

PUBLIC MEETING

# WELCOME!

JUNE 24, 2025



## IL 173 **AT** GILEAD AVENUE/21<sup>ST</sup> STREET

INTERSECTION IMPROVEMENT PROJECT



# AGENDA

**1 Project Introduction**

**2 Purpose and Need**

**3 Project Development Process**

**4 Existing Conditions**

**5 Intersection Improvement Alternatives**

**6 Roundabout Benefits**

**7 Public Input and Feedback**



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# STUDY AREA

- IL Route 173 at Gilead Avenue/21st Street
- Located in the City of Zion, Lake County
- **Project Length:**  
0.55 miles
- **Average Daily Traffic:**
  - **IL 173:**  
6,400 to 9,600 vehicles per day
  - **21st Street:**  
3,600 vehicles per day
  - **Gilead Avenue:**  
400 vehicles per day

# → PURPOSE AND NEED



**Improve  
Safety**



**Improve Pedestrian  
and Bicycle Facilities**



**Address Operational  
Deficiencies**



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# → IDOT PROJECT DEVELOPMENT PROCESS



*This project is not currently included in the Department's FY 2025-2030 Proposed Highway Improvement Program. However, the project will be considered for alternative funding such as Highway Safety Improvement Program (HSIP) funding after Phase I is completed.*



# → EXISTING CONDITIONS



- Safety Concerns
- Pedestrian Access
- Existing Roadway Condition

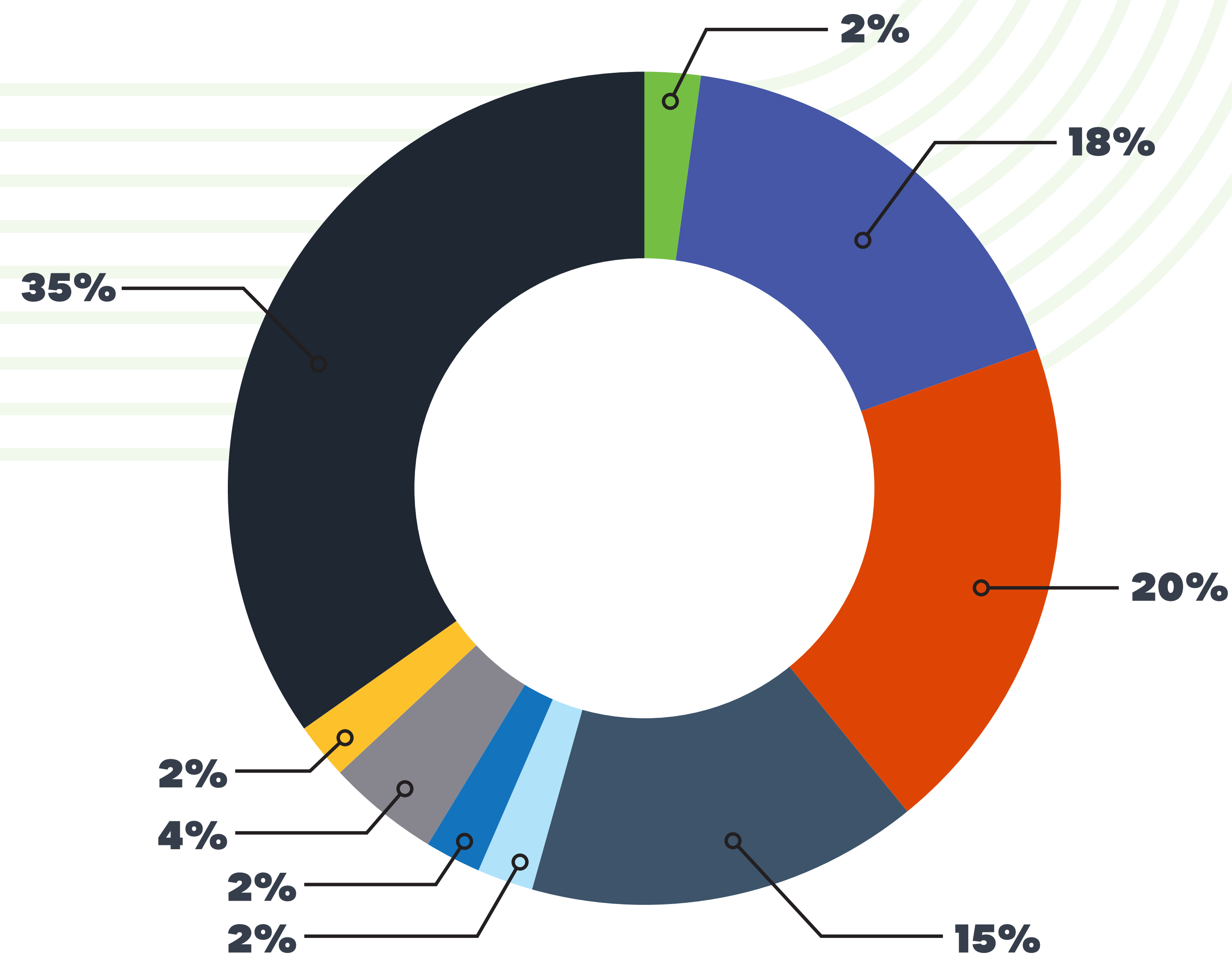


# → EXISTING CONDITIONS

- Two-way stop controlled intersection at 21st Street and Gilead Avenue
- One lane in each direction with a northbound right turn lane along 21st Street
- Suburban section with 4-foot paved shoulders and curb and gutter at intersection
- Robert McClory Bike Path to the west and south of intersection



# → CRASH ANALYSIS 2019-2023



- Angle = 35%
- Turning = 20%
- Fixed Object = 18%
- Front to Rear = 15%
- Sideswipe Opposite = 4%
- Sideswipe Same Direction = 2%
- Head On = 2%
- Rear to Side = 2%
- Animal = 2%

Injury Types	Severity	2019-2023 Crashes with Injuries
K	Fatal	0*
A	Incapacitating	2
B	Injury Evident	6
C	Injury Possible	5
O	Property Damage Only	33

*There were 46 total crashes within the project limits.*

*\*1 fatality in 2017*





**PROPOSED**

# INTERSECTION ALTERNATIVES



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# INTERSECTION ALTERNATIVES

- Left-turn lanes along IL Route 173
- Two-way stop control intersection maintained
- Traffic signal warrants not met
- Roadway resurfacing
- Pedestrian and bicycle improvements
- No right-of-way acquisition

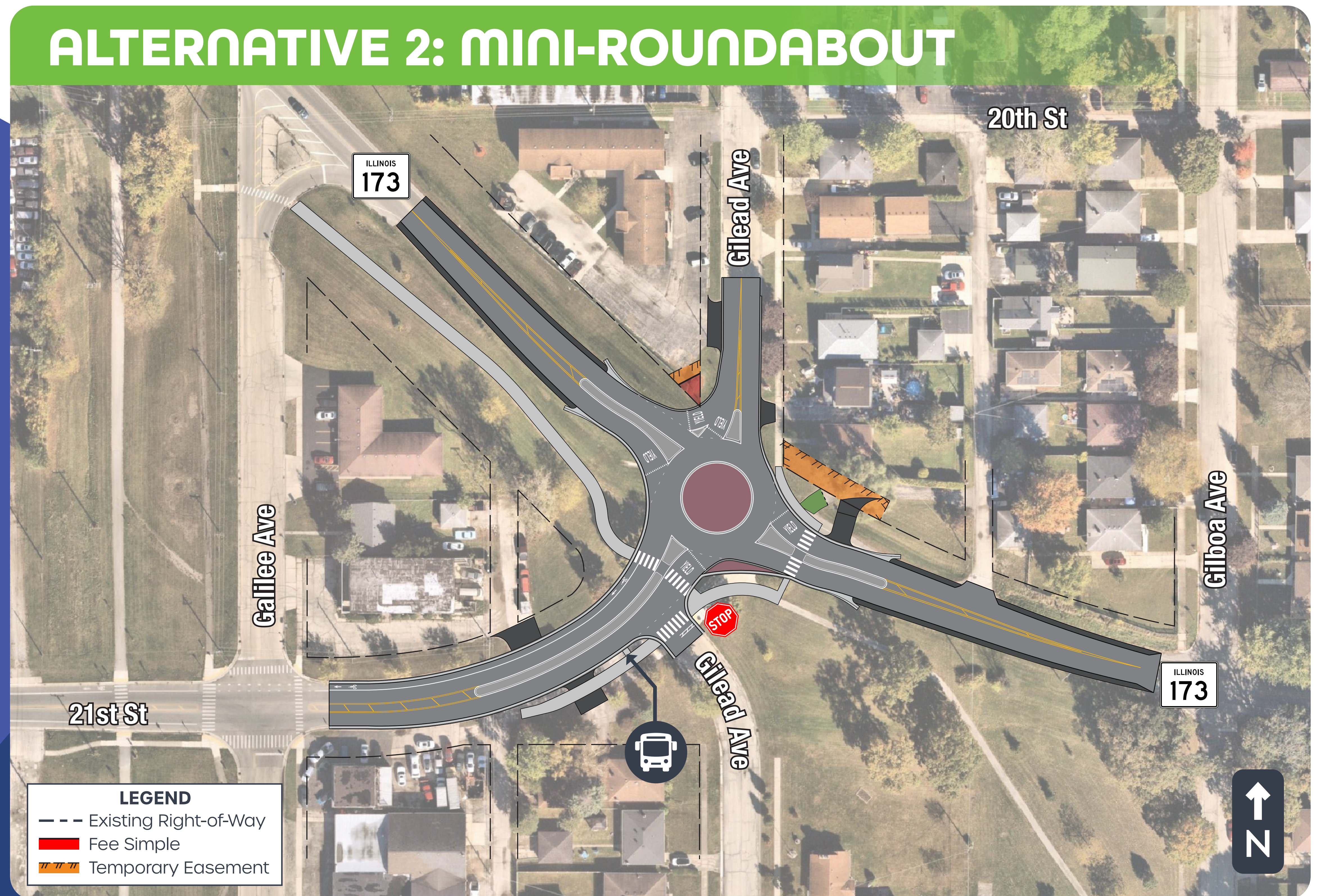
## ALTERNATIVE 1: LEFT-TURN LANES



# ➔ INTERSECTION ALTERNATIVES

## ALTERNATIVE 2: MINI-ROUNDAABOUT

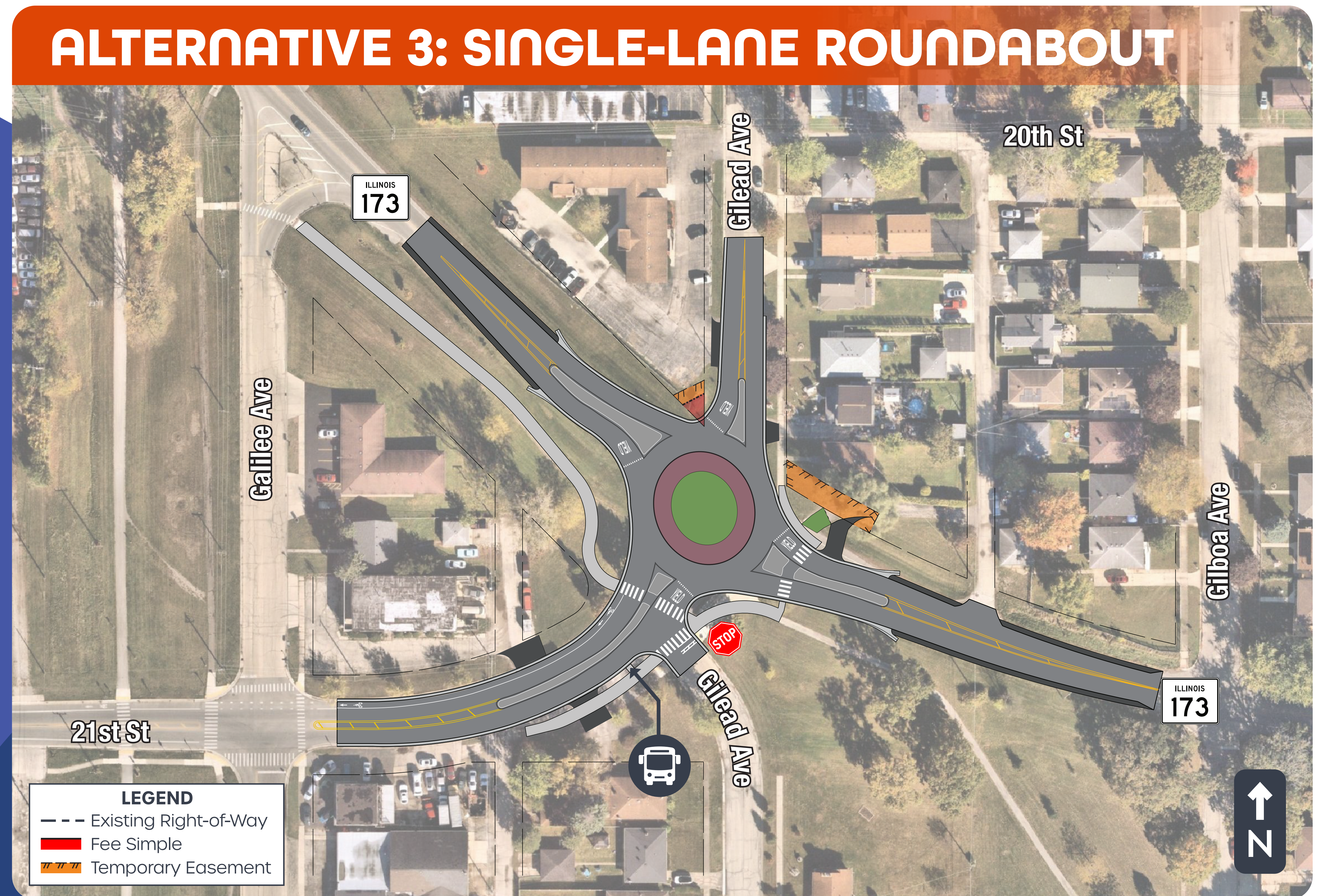
- Single-lane mini-roundabout with traversable center island
- Smaller footprint than traditional single-lane roundabout
- Promotes continuous traffic flow through intersection
- Lighting improves intersection safety and visibility
- Accommodates tractor-trailer vehicles with encroachment on center island
- Pedestrian and bicycle improvements
- Minimal right-of-way acquisition



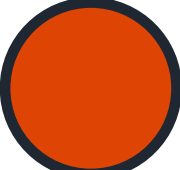
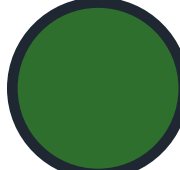
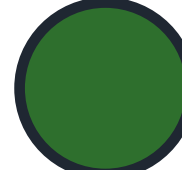

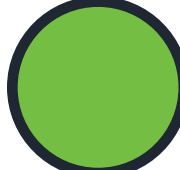


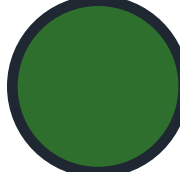
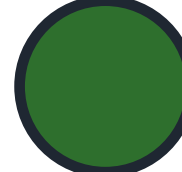

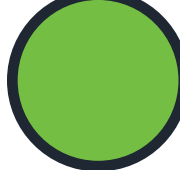




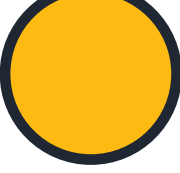
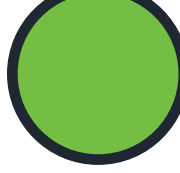
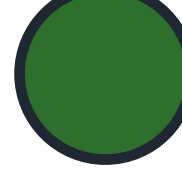
# ➔ INTERSECTION ALTERNATIVES

## ALTERNATIVE 3: SINGLE-LANE ROUNDABOUT



- Traditional single-lane roundabout
- Raised grass center island presents landscaping opportunity
- Promotes continuous traffic flow through intersection
- Lighting improves intersection safety and visibility
- Accommodates tractor-trailer vehicles within truck apron
- Pedestrian and bicycle improvements
- Minimal right-of-way acquisition





# → ALTERNATIVES EVALUATION

ALTERNATIVE CRITERIA	LEFT TURN LANES	MINI-ROUNDABOUT	SINGLE-LANE ROUNDABOUT
SPEED REDUCTION			
INTERSECTION SKEW AND VISIBILITY			
PEDESTRIAN AND BICYCLE SAFETY			
CONFLICT POINTS	 32 vehicle conflicts 24 pedestrian conflicts	 9 vehicle conflicts 8 pedestrian conflicts	 8 vehicle conflicts 8 pedestrian conflicts
CRASH REDUCTION FACTOR			
INTERSECTION OPERATION			
PARCELS IMPACTED	None	Temporary Easement: 2 Fee Simple: 1	Temporary Easement: 2 Fee Simple: 1
ESTIMATED CONSTRUCTION COST (\$M)	\$1M	\$5.5M	\$6M

## LEGEND

-  Maintains existing deficiency
-  Does not achieve goal

-  Somewhat achieves goal
-  Achieves goal



# BENEFITS OF ROUNDABOUT INTERSECTIONS

## ROUNDABOUTS INCREASE SAFETY

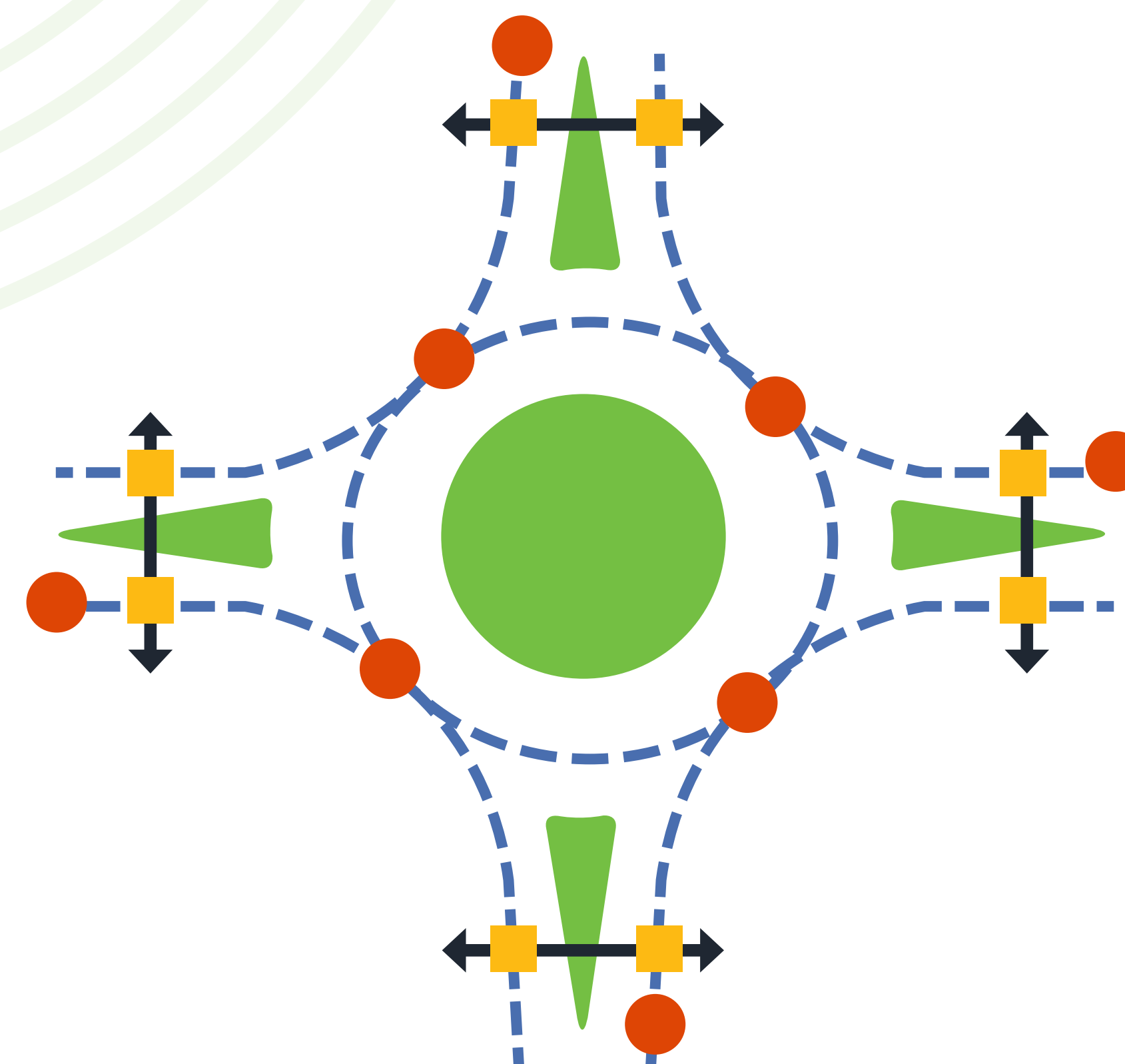
- 75% fewer conflict points than four-way intersections
- 75% reduction in injury crashes
- Up to 90% reduction in fatalities
- 40% reduction in pedestrian crashes

## ROUNDABOUTS INCREASE INTERSECTION EFFICIENCY

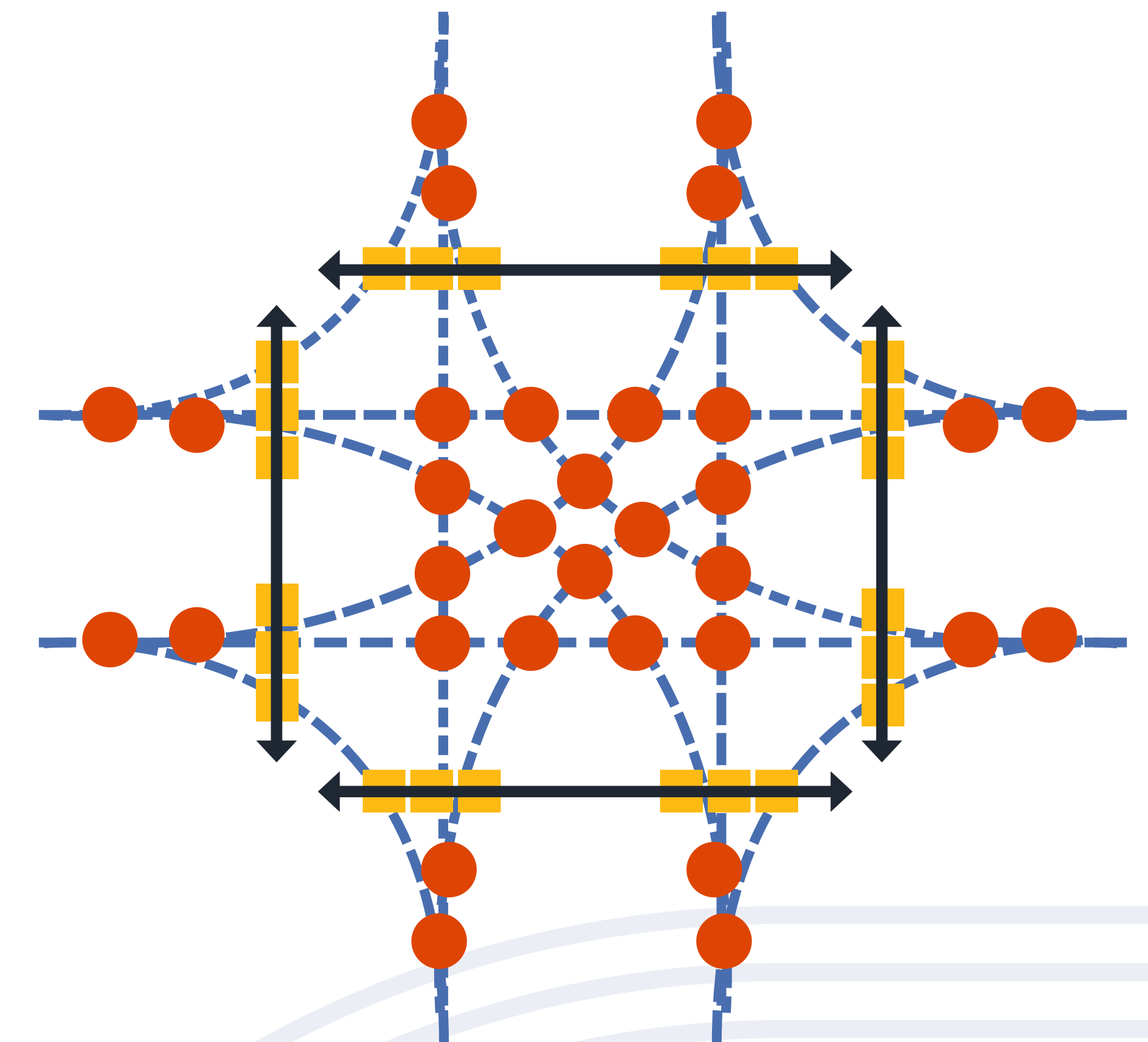
- 30-50% increase in traffic capacity

## ROUNDABOUTS ARE COMMUNITY FRIENDLY

- Reduce pollution and fuel caused by congestion
- Lessen need for long term storage lanes
- Calm traffic
- Aesthetic landscaping



● **8** Vehicle Conflicts  
■ **8** Pedestrian Conflicts



● **32** Vehicle Conflicts  
■ **24** Pedestrian Conflicts

# → LAND ACQUISITION

## Land Acquisition Types

### FEE SIMPLE

- Acquisition of all rights and interest

### PERMANENT EASEMENT

- Ownership retained by the property owner
- Agency is allowed permanent use of the property for construction and future maintenance

### TEMPORARY EASEMENT

- Ownership retained by the property owner
- Agency is allowed temporary use of the property to construct the project

## LAND ACQUISITION PROCESS

OWNERSHIP DETERMINATION

APPRAISAL

NEGOTIATION

ACQUISITION

## IDOT will strive to minimize the need to acquire property

*IDOT's process for land acquisition complies with the federal Uniform Relocation and Assistance and Real Property Acquisition Policies Act (URA).*



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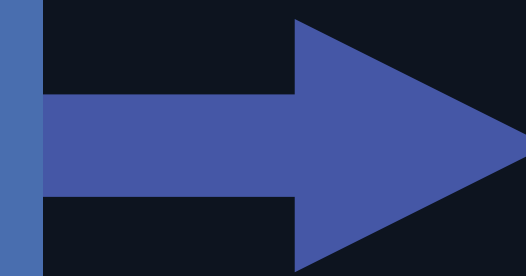


**Mail or email  
questions and/or  
comments**

**COMMENTS DUE  
JULY 15, 2025**

**THANK  
YOU!**

For more  
information go to  
[idot.click/  
il173\\_21st](https://idot.click/il173_21st)



# **CONTACT INFORMATION**

## **Illinois Department of Transportation**

**BUREAU OF PROGRAMMING, 4TH FLOOR**

**🗨 Attn:** Amruta Mate, Project Manager  
201 West Center Court  
Schaumburg, IL 60196-1096

**✉ Email:**

**[DOT.D1.IL173atGilead@illinois.gov](mailto:DOT.D1.IL173atGilead@illinois.gov)**