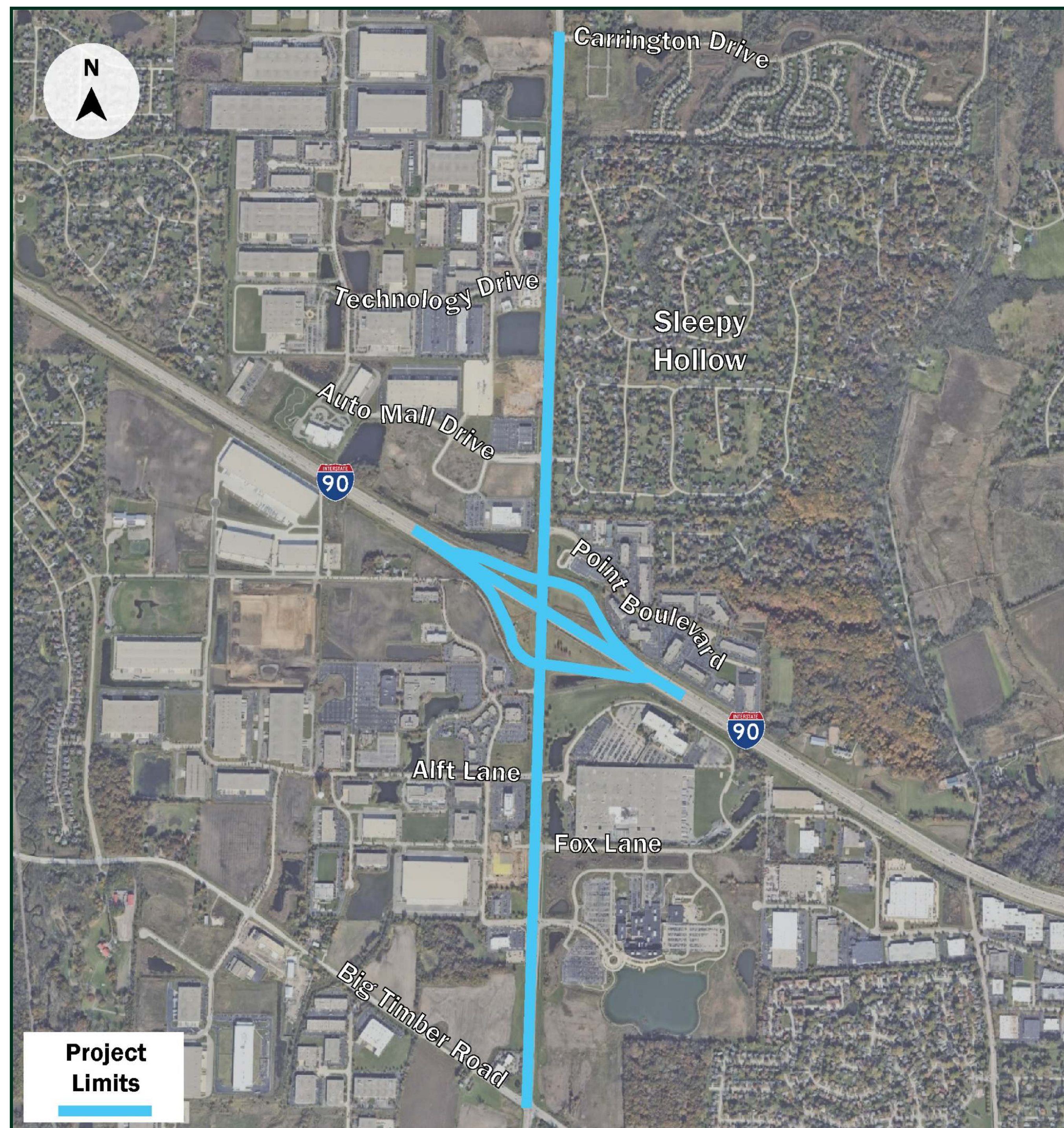


# WELCOME

## RANDALL OVER 90 PUBLIC INFORMATION MEETINGS



### The Kane County Division of Transportation

May 15, 2023 (Virtual)  
May 16, 2023 (In-Person)

RANDALL  
OVER 90

# CORRIDOR TRAFFIC NOISE ANALYSIS

Traffic noise analysis was conducted in accordance with IDOT guidelines, also approved by FHWA. **IDOT requires noise barriers to meet the following feasibility and reasonableness criteria in order to be built:**

## FEASIBILITY

### Acoustical Criteria

- 5 dBA or greater reduction of sound for at least two impacted receptors

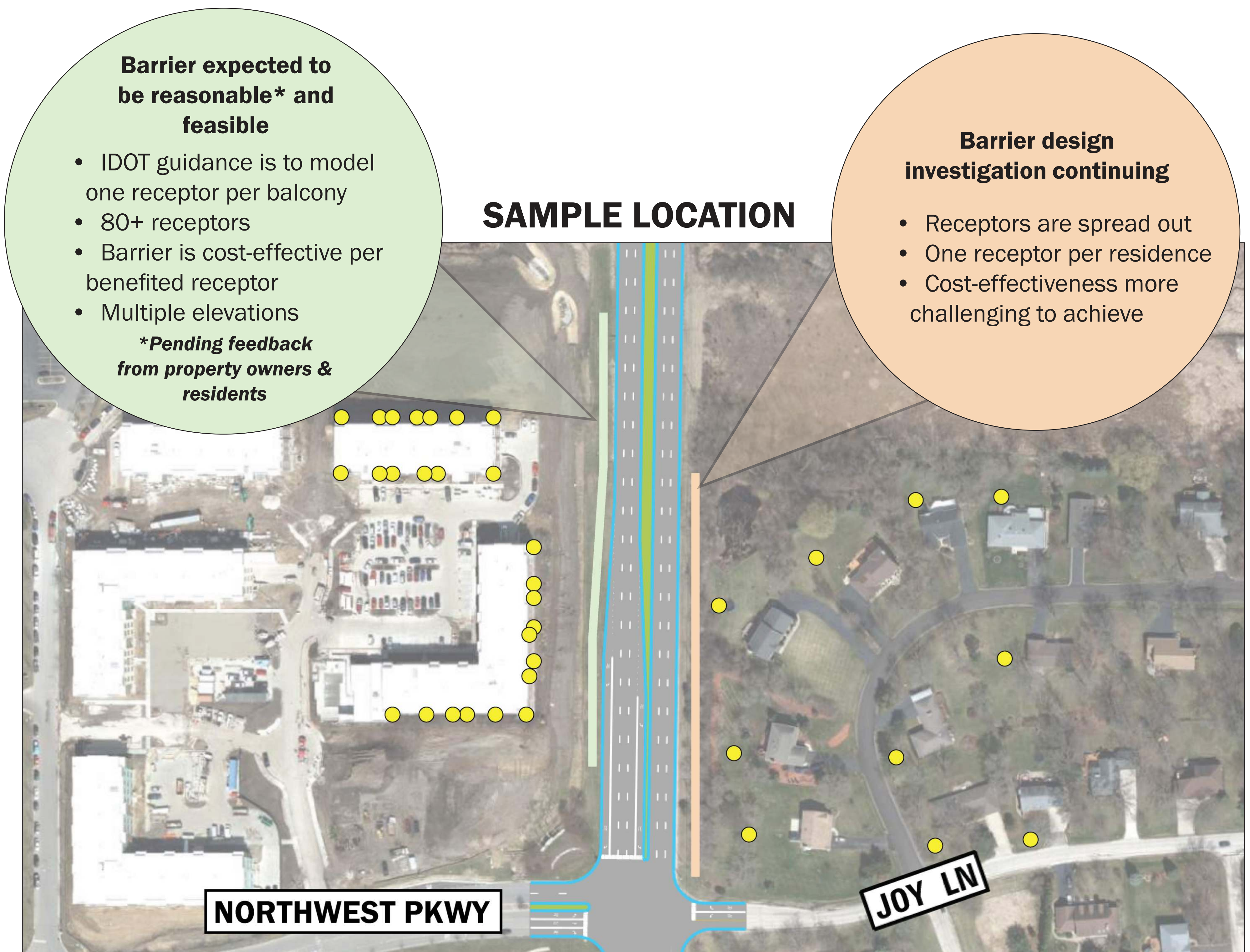
### Engineering Consideration

- Topography and drainage
- Access, safety and maintenance

## REASONABLENESS

Noise reduction design goal is 8 dBA for at least one benefited receptor

- Cost per benefited receptor does not exceed the applicable allowable noise abatement cost
- \$30,000 per benefited receptor
- A **benefited receptor** is any sensitive receptor that receives at least a 5 dBA traffic noise reduction as a result of a noise barrier
- Feedback will be solicited from property owners and residents that are adjacent to the proposed noise wall. Majority of the responses must be in favor of barrier construction



### Barrier expected to be reasonable\* and feasible

- IDOT guidance is to model one receptor per balcony
- 80+ receptors
- Barrier is cost-effective per benefited receptor
- Multiple elevations

*\*Pending feedback from property owners & residents*

### Barrier design investigation continuing

- Receptors are spread out
- One receptor per residence
- Cost-effectiveness more challenging to achieve

Receptor ● Proposed Barrier — Barrier Analyzed —

### IMPACTED RECEPTOR

Receptor that future noise levels approach or exceed the noise threshold in the Noise Abatement Criteria Level (66 dBA for residential receptors) OR exceeds the existing level by more than 15 dBA.)

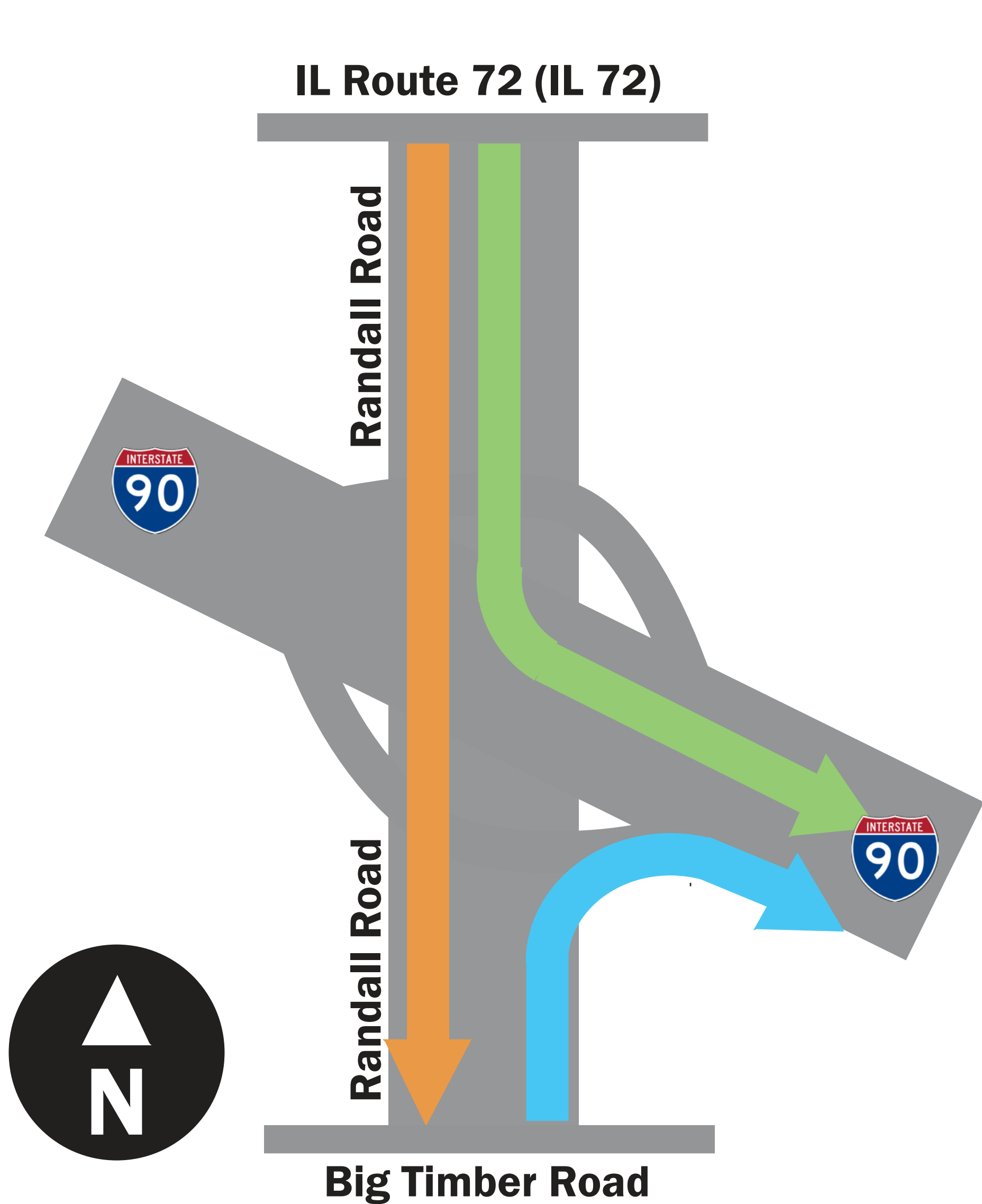
### BENEFITED RECEPTOR

Receptor that experiences at least 5 dBA of sound reduction from an abatement option regardless of whether the receptor was identified as impacted.

# FUTURE AM AND PM PEAK TRAFFIC CONDITIONS

Travel time and delay anticipated for the year 2035 for Build and No-Build Alternatives

## FUTURE AM PEAK TRAFFIC CONDITIONS



### IL Route 72 to I-90 Eastbound

Alternative Under Consideration	Travel Time (minutes)	Distance (mi)	Average Speed (mph)
No Build (2035)	6:57	1.9	16
Alternative 1	3:15	2.1	39
Alternative 2	3:11	2.1	40
Alternative 3	2:58	1.9	38
Alternative 4	3:05	1.9	37
Alternative 5	3:04	1.9	37

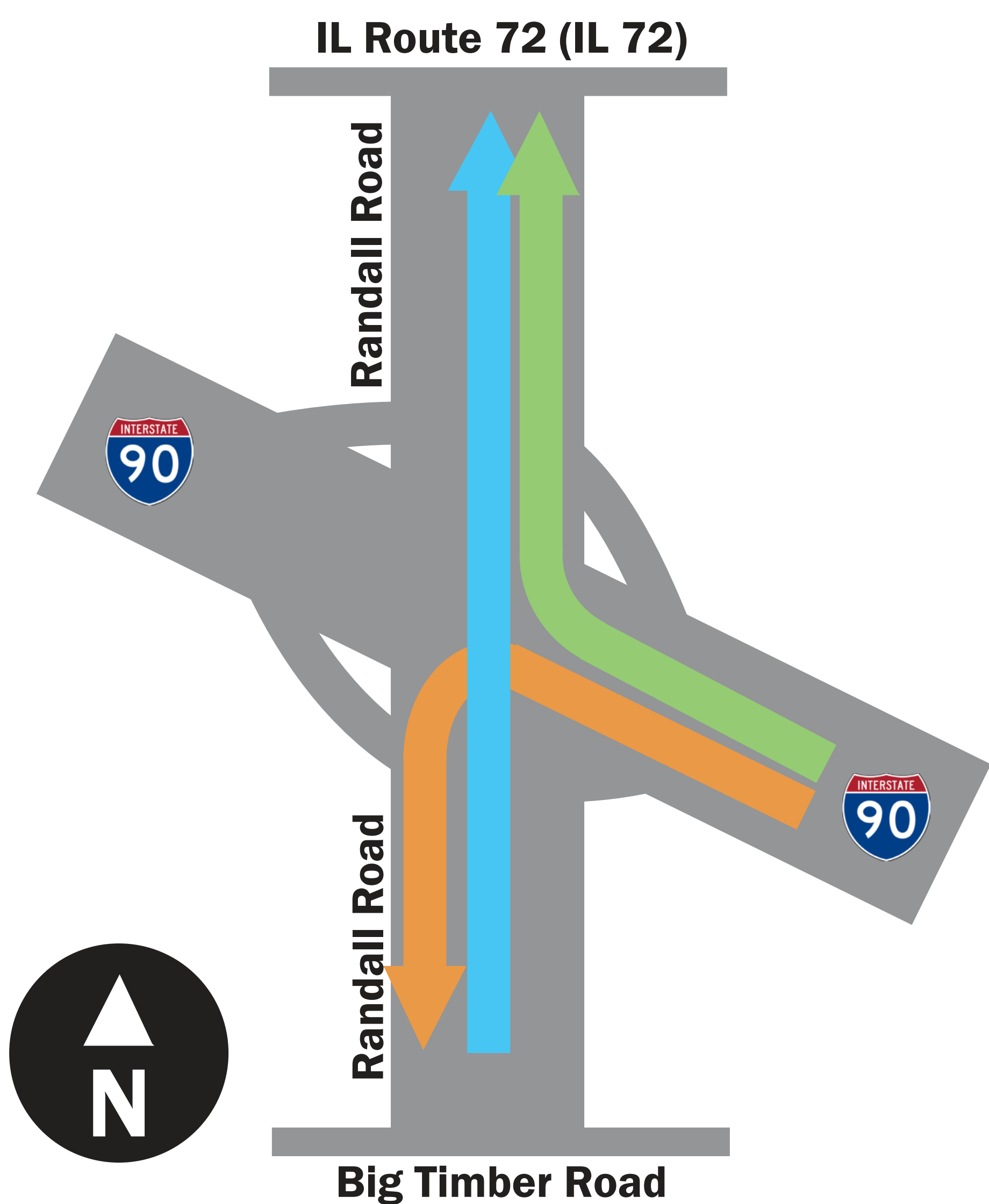
### Big Timber Road to I-90 Eastbound

Alternative Under Consideration	Travel Time (minutes)	Distance (mi)	Average Speed (mph)
No Build (2035)	2:41	1.2	26
Alternative 1	2:07	1.2	33
Alternative 2	2:02	1.2	35
Alternative 3	1:52	1.2	37
Alternative 4	1:55	1.2	36
Alternative 5	2:01	1.2	34

### IL Route 72 to Big Timber Road

Alternative Under Consideration	Travel Time (minutes)	Distance (mi)	Average Speed (mph)
No Build (2035)	7:34	2.8	22
Alternative 1	4:45	2.8	35
Alternative 2	5:07	2.8	33
Alternative 3	4:58	2.8	34
Alternative 4	5:11	2.8	32
Alternative 5	4:44	2.8	35

## FUTURE PM PEAK TRAFFIC CONDITIONS



### I-90 Westbound to IL Route 72

Alternative Under Consideration	Travel Time (minutes)	Distance (mi)	Average Speed (mph)
No Build (2035)	5:27	2.0	22
Alternative 1	4:46	2.0	25
Alternative 2	4:47	2.0	25
Alternative 3	4:46	2.0	25
Alternative 4	4:51	2.0	25
Alternative 5	4:03	2.0	30

### I-90 Westbound to Big Timber Road

Alternative Under Consideration	Travel Time (minutes)	Distance (mi)	Average Speed (mph)
No Build (2035)	5:30	1.6	18
Alternative 1	4:42	1.6	21
Alternative 2	4:48	1.6	20
Alternative 3	4:48	1.6	20
Alternative 4	4:47	1.6	21
Alternative 5	4:41	1.7	21

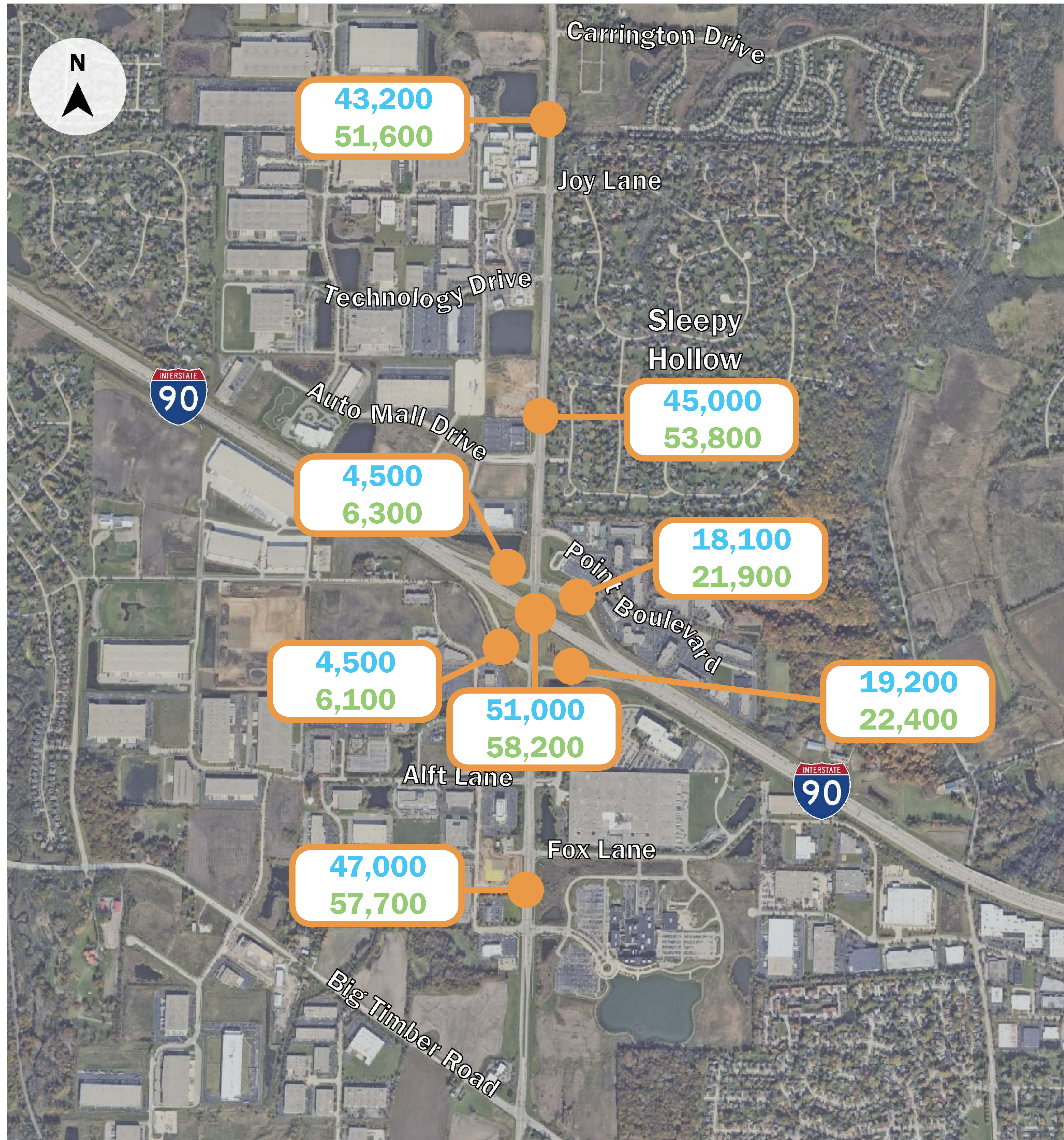
### Big Timber Road to IL Route 72

Alternative Under Consideration	Travel Time (minutes)	Distance (mi)	Average Speed (mph)
No Build (2035)	9:38	2.8	18
Alternative 1	5:33	2.8	31
Alternative 2	5:46	2.8	29
Alternative 3	6:09	2.8	28
Alternative 4	6:04	2.8	28
Alternative 5	5:51	2.8	29

# EXISTING AND FUTURE AVERAGE DAILY TRAFFIC

2022 Average Existing Daily Traffic  
(number of vehicles per day)

2035 Projected Future Daily Traffic  
(number of projected vehicles per day)



# ALTERNATIVE EVALUATION AND SCORING PROCESS

Alternatives were evaluated based on the project's Purpose and Need Statement. Below details the evaluation categories and their respective "scores" which determined the Alternatives Under Consideration.

## Traffic Operations – 100 total points

### Mean Travel Times – 40 Points

The average time it takes to travel between two points within the corridor for 4 segments:

- Big Timber to the EB I-90 intersection
- Big Timber to IL 72
- EB I-90 intersection to Big Timber
- IL 72 to Big Timber

Alternatives with shorter travel times received a higher score.

### Total Vehicles Processed– 40 Points

This metric represents the total number of vehicles that are able to travel through the entire corridor. Scoring was done for both the AM and PM peak periods.

Alternatives which were able to process more vehicles received a higher score.

### Intersection Delay– 20 Points

The delay at the highest volume intersections, westbound I-90 and eastbound I-90, was calculated for each alternative. The delay for the critical movements were used for scoring in the final rubric.

Alternatives which had shorter delay times received a higher score.

### Safety – 30 points

The ability to reduce queue lengths was used to determine the safety benefits of each alternative. Shorter queue lengths can reduce rear end potential. Alternatives with shorter queue lengths received a higher score.

### Cost– 30 points

Cost estimates were prepared for all alternatives and compared to one another. Alternatives with lower costs received a higher score.

### Constructability – 15 points

Alternatives were evaluated based on how difficult it would be to build. Alternatives with less complex structures that can be built without impacting traffic received a higher score.

### Sensitivity Analysis– 10 points

In the event the actual future traffic is higher than projected, a sensitivity analysis was performed for each alternative to ensure that if the actual traffic is more than assumed, the Alternatives Under Consideration will still meet the project's Purpose and Need. Alternatives with a larger capacity received a higher score.

### Economic Impacts – 10 points

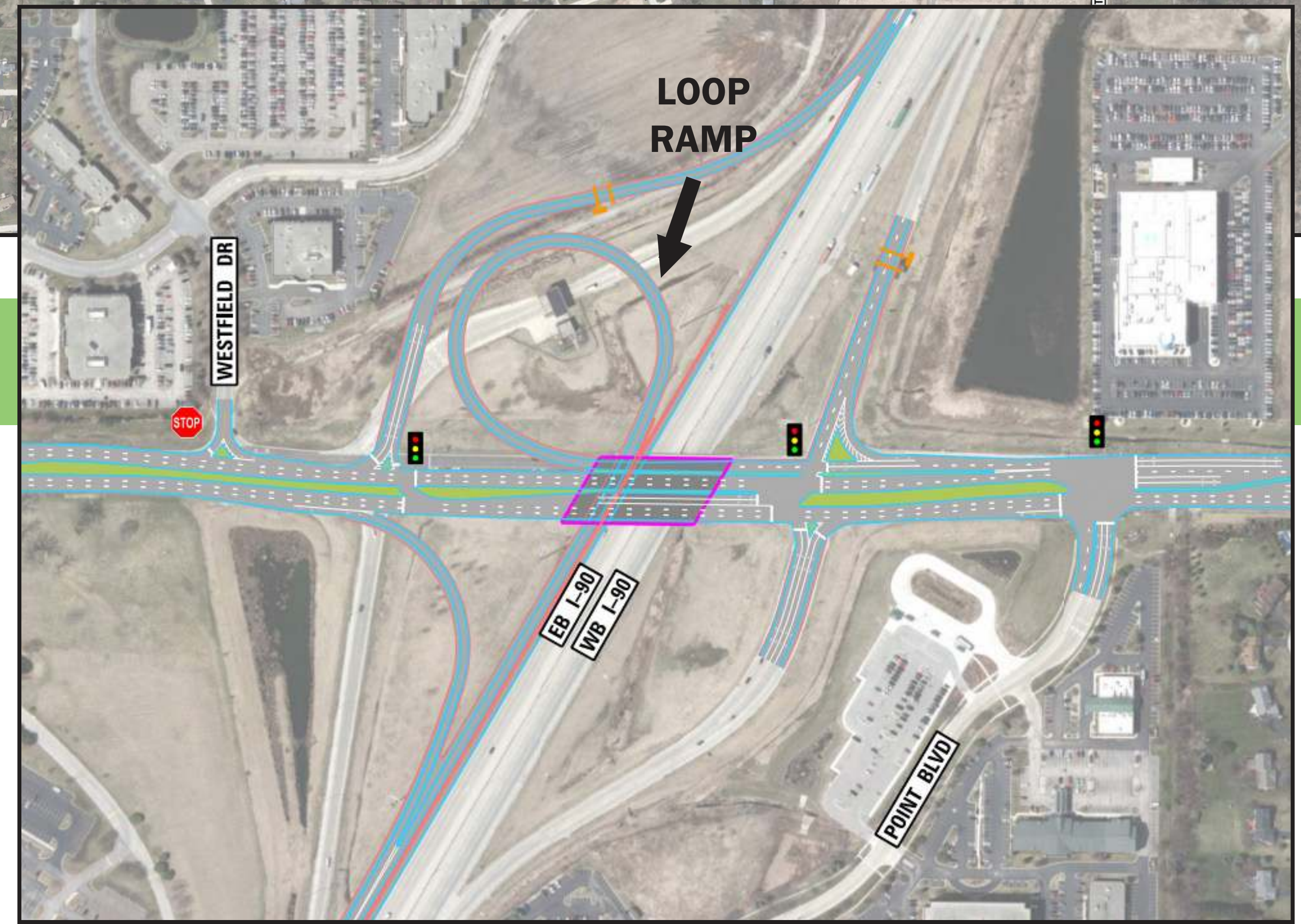
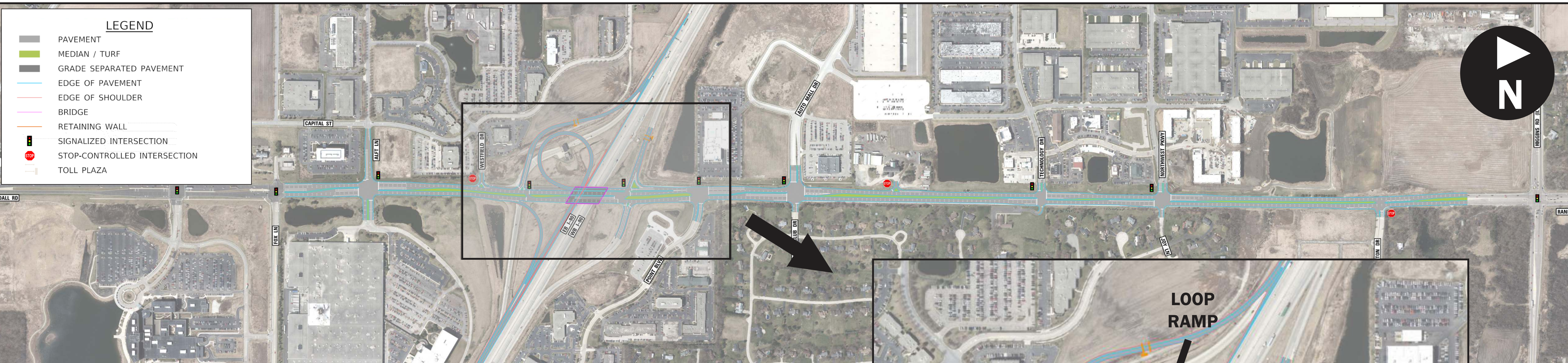
Access into and out of business complexes within the corridor was evaluated. Alternatives with a larger capacity received a higher score.

### Multi-Modal Potential – 5 points

The potential to provide safe options for pedestrians and cyclists as well as meet ADA requirements was evaluated. Alternatives which required fewer conflicts with uncontrolled movements (free-flow ramp traffic) received a higher score.

All alternatives could receive a total overall score of **200 points**. The **5 Alternatives Under Consideration** were the highest scoring of all alternatives evaluated.

# ALTERNATIVES UNDER CONSIDERATION



## ALTERNATIVE 1 FEATURES:

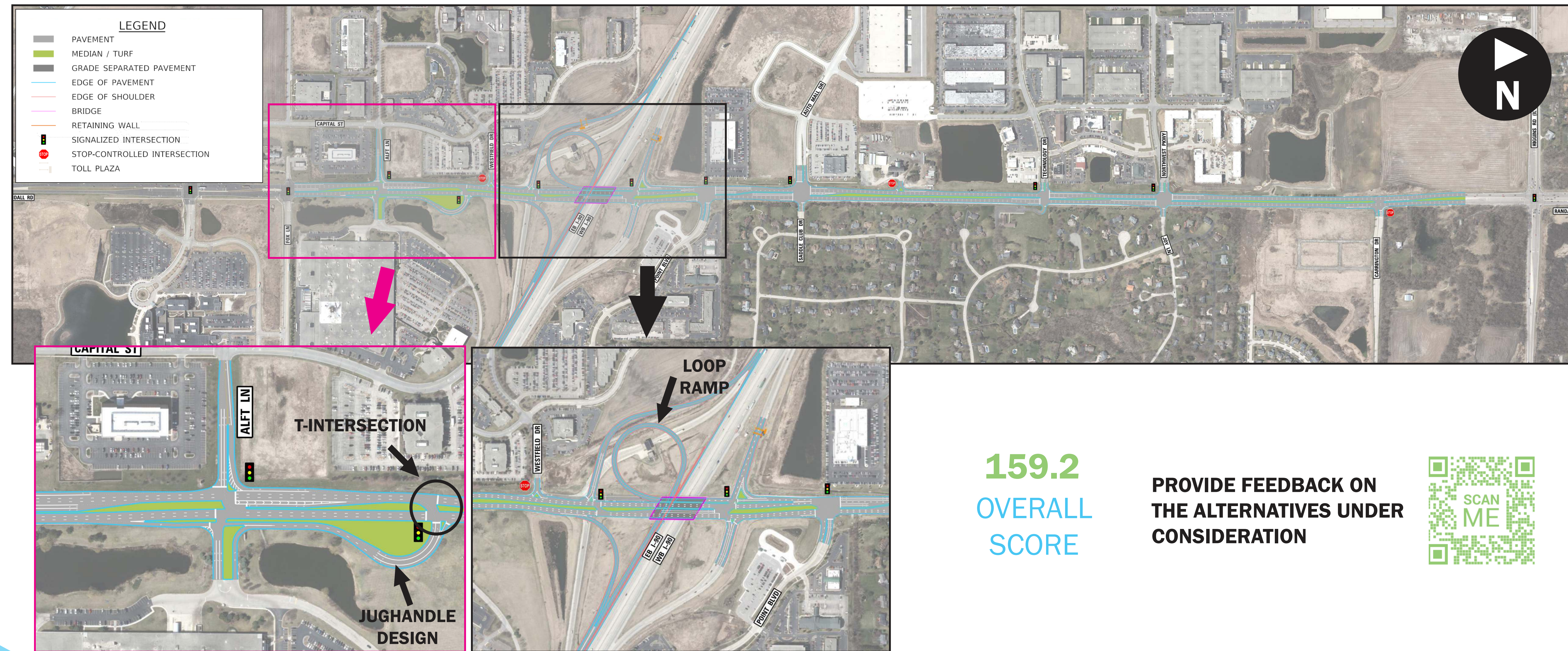
- ✔ Improves capacity to southbound Randall Road traffic to eastbound I-90 using a loop ramp
- ✔ Southbound Randall Road traffic traveling to I-90 is separated from through traffic just south of Point Boulevard
- ✔ Widens Randall Road from 4 lanes to 6 lanes north and south of the I-90 interchange

**160.3**  
OVERALL  
SCORE

PROVIDE FEEDBACK ON  
THE ALTERNATIVES UNDER  
CONSIDERATION



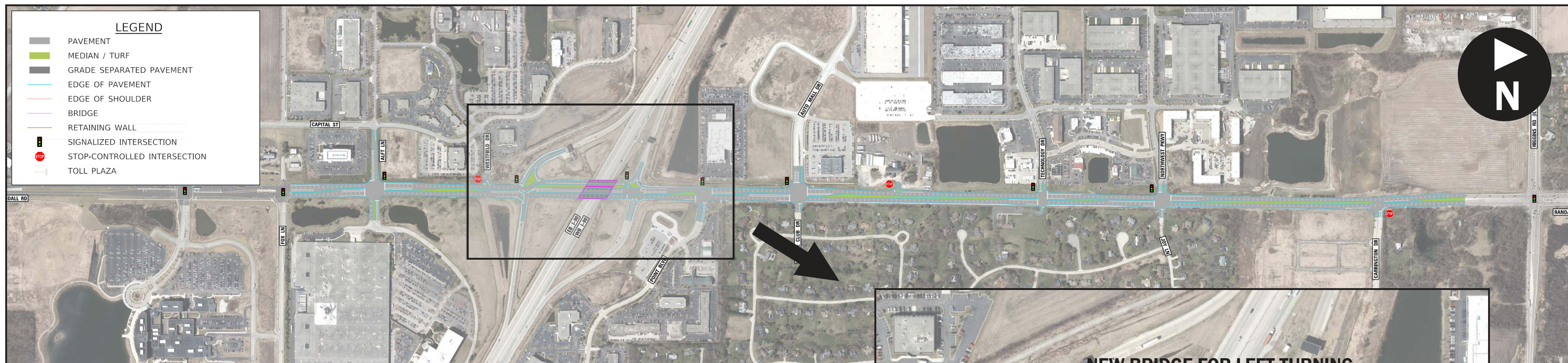
# ALTERNATIVES UNDER CONSIDERATION



## ALTERNATIVE 2 FEATURES:

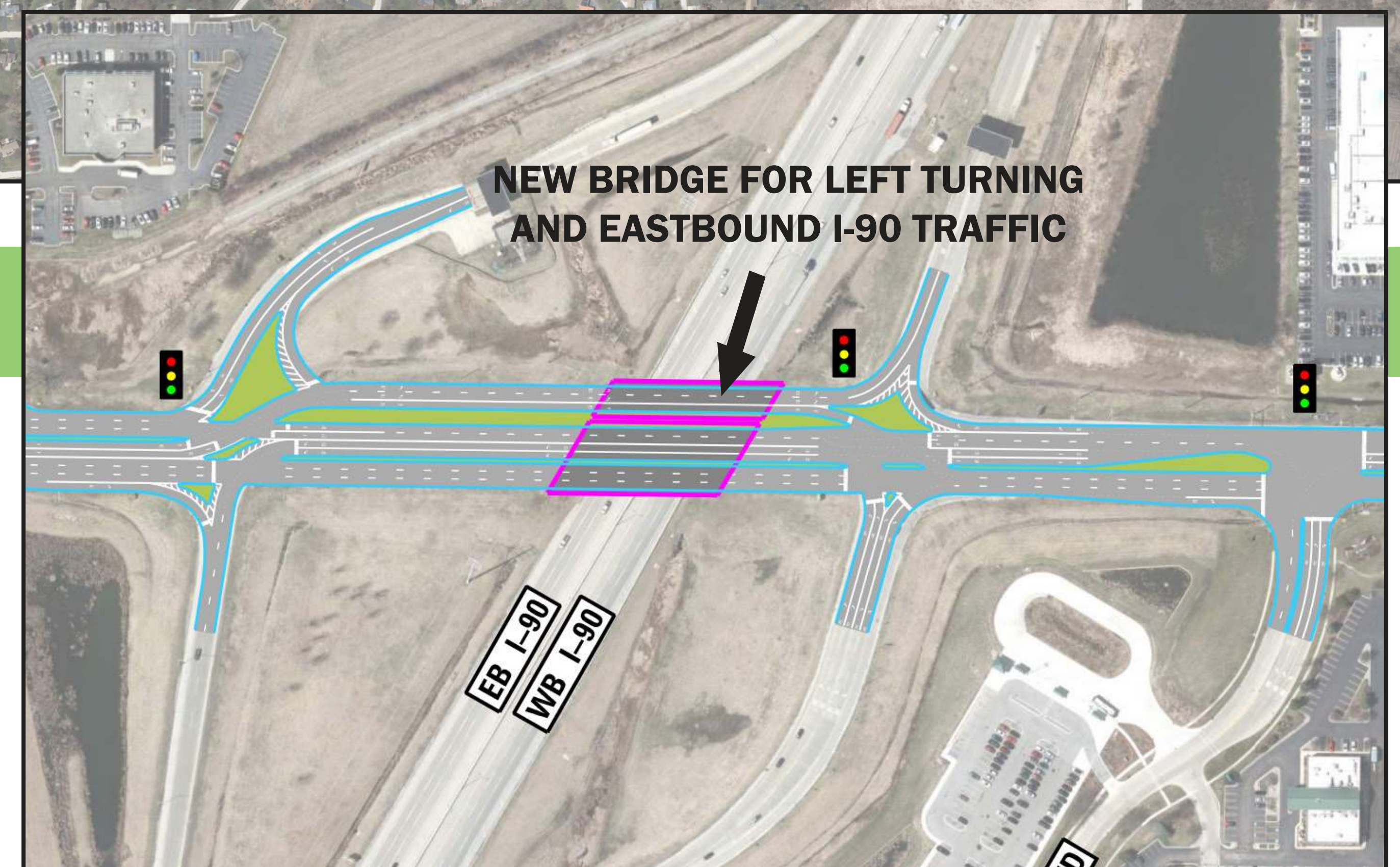
- ✓ Improves capacity to southbound Randall Road traffic to eastbound I-90 using a loop ramp
- ✓ Southbound Randall Road traffic traveling to I-90 is separated from through traffic just south of Point Boulevard
- ✓ South of I-90 at the Alft Lane and Randall Road intersection, left turning traffic from northbound Randall Road and traffic from the east leg of the intersection will be routed to a separate intersection with Randall Road using a “Jughandle” design

# ALTERNATIVES UNDER CONSIDERATION



## ALTERNATIVE 3 FEATURES:

- ✓ Left turning traffic from northbound Randall Road and eastbound I-90 are shifted onto a new bridge next to existing Randall Road
- ✓ Widens Randall Road from 4 lanes to 6 lanes north and south of the I-90 interchange



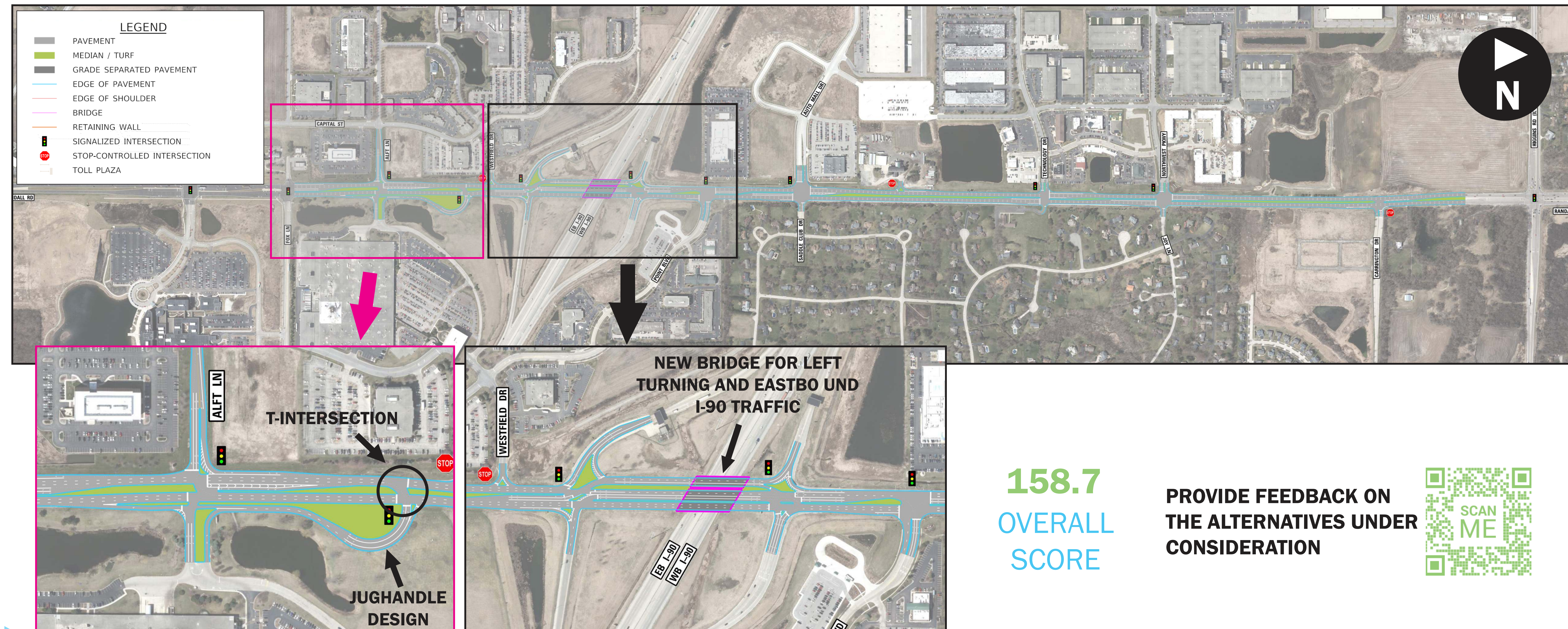
**157.1**  
OVERALL  
SCORE

PROVIDE FEEDBACK ON  
THE ALTERNATIVES UNDER  
CONSIDERATION





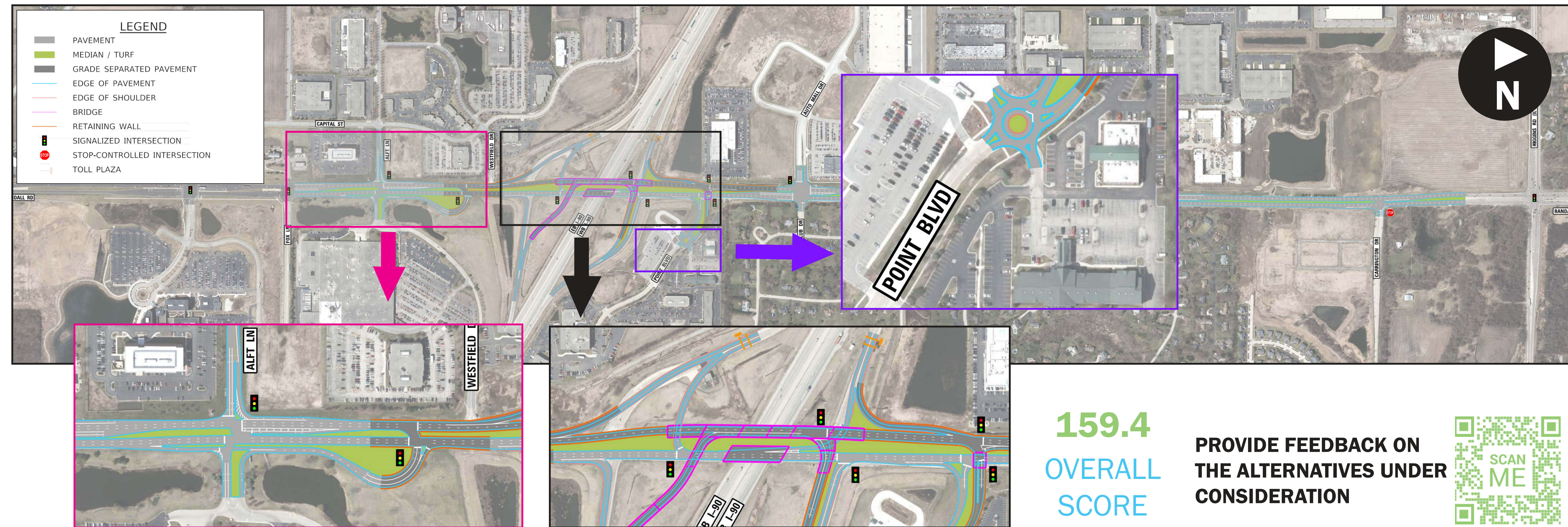
# ALTERNATIVES UNDER CONSIDERATION



## ALTERNATIVE 4 FEATURES:

- ✓ Left turning traffic from northbound Randall Road and eastbound I-90 are shifted onto a new bridge next to existing Randall Road
- ✓ South of I-90 at the Aft Lane and Randall Road intersection, left turning traffic from northbound Randall Road and traffic from the east leg of the intersection will be routed to a separate intersection with Randall Road using a “Jughandle” design
- ✓ Widens Randall Road from 4 to 6 lanes north of I-90 interchange

# ALTERNATIVES UNDER CONSIDERATION



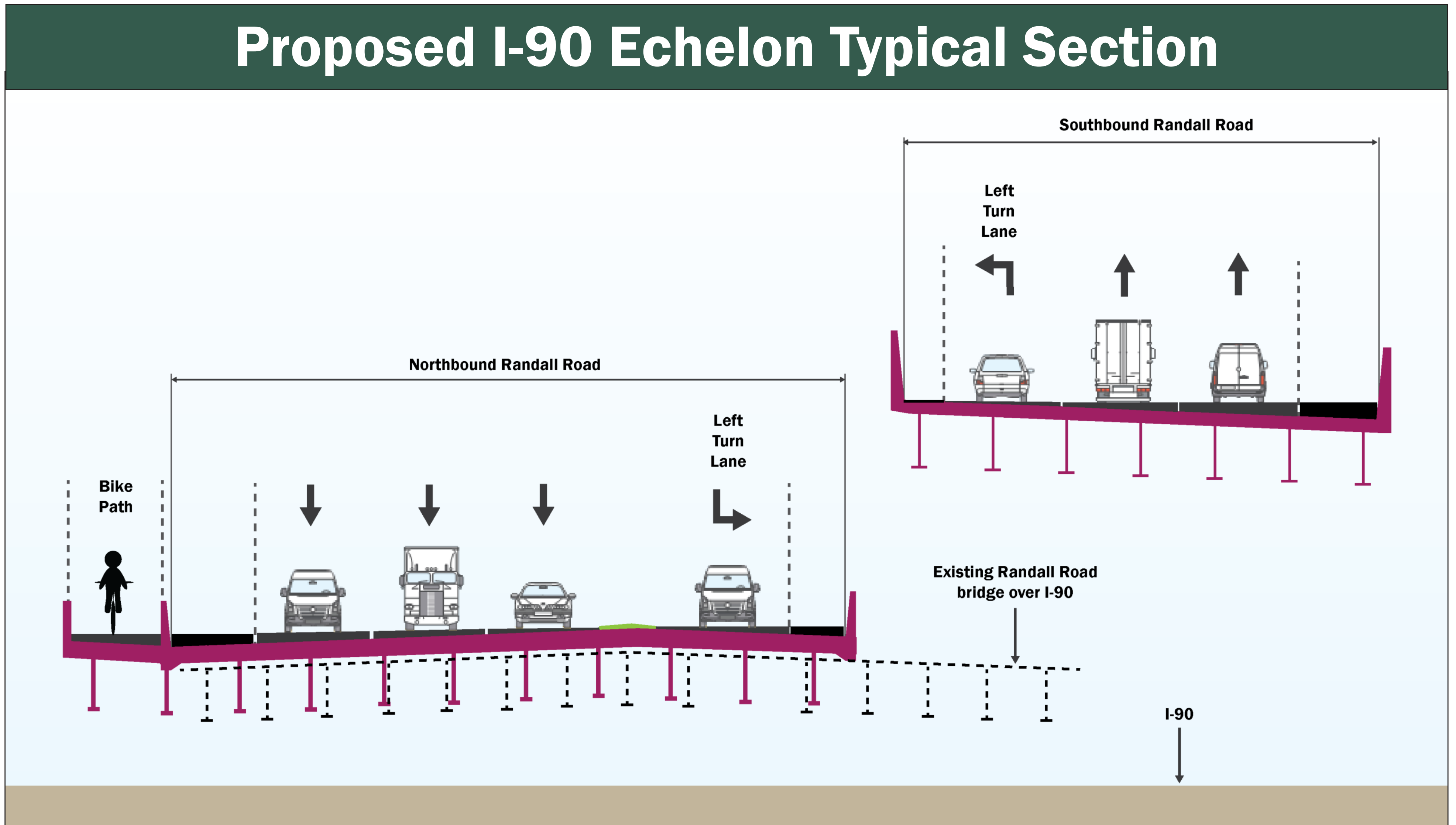
## ALTERNATIVE 5 FEATURES:

- ✓ Southbound Randall Road will be grade separated from south of Auto Mall Drive to north of Alft Lane, while access to and from northbound Randall Road will remain at-grade
- ✓ Point Blvd traffic to and from southbound Randall Road will be grade-separated over northbound Randall Road. A roundabout will distribute traffic to Point Boulevard and to the PACE bus station
- ✓ South of I-90 at the Alft Lane and Randall Road intersection, left turning traffic from northbound Randall Road and traffic from the east leg of the intersection will be routed to a separate intersection with Randall Road using a “Jughandle” design. The new intersection will be raised on structure to match into vertical alignment of the I-90 Echelon

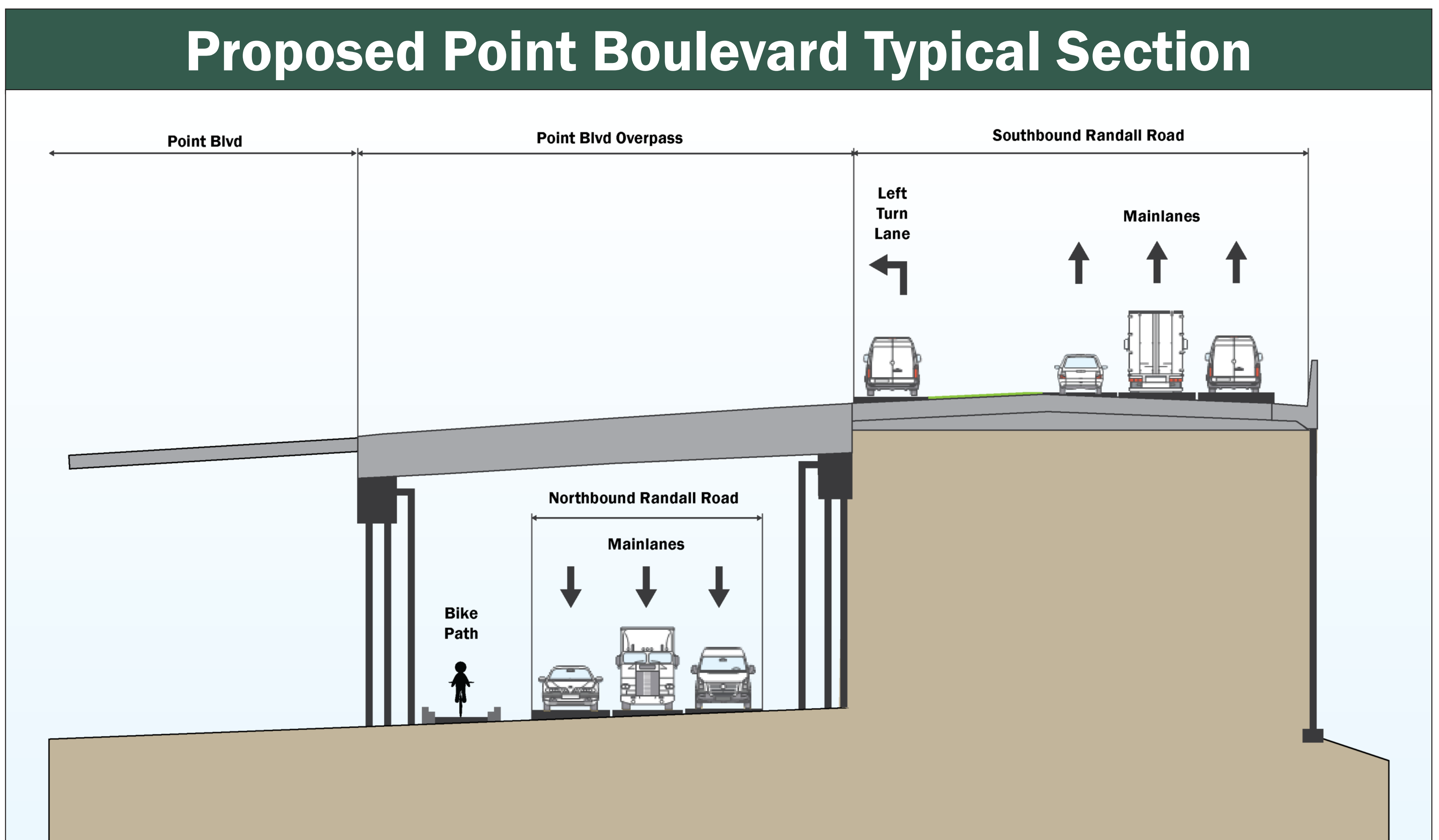
# ALTERNATIVE 5

## TYPICAL SECTIONS

### Proposed I-90 Echelon Typical Section

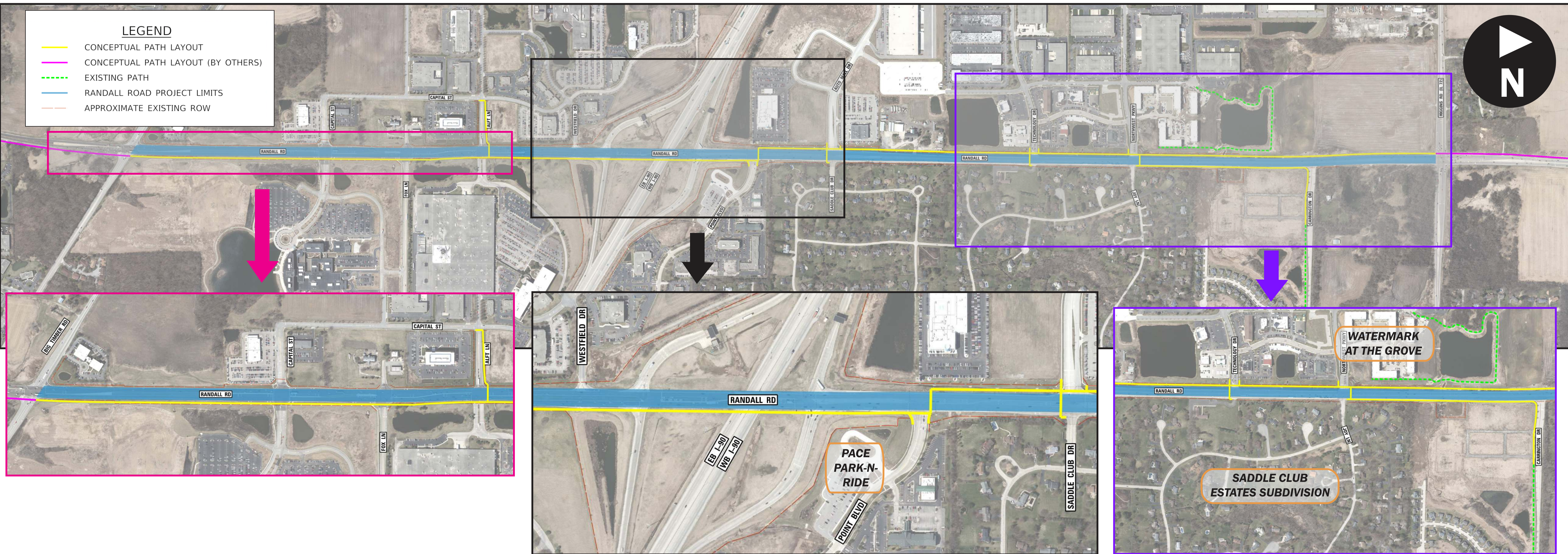


### Proposed Point Boulevard Typical Section



# MULTI-USE PATH ANALYSIS

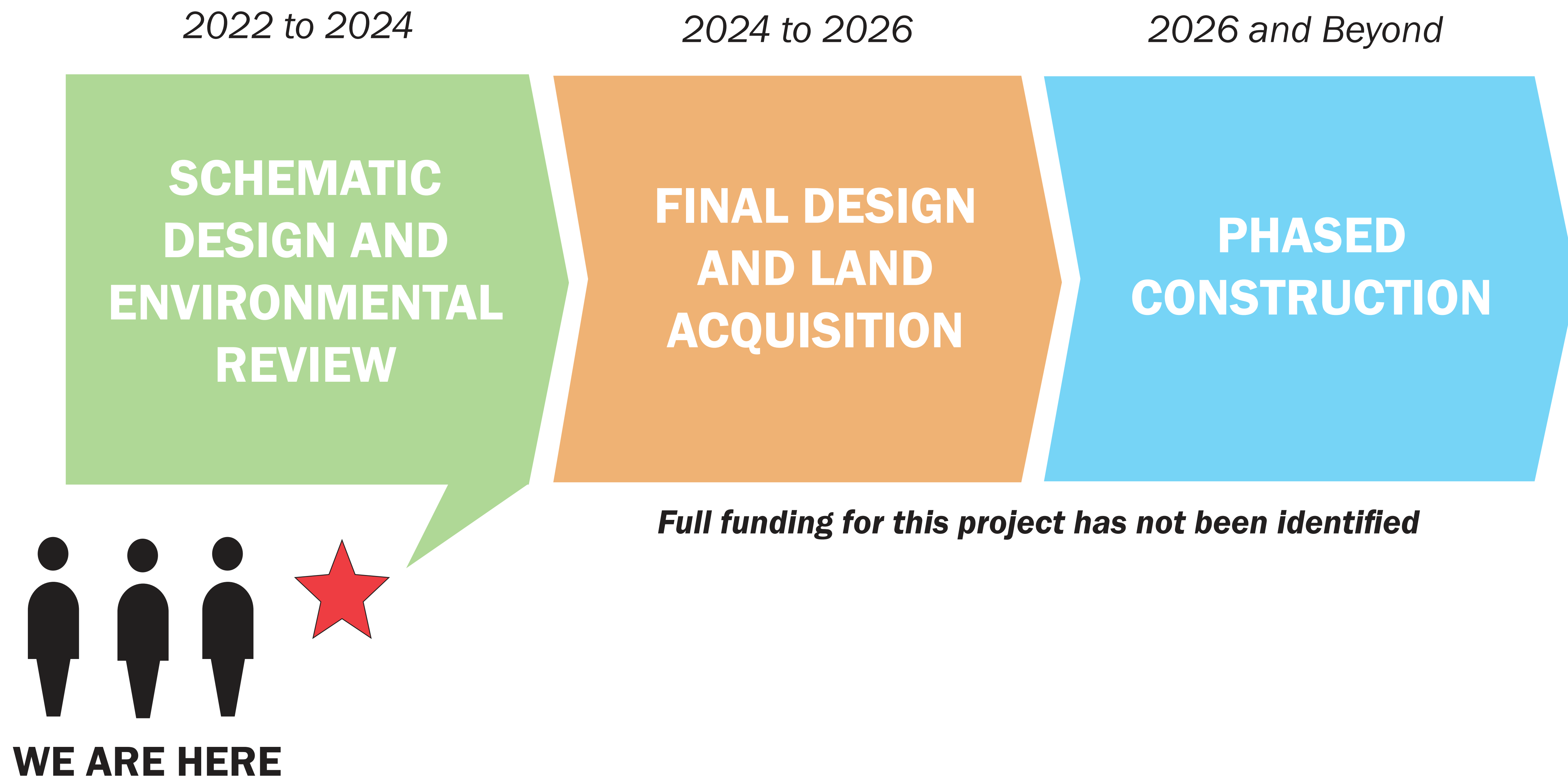
A preliminary multi-use path study was conducted to assess bicycle and pedestrian improvements for the Randall Road at I-90 corridor. Below are potential multi-use path routes within the project area.



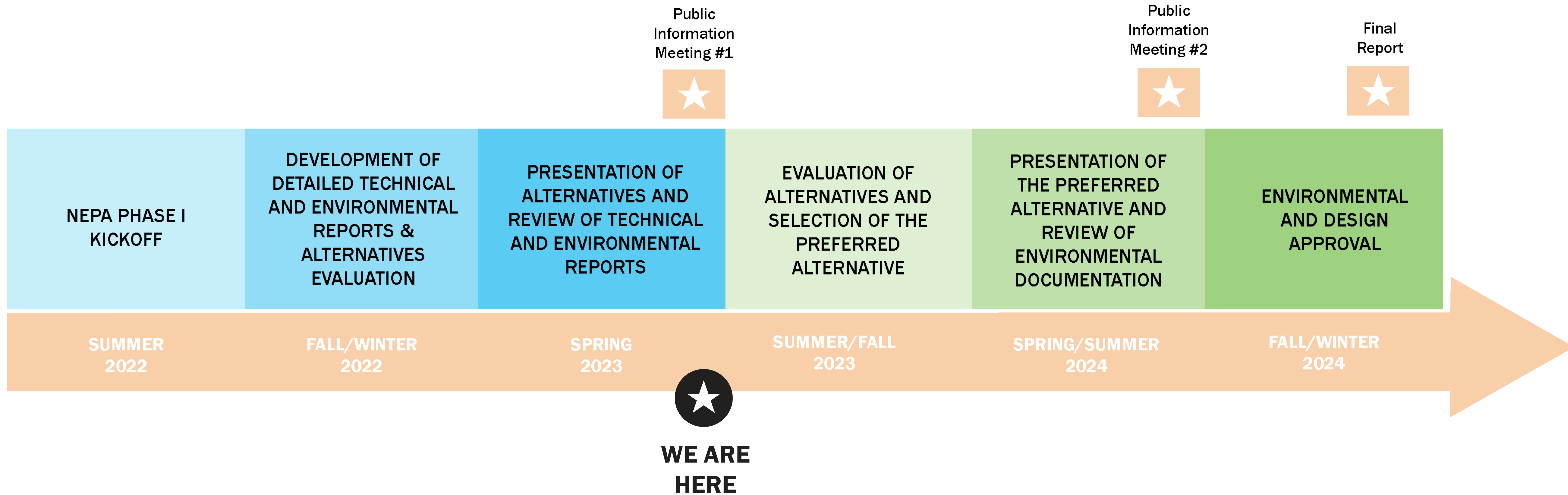
*As the project progresses, KDOT will continue to evaluate multi-use path routes to safely implement pedestrian and bicycle infrastructure as part of the Randall Over 90 project.*

# PROJECT DEVELOPMENT

WHERE WE'VE BEEN → WHERE WE'RE GOING



# PROJECT TIMELINE



***SCHEDULE SUBJECT TO CHANGE***



# HOW TO PROVIDE INPUT



## Online Survey

Scan the **QR code** to go directly to the project survey



## Email

**RandallOver90@gmail.com**



## Mail

**Mike Zakosek, P.E.**  
41W011 Burlington Road  
St. Charles, IL 60175

**COMMENTS MUST BE SUBMITTED BY FRIDAY, JUNE 16, 2023**

For questions or comments about the project, please contact the Randall Over 90 project team at **Randallover90@gmail.com**.

# THANK YOU

For taking time to join us and provide input to help shape the future of our community and Randall Road at I-90.

