Michigan & New York Streets

College Avenue to Ellenberger Park

Two-Way Conversion

ST-26-054

Update since the **Near Eastside Quality of Life Fall Summit 2021**

December 5, 2023

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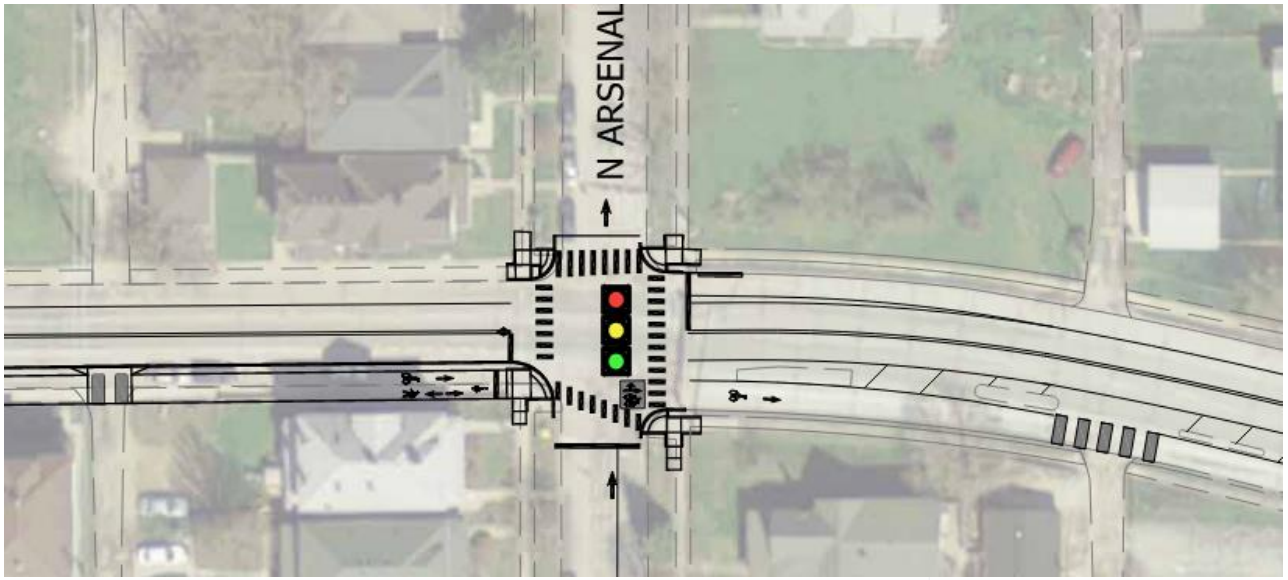
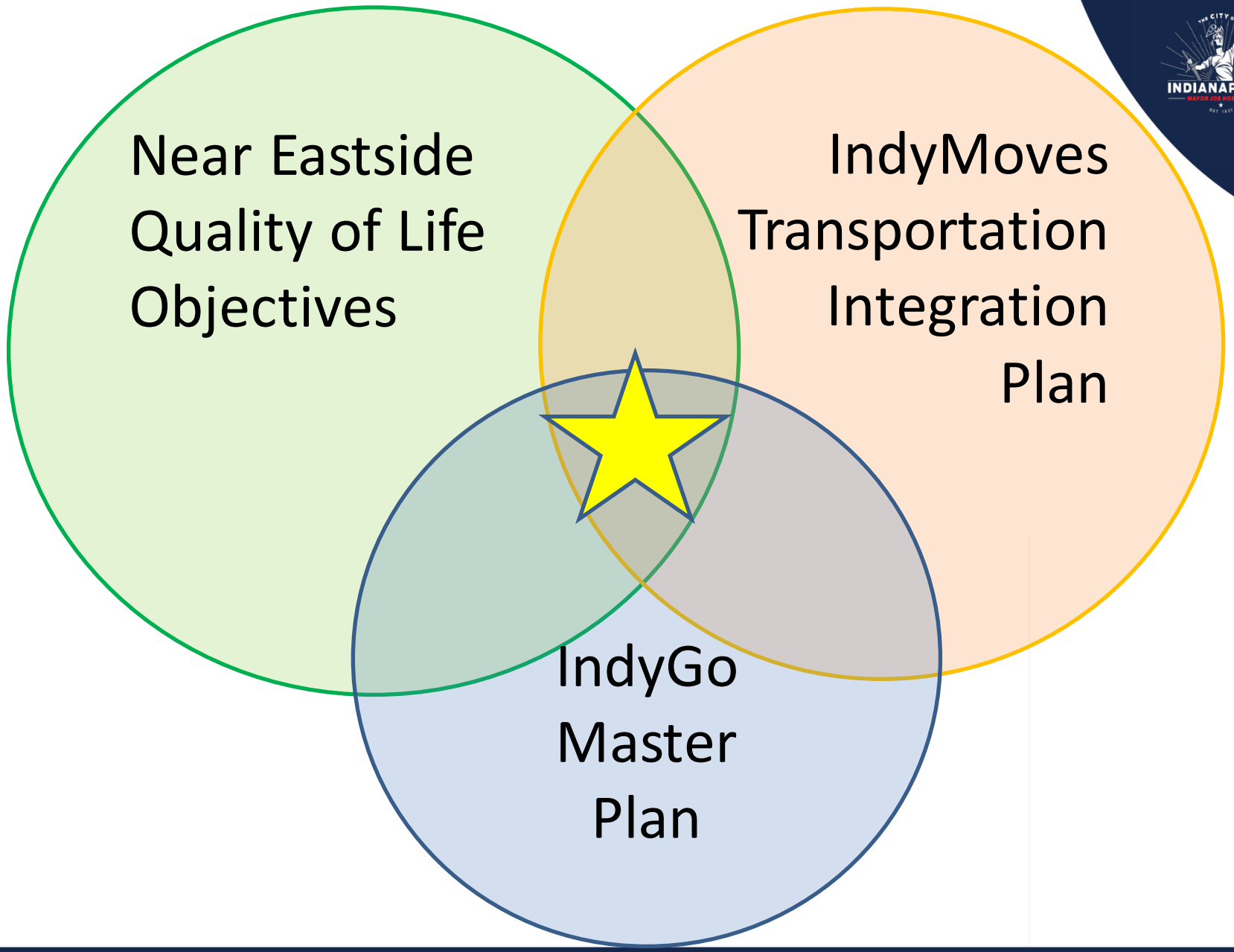
TL/DR (Too Long, Didn't Read: Highlights)

- **History of 1-Way Pairs**
- **Based on 15+ Years of Eastside Advocacy**
- **IndyGo Improvements**
- **Protected Bicycle Infrastructure: College to Ellenberger**
- **Parking Study: Above & Beyond Existing Demand**
- **Top Priorities**
  - 1: Safety
  - 2: Mobility




Near Eastside
Quality of Life
Objectives
IndyMoves
Transportation
Integration
Plan
IndyGo
Master
Plan

Overview

- **Background Information**
  - History of One-Way Streets
  - Pros/Cons of Two-Way Conversions
  - Recent Example: Central Avenue
    - Lessons Learned
- ***Michigan & New York!***
- **Other 2-Way Conversions**
- **To Conclude**
  - Questions/Comments

History of One-Way Streets

- **Many in Indy predate the construction of freeways, incl. MI/NY**
- **Mid 20th-Century, Nationally, not just here:**
  - Facilitate suburbs/commuting
  - Facilitate expedient movement/throughput
    - Urban areas were retrofitted to accommodate one-way streets
      - Greater traffic capacity
      - Higher speeds
  - *Unintended Consequences*

Mid-20th Century:

Among other Cities Indy Followed Suit

Pros/Cons of Two-Way Conversions

- ✓ **Traffic Calming**
  - Fewer/no adjacent lanes to weave/overtake (or street race!)
- ✓ **Improved / Simplified Mobility**
  - More direct routing = Less distance and delay for local users
  - Eliminates confusion by non-familiar drivers
- ✓ **Neighborly & Pedestrian Friendly**
  - Drivers looking both ways = See pedestrians from both ways
- ✓ **Economic Development Opportunities**
  - More walkable and livable mixed use neighborhoods
- χ **Decreased Network Throughput**
  - Signal inefficiency
  - Fewer turn lane options/opportunities
  - Results in 2-5% less capacity – Transportation Research Board

The Conversion of Central Ave

Fall Creek Parkway to 10th Street

– Previously one-way southbound

The Conversion of Central Ave

goals/implications

- **Safety**
  - Traffic calming (pro)
  - More conflict points (con?)
    - Neighbors' had concerns about looking both ways*
      - *Study: 2-way = 30-40% fewer pedestrian/vehicle collisions
- **Streetscape Components**
  - Curb extensions, trees
- **Restored Neighborhood Feeling**
- **Reduced Throughput**
  - *Demand is not constrained* = Traffic Still Flows

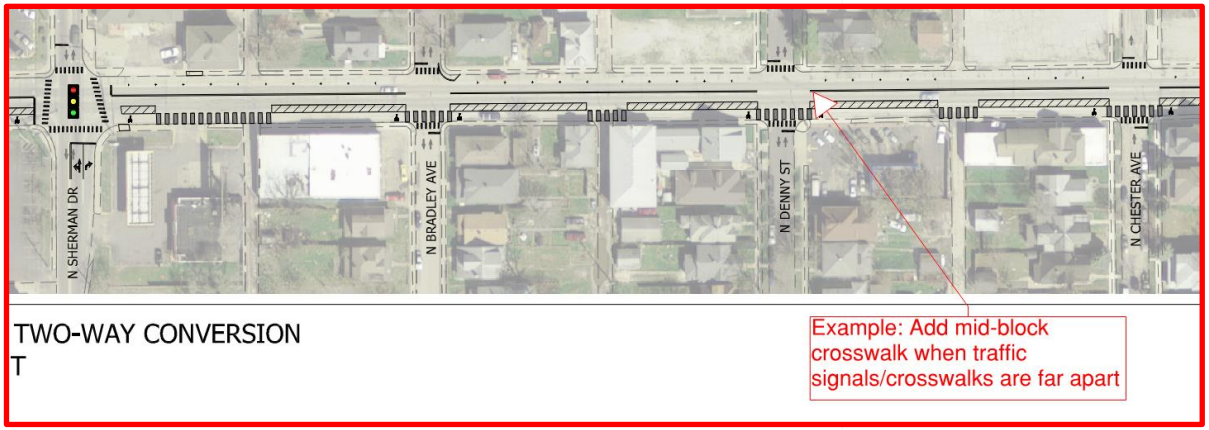
before

after

Central & 23rd

Lessons Learned

- **Community Input**
  - 2 meetings through project development
  - Curb extensions, mid-block crossings added based on input
- **Coordination w/ City Councillors**
  - They hear you and advocate on your behalf
- **Maps Available for Comment**
  - Feel free to make a note in the white space above/below the map, with an arrow to the location in question
  - ***Minor revisions***



MI/NY: Purpose & Need

- **15+ Years of Community Input**
  - June 2005: Near Eastside Collaborative Taskforce (NESCO) formed to address Quality of Life (QoL)
    - 200+ Members
  - June 2007: Drafting begins of first QoL Plan, with input from ~400 neighbors
  - January 2008: First Draft finalized of QoL Plan, incl. 2-way Conversion of both Michigan and New York Streets
  - February 2008: Draft is officially adopted at 2008 NESCO Congress
    - Funding = Barrier
  - October 2016: National Assoc. of City Transportation Officials (NACTO) hosts 2-day workshop with JBCN, NEAR, IndyGo, and City of Indianapolis
    - Focused on and refined objectives identified and supported by NESCO Congress
  - Fall 2018: QoL Plan refined further: Latest objectives found here: http://neareastplan.org/

MI/NY: Purpose & Need

- **Quality of Life Plan: Placemaking & Infrastructure**

Commercial Corridors

Create stronger commercial corridor connectivity to create a connected and accessible community.

View action items.

Prioritize Pedestrians

Prioritize pedestrian-centered development to improve access to daily needs for all individuals.

View action items.

Transit Infrastructure

Maintain and improve transit stop infrastructure to create a connected and accessible community.

View action items.

Maintain Infrastructure

Maintain infrastructure to preserve a connected and accessible community.

View action items.

Natural Spaces

Improve access to natural spaces for people of all abilities.

View action items.

Connection

Connect people to the built and natural environment.

View action items.

Parks

Maintain existing parks on the near Eastside to sustain the built and natural environment for future generations.

View action items.

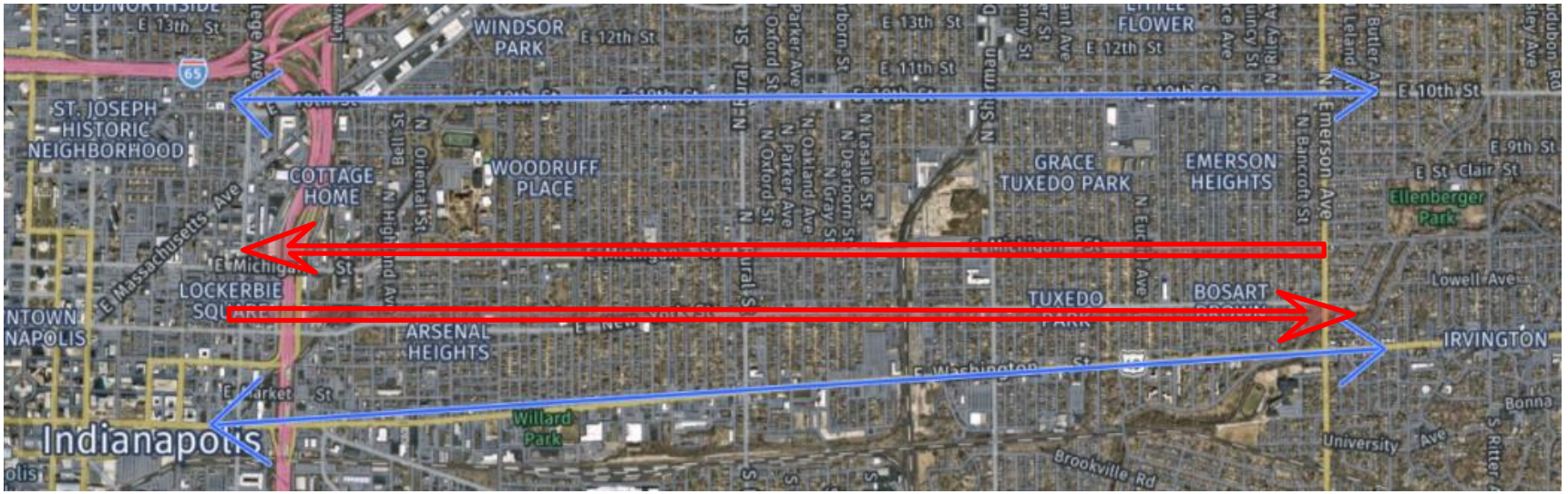
Updates & Announcements

Stay updated on the latest news from the placemaking & infrastructure community action team.

View news.

MI/NY: Purpose & Need

- **Connectivity: Viable Mobility Options**
  - IndyGo: Maximizing walkability to transit
    - Michigan/New York Spacing:
    - "Today, people who are walking distance to an inbound bus stop on Michigan are probably not walking distance to an outbound stop on New York."
    - Route Balancing with Washington Street
    - "…If they are [in walking distance to New York], then they are more likely to use the bus service on Washington Street for their inbound trip anyway."



MI/NY: Purpose & Need

- **Right-Sizing for the Neighborhood**
  - Combined NY + MI Demand = 16k AADT
  - Excess Capacity:
    Design Speed >> Desired Speed
  - Re-allocate Space to Benefit Locals:
    - Meet Demand
    - Design Speed = Posted Speed (Traffic Calming)
    - Neighborhood Connectivity
    - Multimodal Options w/ Enhanced Safety

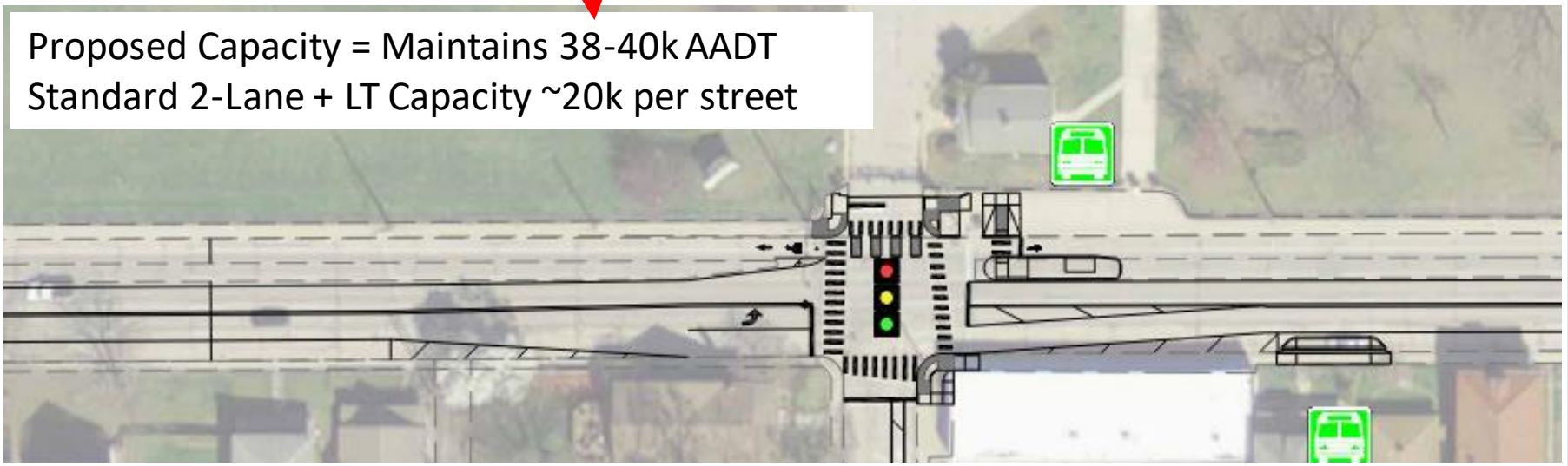
AADT: Average Annual Daily Traffic
Perspective:
> West St Downtown: 38,000
> Mass Ave Downtown: 5,000
> Broad Ripple Ave: 22,000

Prior to Green Lanes, 57k+ AADT Capacity!

Current Capacity = 38k+ AADT

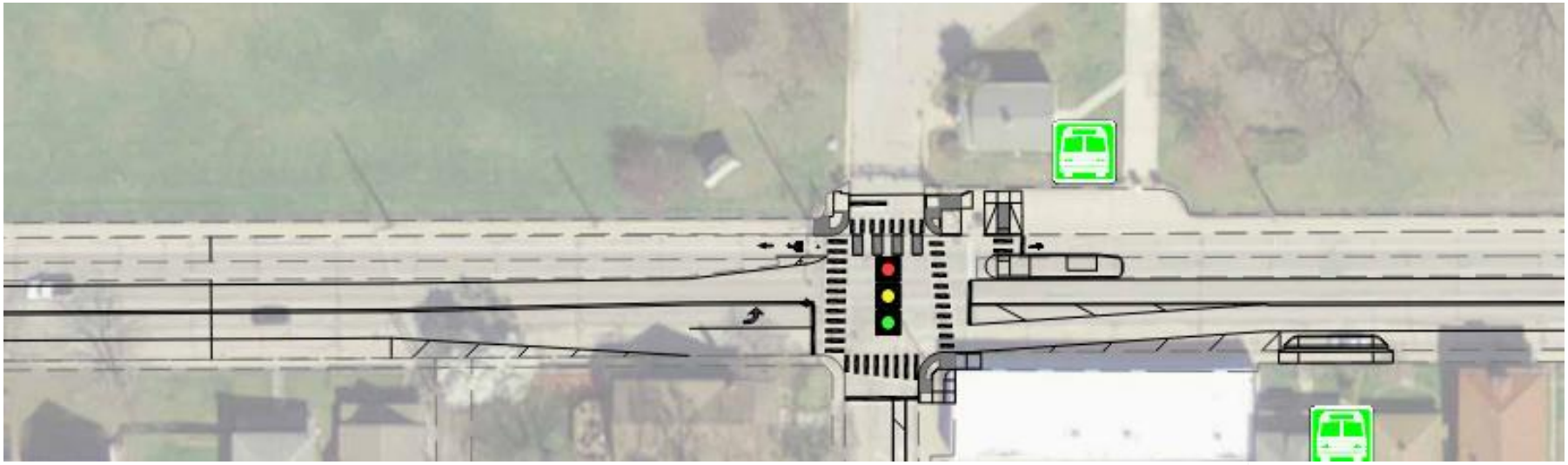
MI/NY: Purpose & Need

Perspective:
>Demand: Combined 16,000 AADT
>>(8,000 ea., MI/NY)
> West St: 38,000 AADT
> Mass Ave: 5,000 AADT
> Broad Ripple Ave: 22,000 AADT



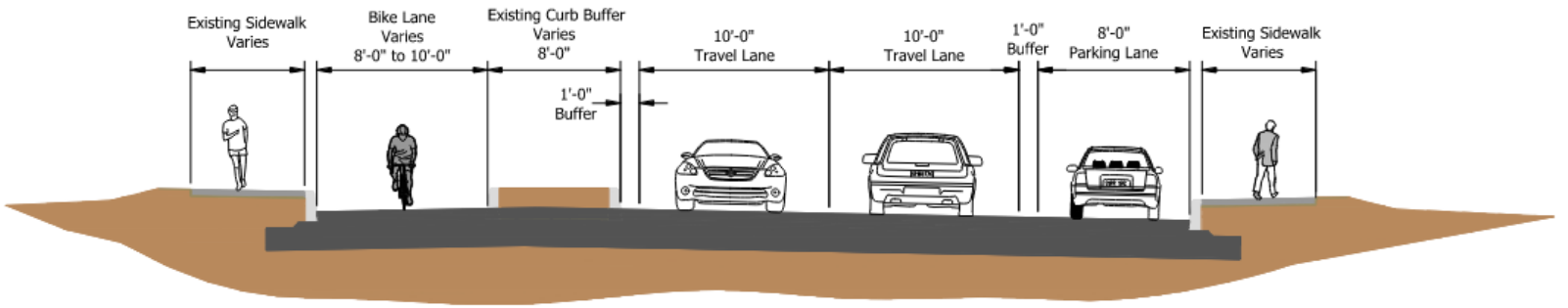
Michigan & New York: Features

- **1 Side On-Street Parking Throughout**
  - Some restrictions at intersections, per usual
- **Protected bicycle lanes from College to Ellenberger Park**
- **Enhanced bus platforms throughout**
- **1 Lane in Each Direction**
- **Turn lanes where required**

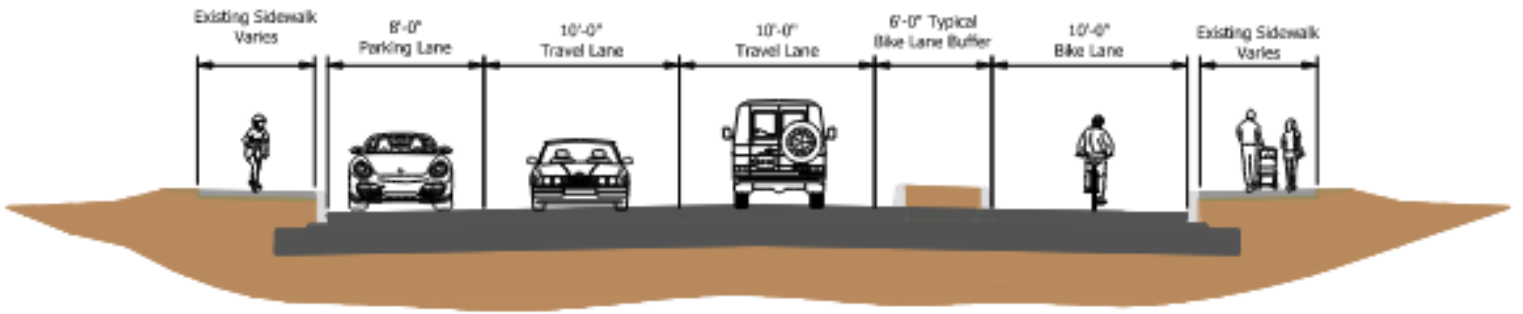


Typical Sections

(varies by segment)



MICHIGAN STREET TYPICAL SECTION



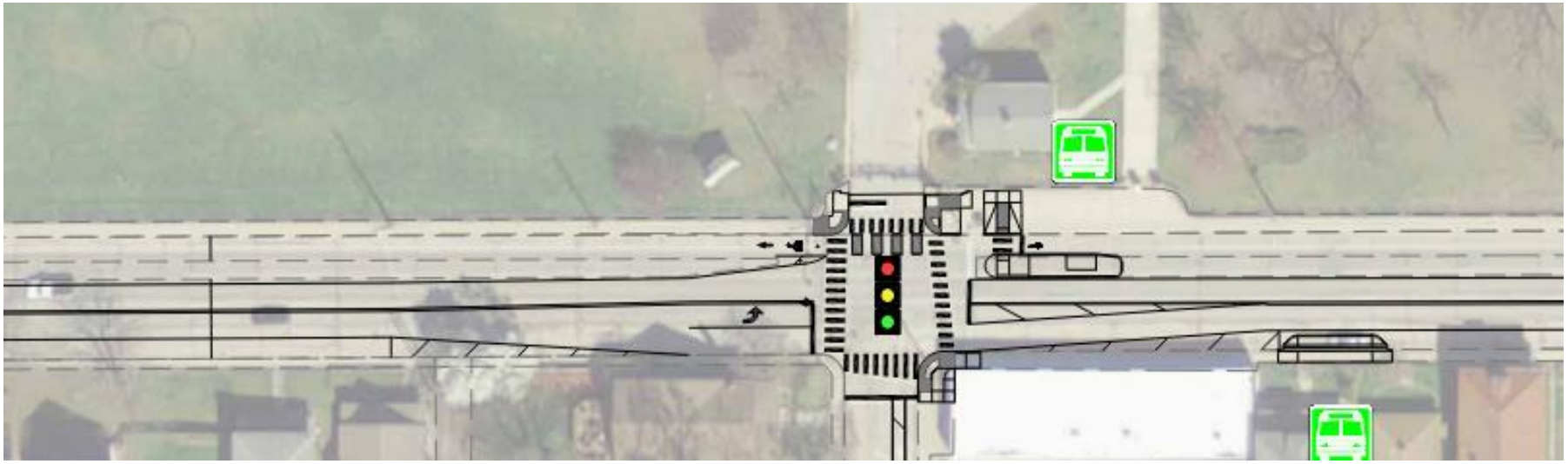
NEW YORK STREET TYPICAL SECTION

Parking Study

- **We studied and surveyed**
  - Daytime & Nighttime
  - Weekday & Weekend
  - 57 segments evaluated per corridor
  - 90%+ of segments < 50%
  - Adjacent Segments
  - Side-street Opportunities
  - Safety in Numbers

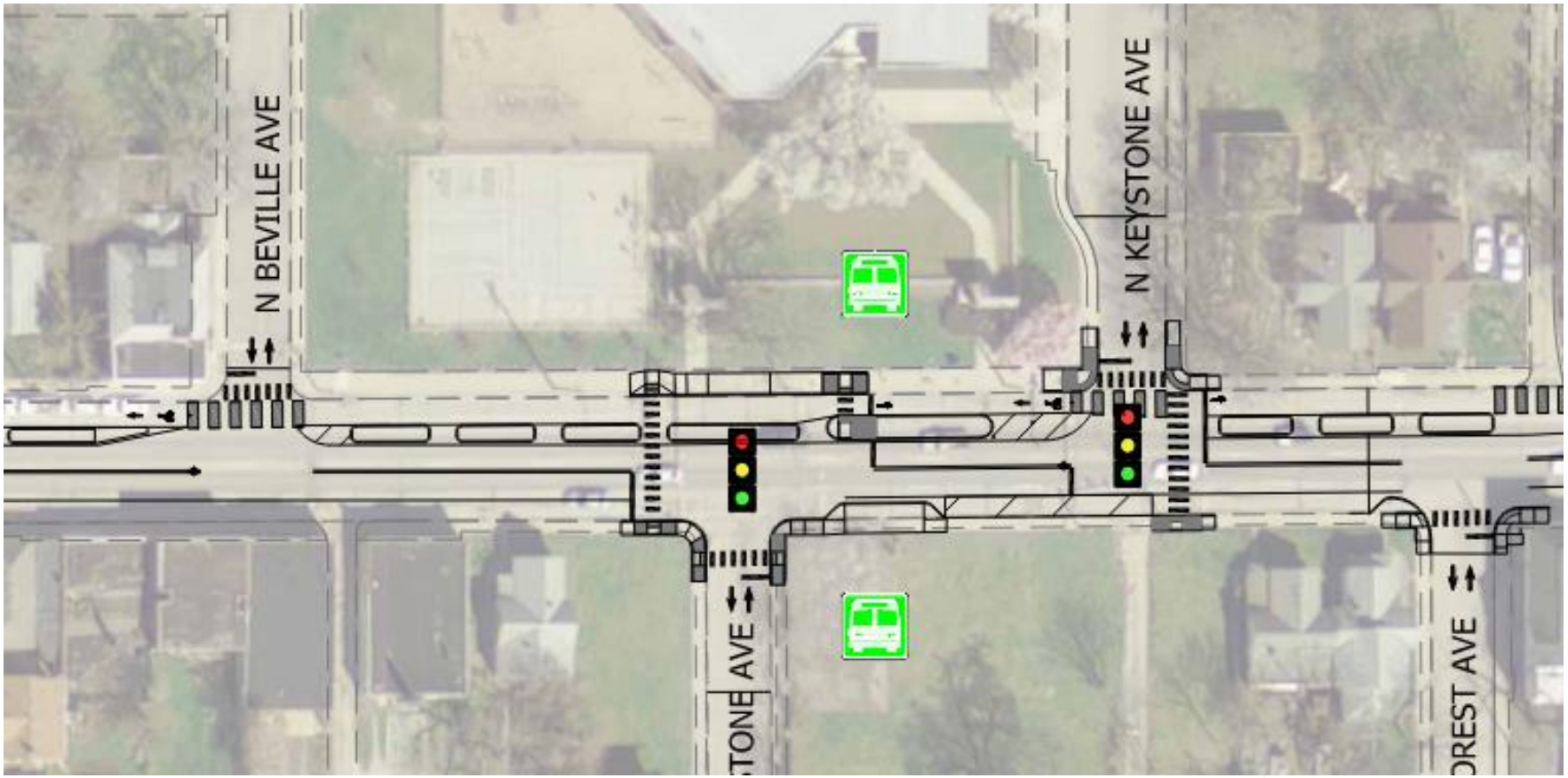
- **Summary of Results:**

Michigan		Corridor	New York	
% Occ	# > 50%	Metric	% Occ	# > 50%
19%	5	Daytime, Weekday	20%	4
20%	6	Nighttime, Weekday	25%	8
22%	6	Daytime, Weekend	23%	3
21%	5	Nighttime, Weekend	29%	7



Design Challenges

Bus Stops

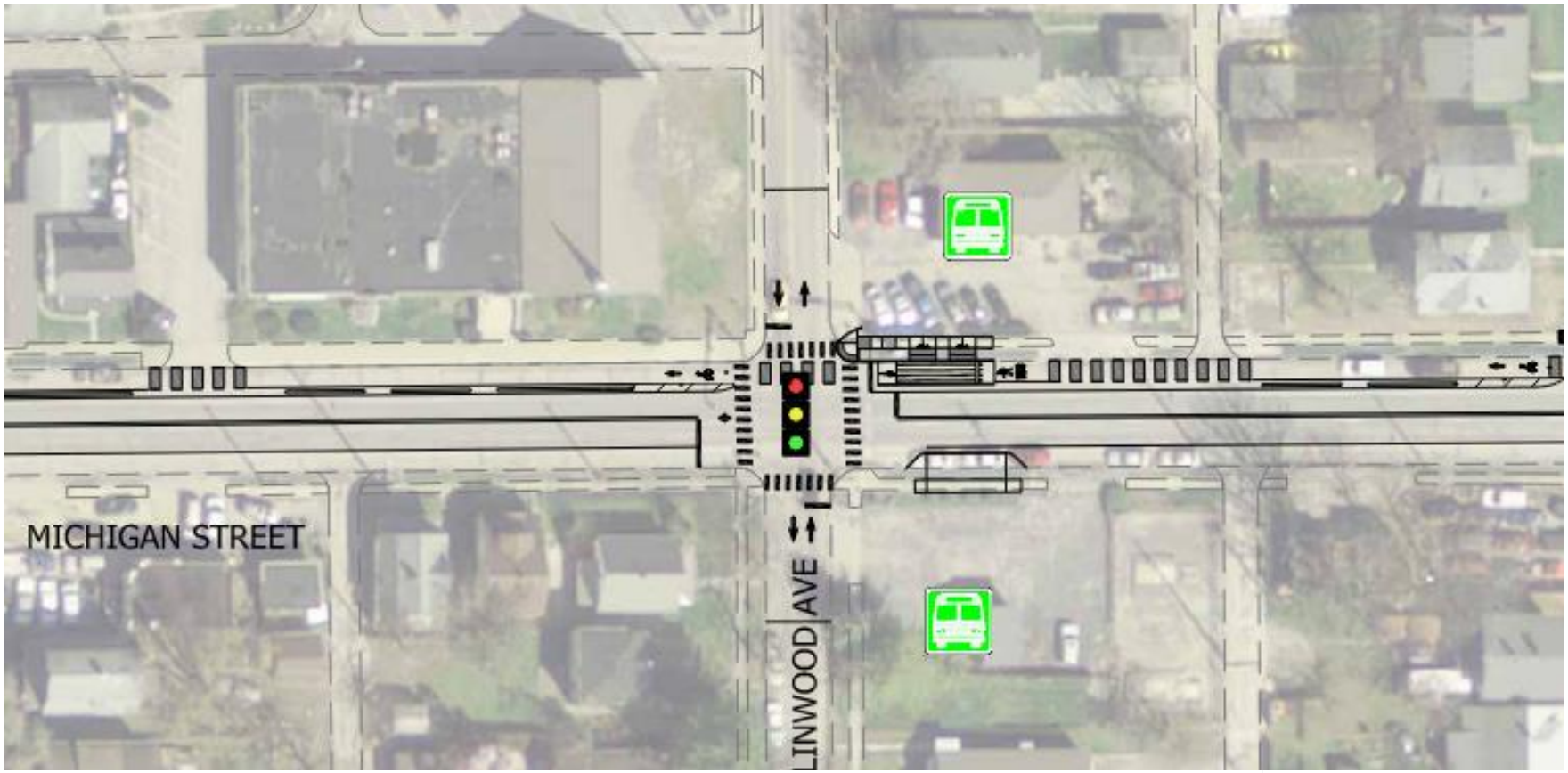


Design Challenges

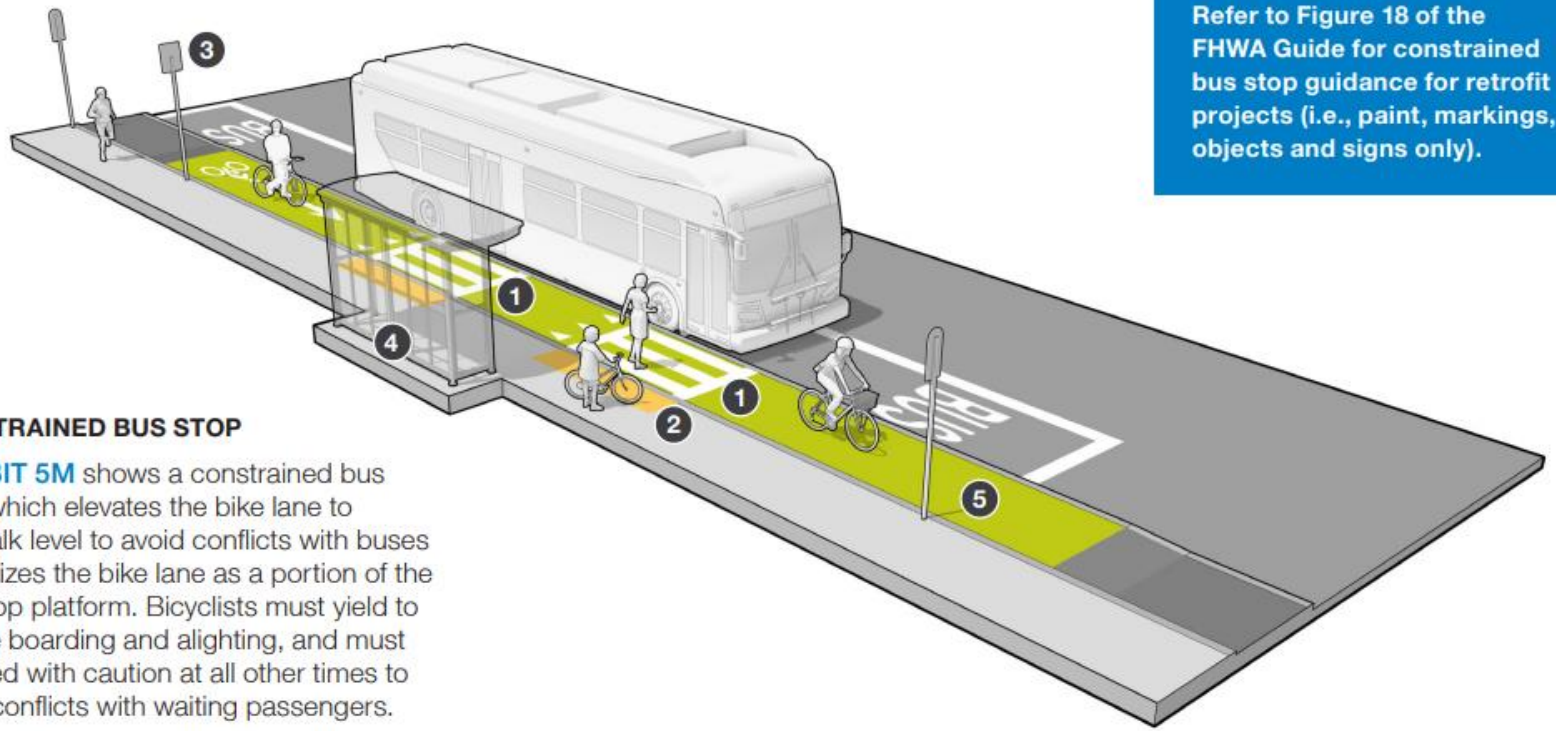
Floating Bus Stop Example

Design Challenges

Bus Stops



Design Challenges



Refer to Figure 18 of the FHWA Guide for constrained bus stop guidance for retrofit projects (i.e., paint, markings, objects and signs only).

CONSTRAINED BUS STOP

EXHIBIT 5M shows a constrained bus stop, which elevates the bike lane to sidewalk level to avoid conflicts with buses but utilizes the bike lane as a portion of the bus stop platform. Bicyclists must yield to people boarding and alighting, and must proceed with caution at all other times to avoid conflicts with waiting passengers.

Design Challenges

Curb Ramp Design and Signal Pole Placement

Design Challenges

College Avenue

Curb Extensions

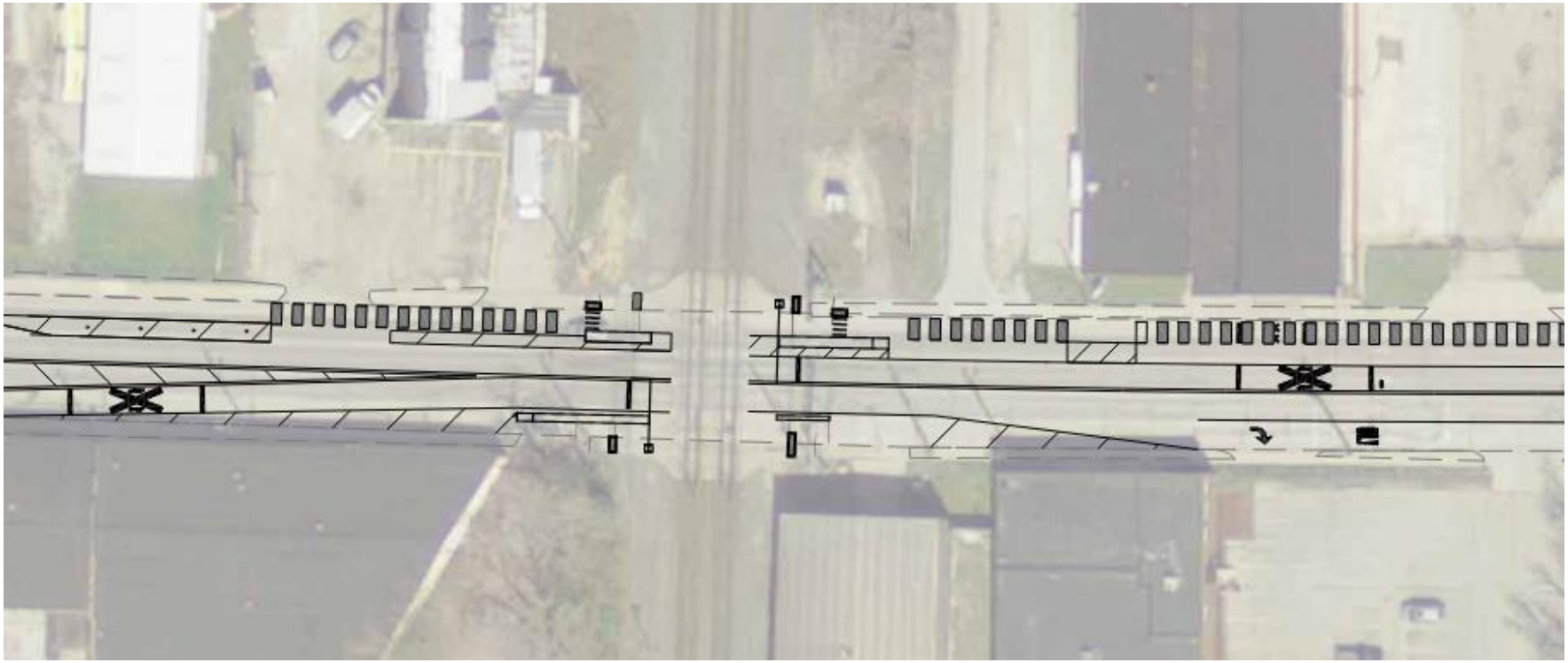
Design Challenges

Railroad Coordination

Michigan Street Facing West

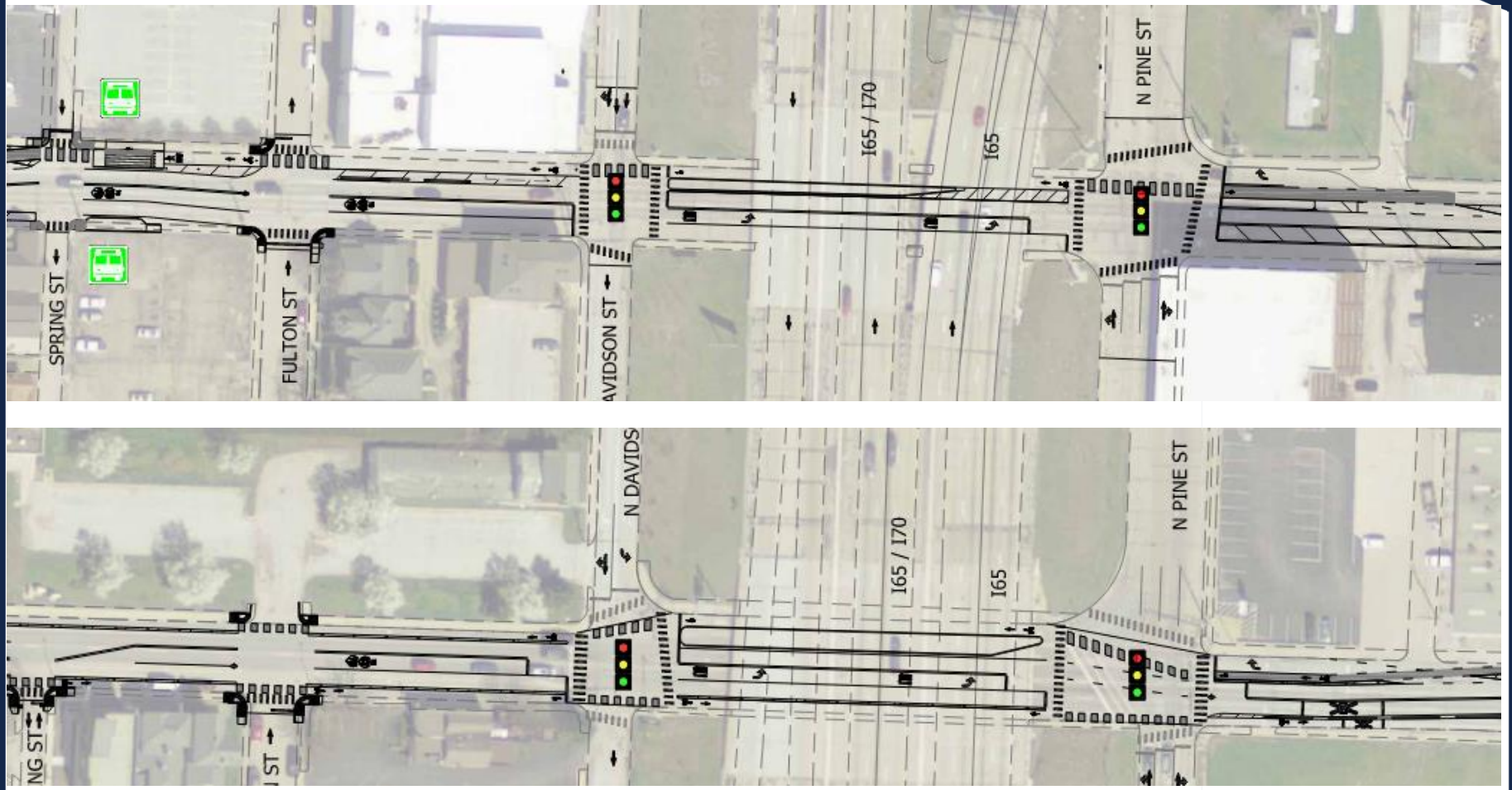
Design Challenges

Railroad Coordination



Design Challenges

INDOT Coordination



Design Challenges

Pavement Rehabilitation

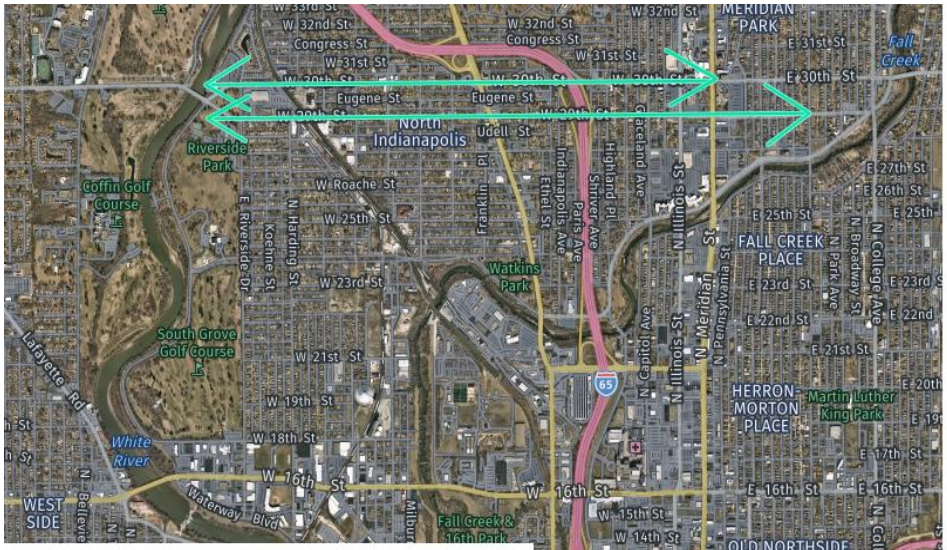
Buried inlet, other things of interest

Other 2-Way Conversions

City of Indianapolis Feasibility Study

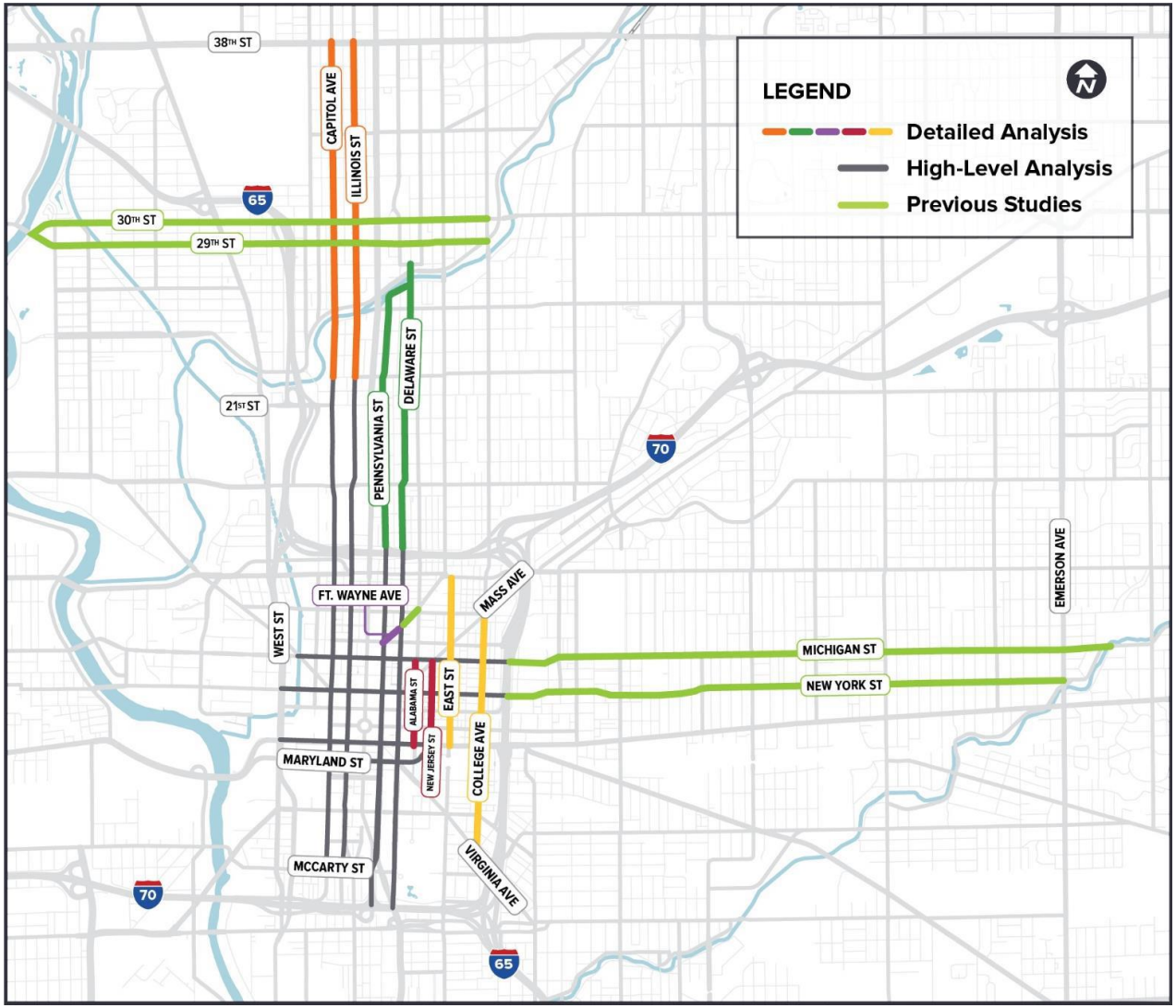
- **Goals**
  - Create vibrant neighborhoods
  - Improve safety & mobility for all modes
- **Considerations**
  - Capacity, safety, property lines, transit, etc.

2-Way Conversion Projects Currently Under Design



- 29th / 30th St.
  - White River to Meridian/Central
- Michigan / New York St.
  - College Ave to Ellenberger Park
- College Ave.
  - Market St. to Mass Ave.

Study Corridors



Conclusions

- **Feasible for conversion**

One-way Streets / Pairs	Extents
Illinois Street & Capitol Avenue	21st Street to 38th Street
Delaware Street & Pennsylvania Street	I-65 North to Fall Creek Parkway S Drive
Fort Wayne Avenue	Pennsylvania Street to Delaware Street
Alabama Street & New Jersey Street	Washington Street to Michigan Street
College Avenue & East Street	Virginia Avenue to Massachusetts Avenue, and Washington Street to 10th Street

- **To remain as one-way pairs**

One-way Streets / Pairs	Extents
Illinois Street & Capitol Avenue	McCarty Street to 21st Street
Delaware Street & Pennsylvania Street	I-70 to I-65
New York Street & Michigan Street	West Street to College Ave
Washington Street & Maryland Street	West Street to Alabama Street

Questions / Food For Thought

- "There are simply more (typically 30-40 percent) more vehicle/pedestrian conflicts within a one-way street network than in a comparable two-way system."
  - Walker, Kulash, McHugh – Transportation Research Board
  - https://onlinepubs.trb.org/onlinepubs/circulars/ec019/Ec019_f2.pdf
- "The injury rate [for child pedestrians] was 2.5 times higher on one-way streets than on two-way streets"
  - Wazana, Rynard, Raina, Krueger, Chambers – National Library of Medicine
  - https://pubmed.ncbi.nlm.nih.gov/10927849/
- "One-way streets have hurt downtown commercial businesses. For instance, on Vine Street in Cincinnati, 40 percent of the businesses closed after conversion from a two-way to a one-way street. One-way streets have a negative impact on storefront exposure, which is lost when one direction of travel is eliminated as well as when traffic speeded up due to one way traffic"
  - Hanka and Gilderbloom, PhD. Center for Sustainable Neighborhoods
  - http://sun.louisville.edu/preservation/one-waystreetver12-012908-5B1-5D%20.pdf
- "Two-way conversion improves the livability of a neighborhood by significantly reducing crime and collisions…"
  - Center for Sustainable Urban Neighborhoods, University of Louisville [KY]
  - https://www.planetizen.com/node/69354

Contact Information

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