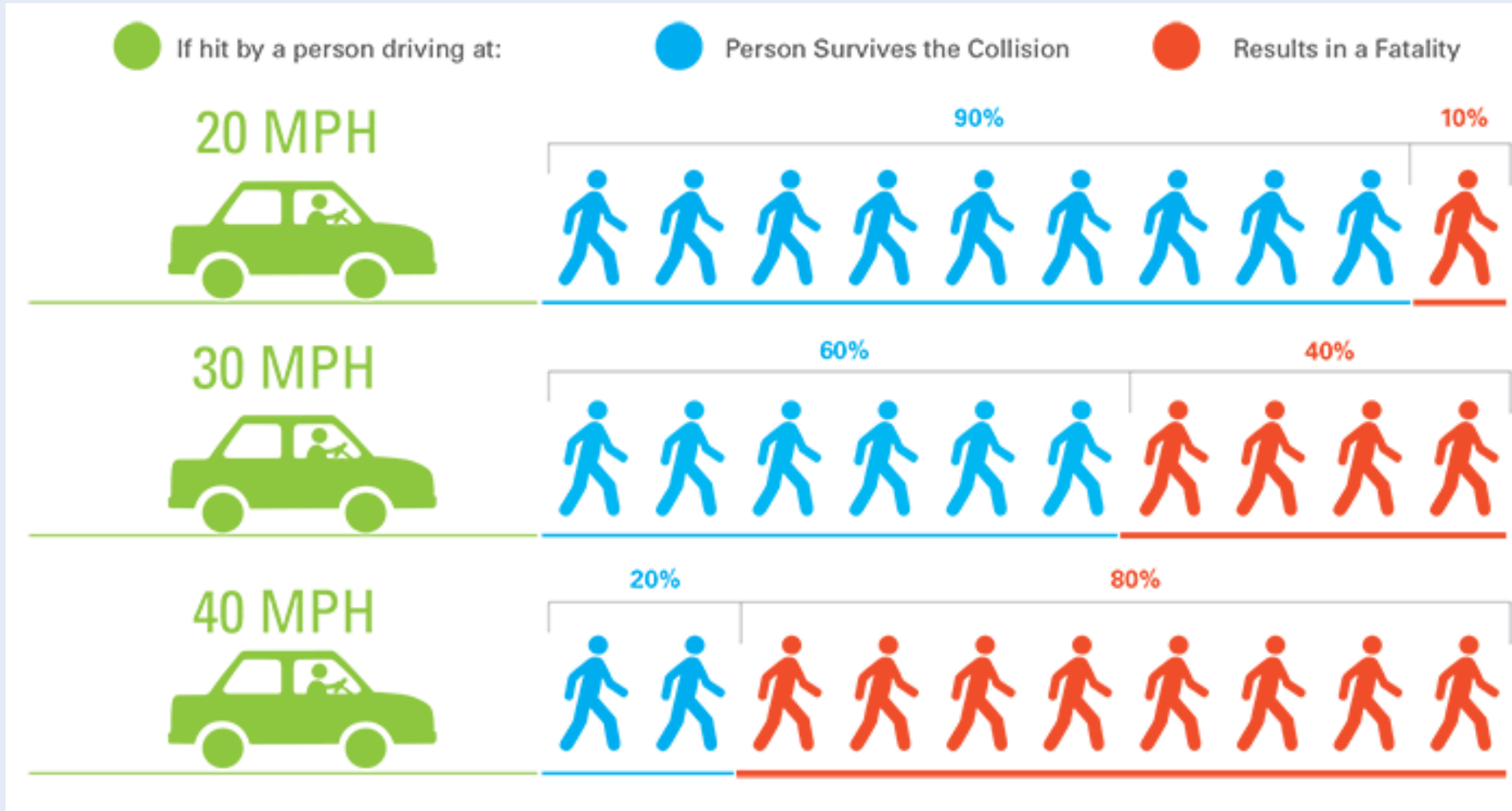
Agenda and Project Purpose

- Project Purpose
- Study Findings
- Proposed Design Options
- Summary and Timeline
- Questions/Comments



Project Purpose:
Enhance pedestrian, bicycle and motorist safety and mobility, and reduce the number of crashes, particularly crashes resulting in injury

Safety-First Approach



Existing Conditions and Findings

Crash Data (five years)

- 249 total crashes reported, 7 percent of all crashes in Princeton
- Highest crash occurrences at: Nassau St, Valley Rd, U.S. 206, Hartley Ave, & Lake Ln

Traffic Data and Intersection Performance

- Moderate daily traffic volumes: 12,000 – 14,000: Consistent with two-lane roadway
- Intersection performance (Level-of-Service) is very good

Travel Speeds

- Highest average speeds at Lake Lane and Valley Road; frequently well above posted speed limits
- Corridor-wide lack of traffic calming design elements

No Evidence of high traffic volumes, delay, or congestion

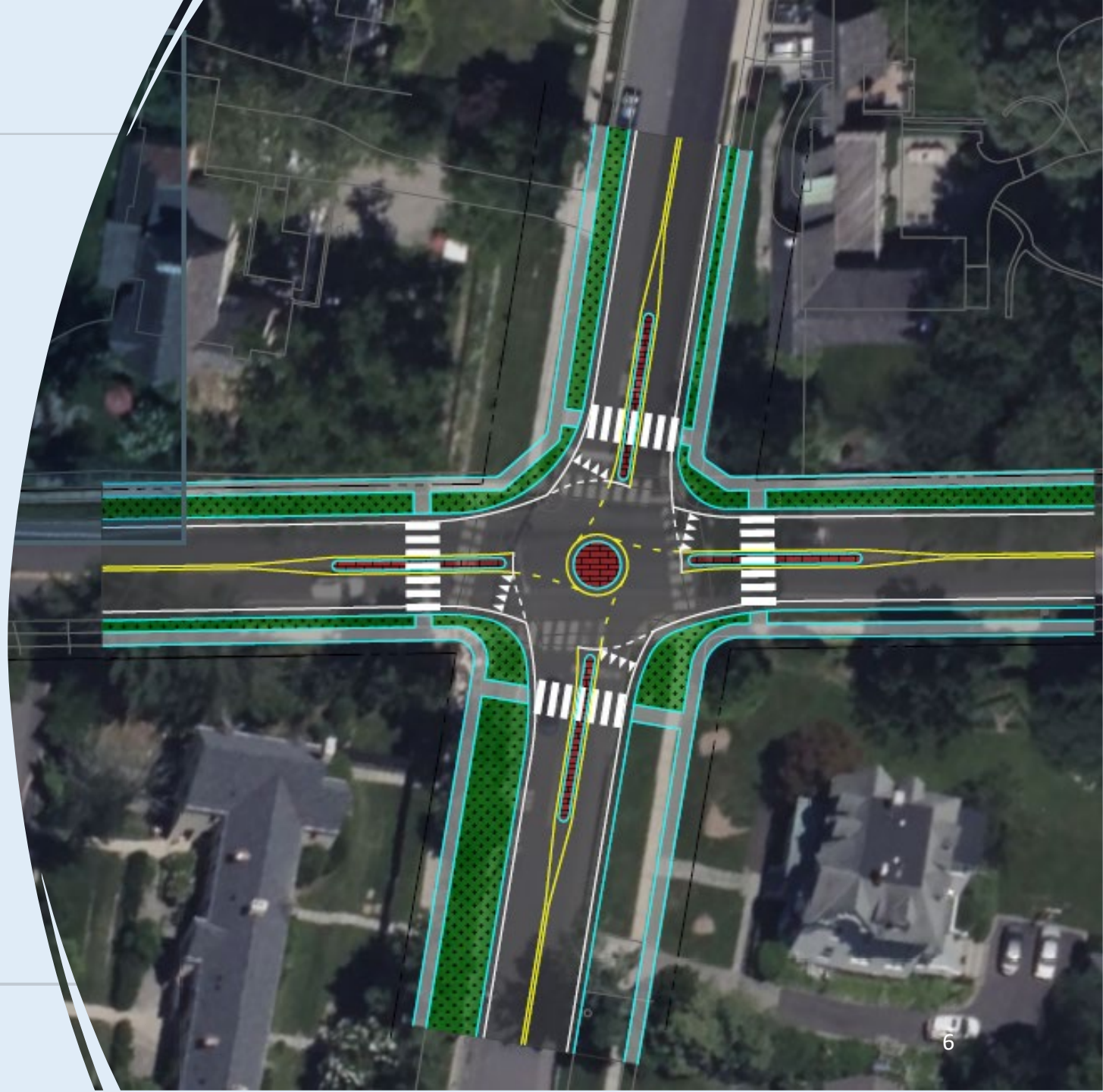
- Observations of excessive speeds, aggressive driving, passing maneuvers, and red light running
- Traffic conditions and intersection performance create the opportunity for a new vision

Enhance the D&R Canal Crossing

- Need to slow traffic as it enters Princeton from the south
- Multiple design options are feasible
 - Gateway design treatment and traffic calming elements
 - ‘Welcome to Princeton’ signs
 - Speed detection signs
 - Enhanced crosswalk design and lighting
- Mercer County has jurisdiction, not Princeton

Convert up to Four Intersections to Roundabout Design

- Valley Road, Terhune Road, and Bunn Drive
- Prospect Avenue
- Similar design to current roundabouts on Faculty Road & Alexander Street





Traffic Calming between Nassau Street and Franklin Avenue

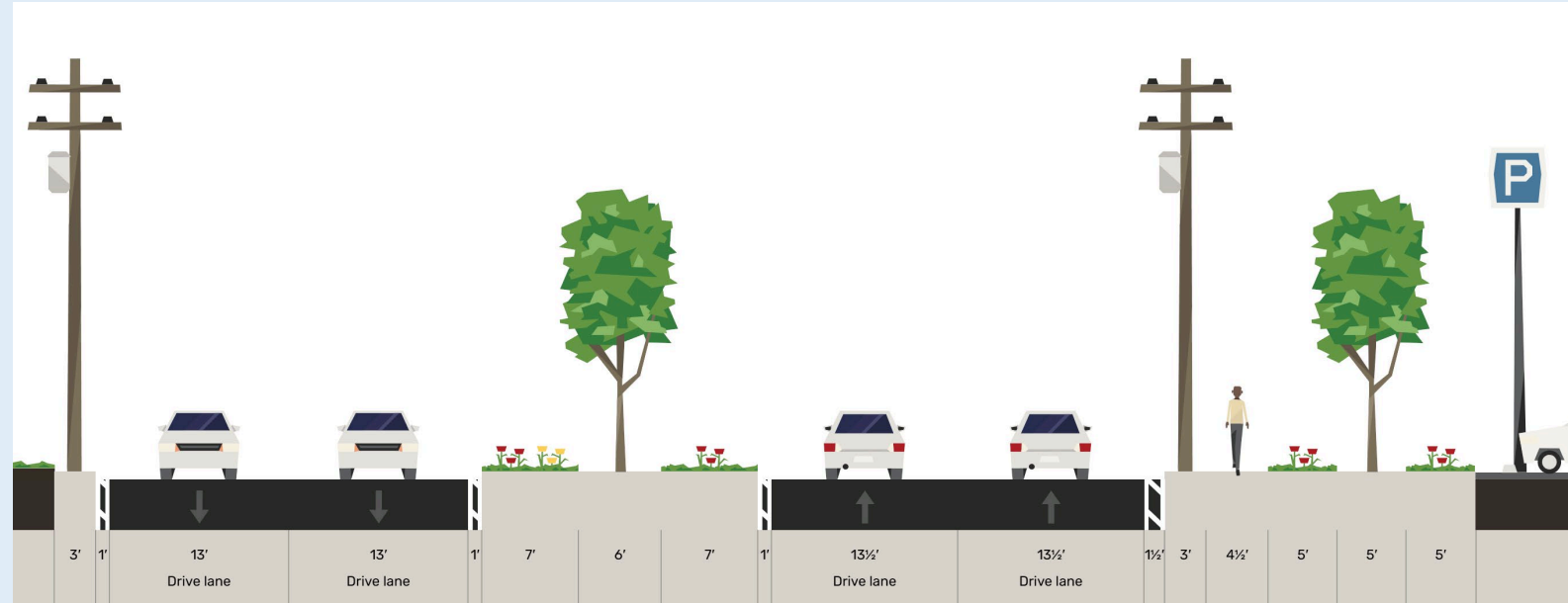
- Frequent public comments and reports
- High travel speeds northbound from Nassau
- Very constrained intersection at Hamilton Ave
- High left turn movements
- Proposed changes include raised medians, pavement treatment, traffic signal enhancements to improve pedestrian crossings, and improved pedestrian facilities

Road Diet at Princeton Shopping Center

Four lanes not needed

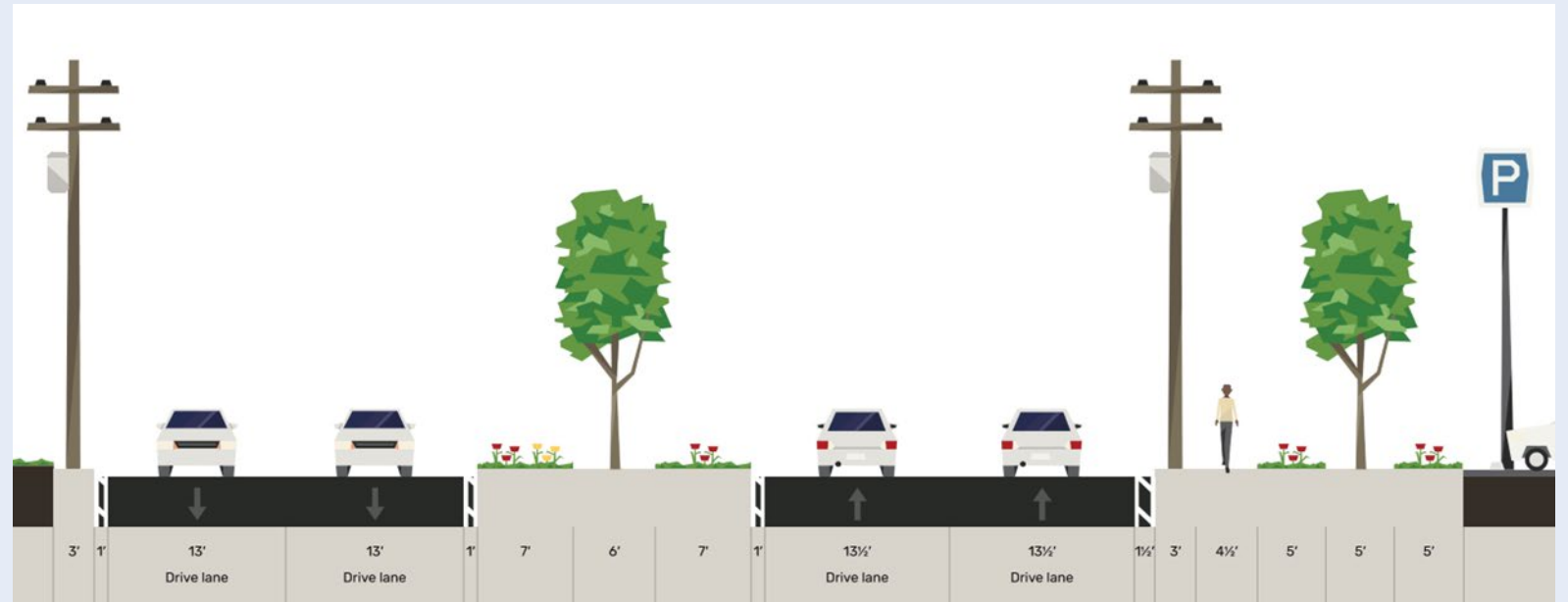
Opportunity to repurpose pavement for pedestrian and bicycle improvements

Concept improves safety, slows traffic to posted speed limits



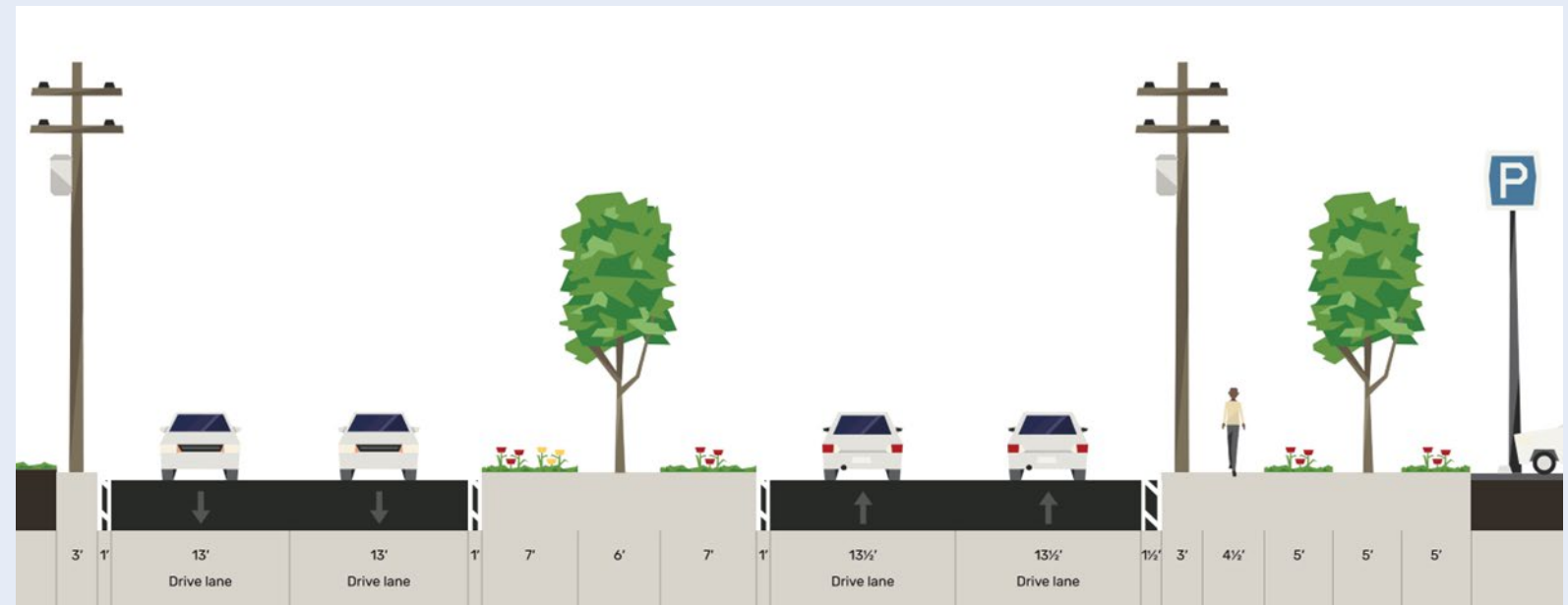
Existing:

- 4 travel lanes
- No bicycle facility
- Sidewalk northbound direction



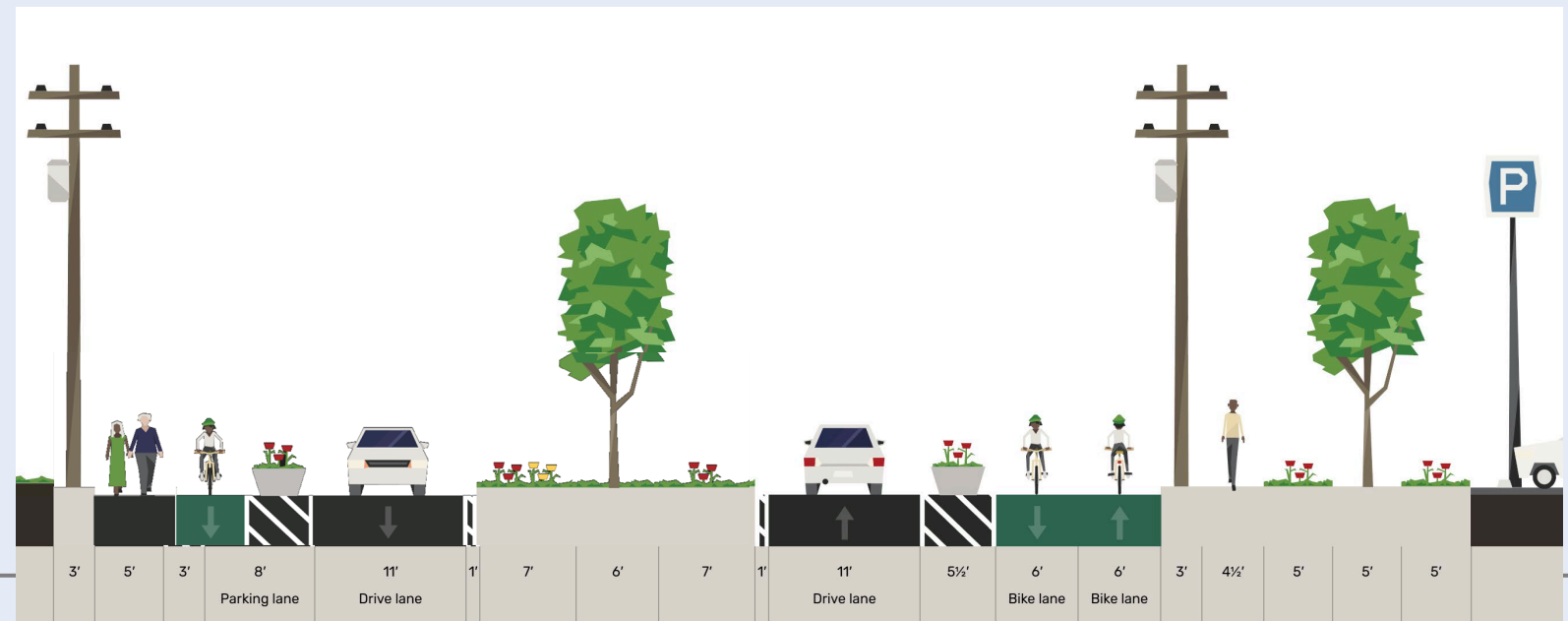
Existing:

- 4 travel lanes
- No bicycle facility
- Sidewalk northbound direction



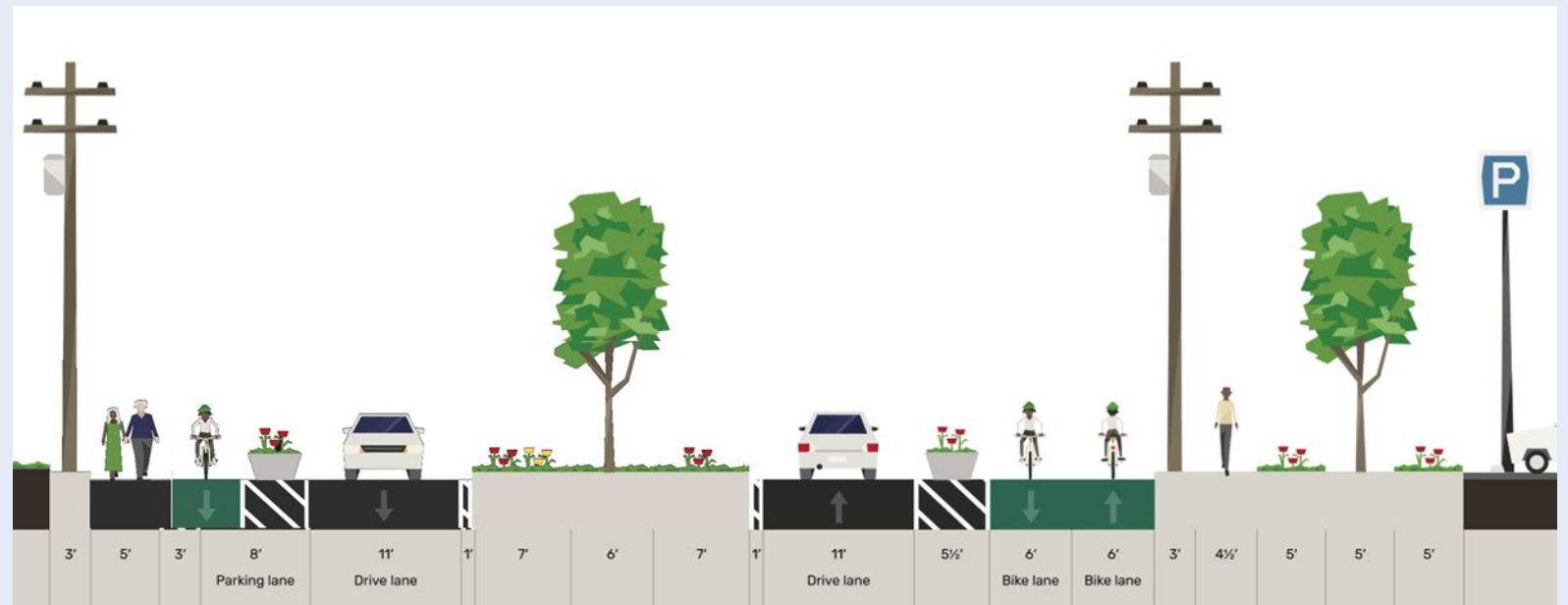
Interim Build:

- 2 travel lanes
- Interim bicycle facility
- Sidewalk both direction



Interim Build:

- 2 travel lanes
- Interim bicycle facility
- Sidewalk both direction



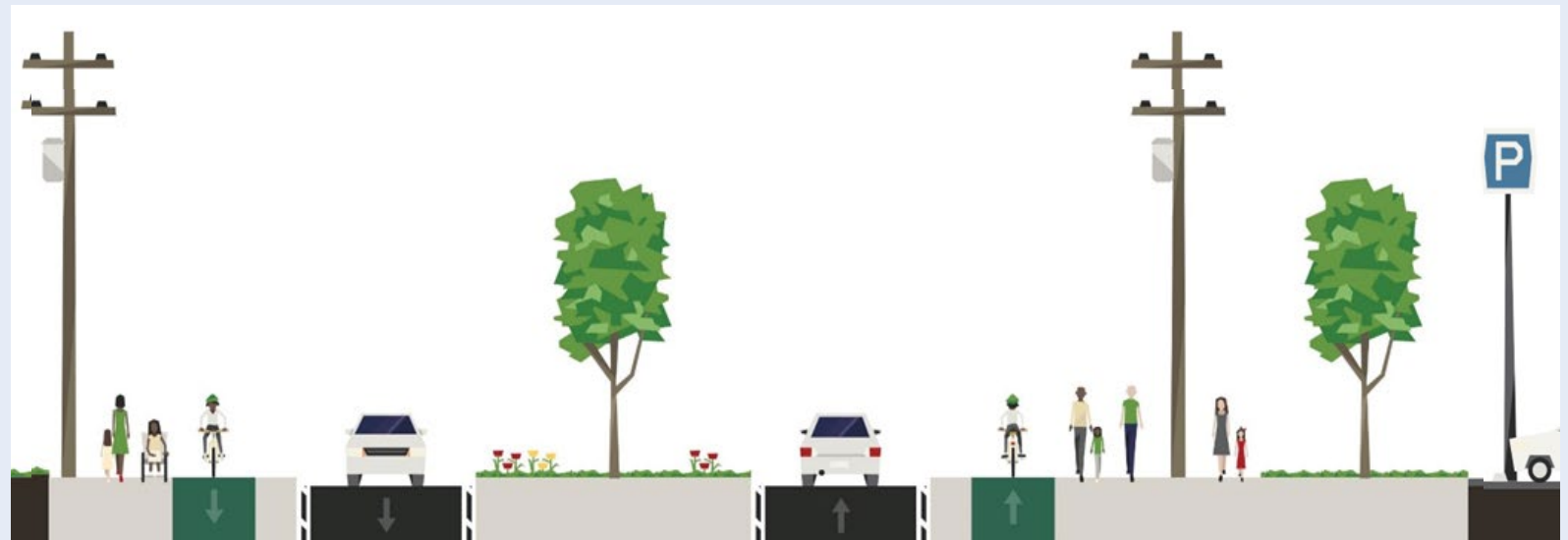
Interim Build:

- 2 travel lanes
- Interim bicycle facility
- Sidewalk both direction



Final Build:

- 2 travel lanes
- Full bicycle facility
- Sidewalk both directions



New Traffic Signal Intersection: Ewing Street at U.S. 206

Frequent (illegal and unsafe) use of southbound shoulder to bypass left turning vehicles to Ewing Street

New signal may divert some traffic from adjacent traffic signals at U.S. 206

Meets required “Signal Warrants”

Requires coordination with NJDOT



Corridor-Wide Treatments

1. Improved street lighting
2. Sidewalk and sidepath enhancement
3. Curb extensions and splitter islands
4. High Visibility crosswalks
5. Install ADA-compliant curb ramps



OFFICE OF SAFETY
Proven Safety Countermeasures

SPEED MANAGEMENT

- Speed Safety Cameras
- Variable Speed Limits
- Appropriate Speed Limits for All Road Users

ROADWAY DEPARTURE

- Wider Edge Lines
- Enhanced Delineation for Horizontal Curves
- Longitudinal Rumble Strips and Stripes on Two-Lane Roads
- SafetyEdgeSM
- Roadside Design Improvements at Curves
- Median Barriers

INTERSECTIONS

- Backplates with Retroreflective Borders
- Corridor Access Management
- Dedicated Left- and Right-Turn Lanes at Intersections
- Reduced Left-Turn Conflict Intersections
- Roundabouts
- Systemic Application of Multiple Low-Cost Countermeasures at Stop-Controlled Intersections
- Yellow Change Intervals

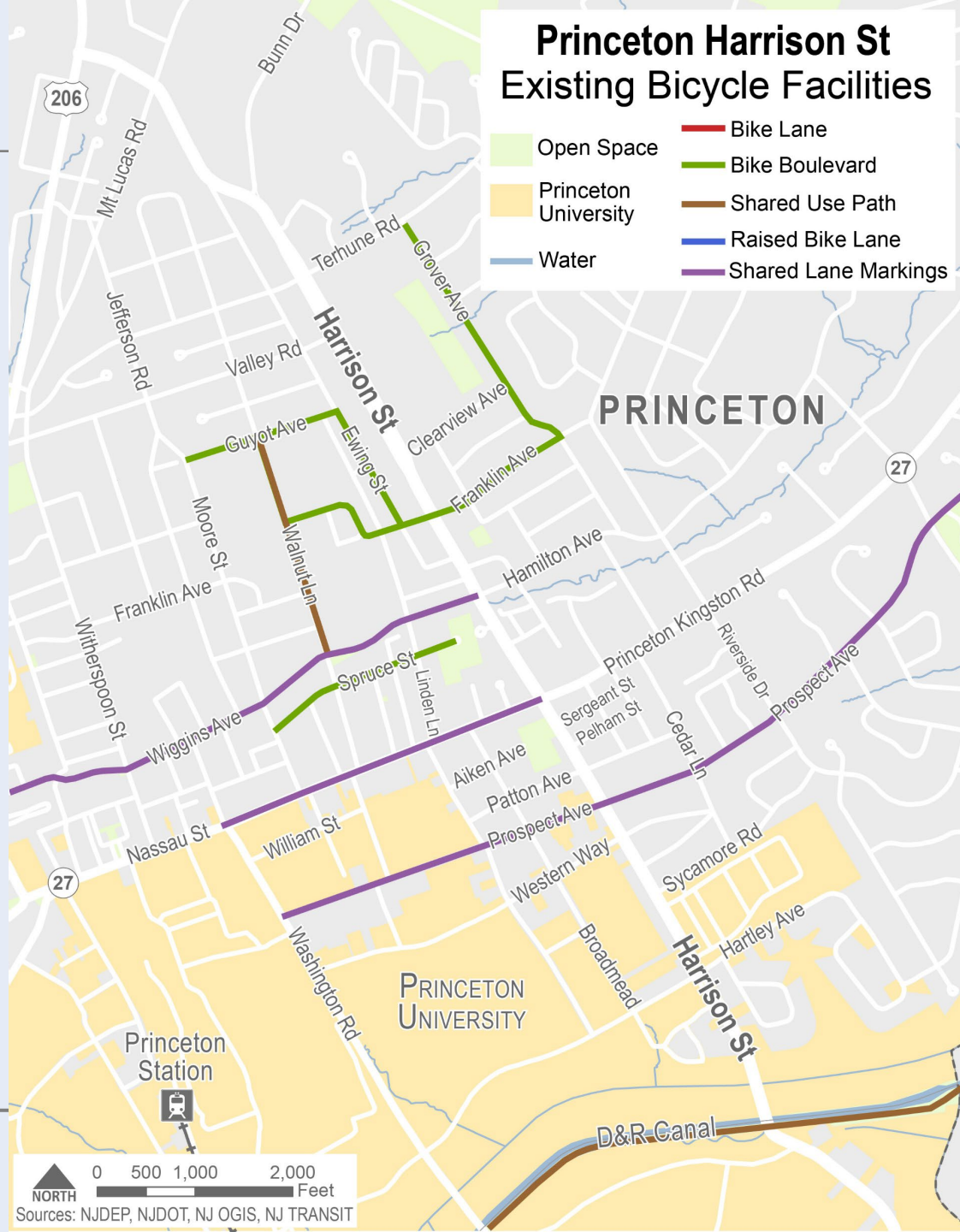
PEDESTRIANS/BICYCLES

- Crosswalk Visibility Enhancements
- Bicycle Lanes
- Rectangular Rapid Flashing Beacons (RRFB)
- Leading Pedestrian Interval
- Medians and Pedestrian Refuge Islands in Urban and Suburban Areas
- Pedestrian Hybrid Beacons
- Road Diets (Roadway Reconfiguration)
- Walkways

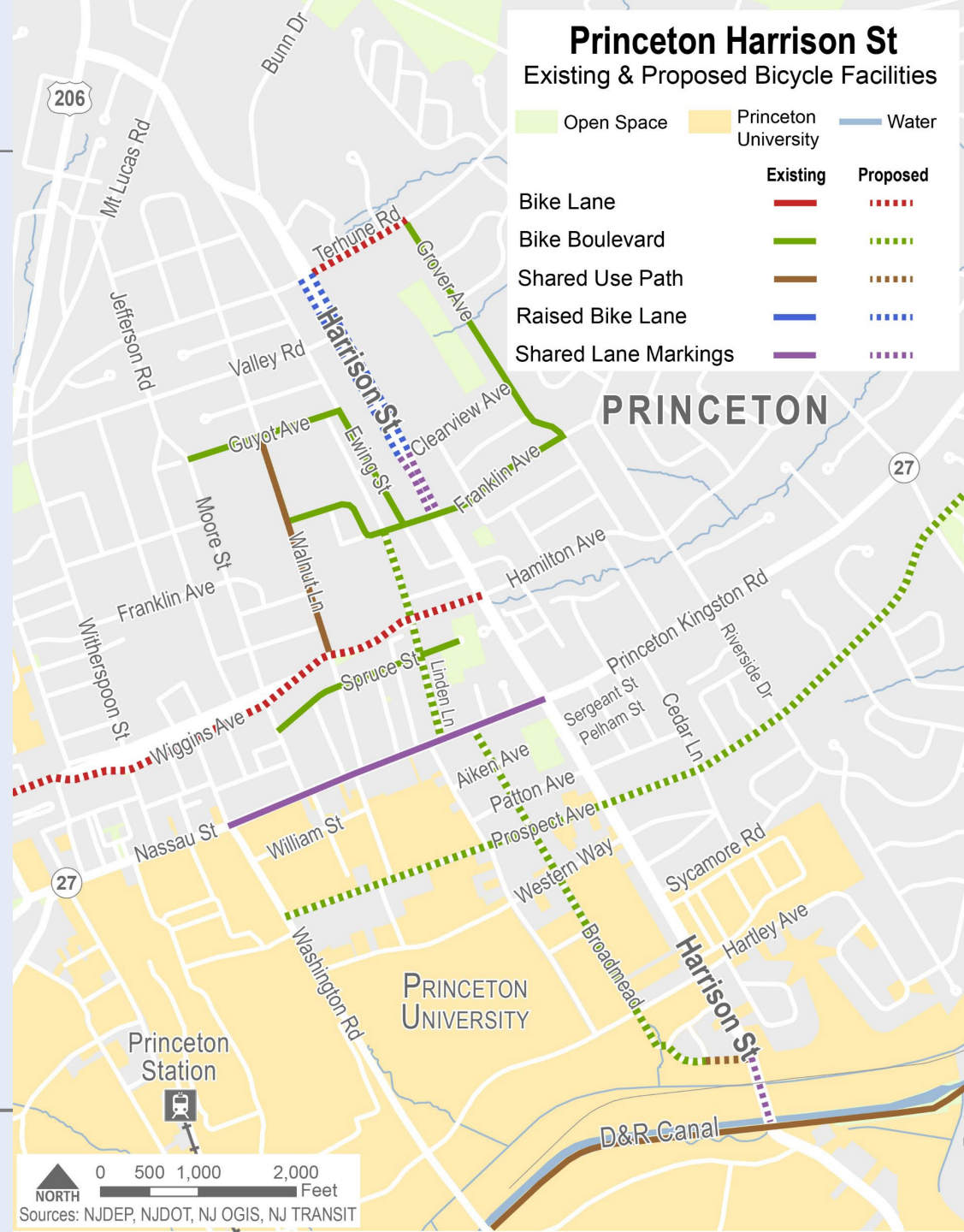
CROSSCUTTING

- Pavement Friction Management
- Lighting
- Local Road Safety Plans
- Road Safety Audit

Existing Bicycle Network



Proposed: Bicycle Mobily Plan Network



Summary of Recommendations

- Existing conditions create the opportunity for a new vision
 - Enhance the D&R Canal Crossing
 - Traffic calming, various locations including approach to Hamilton Ave
 - Convert four current intersections to roundabout design
 - Road Diet at Princeton Shopping Center
 - Install traffic signal at Ewing Street @ U.S. 206
 - Corridor-wide intersection and traffic calming treatments
 - Proposed bicycle network expansion on lower volume roadways

Timeline and Next Steps to Advance Corridor Vision Plan

- Improvements between Nassau St (NJ 27) and Franklin Avenue
- Road Diet at the Princeton Shopping Center
- Three roundabouts: Valley Road, Terhune Road, Bunn Drive
- Roundabout at Prospect Avenue
- Implement bicycle connection at Lake Drive upon easement acquisition from Princeton University
- Consider other corridor-wide improvements

Questions and Comments

Peter F. Kremer, AICP, PP
peter.kremer@mbakerintl.com

Thomas DiBiase, P.E., RSP2i
thomas.dibiase@mbakerintl.com