SIGN-IN TABLE
WELCOME
ILLINOIS ROUTE 47 at PLATO ROAD
INTERSECTION IMPROVEMENT PUBLIC MEETING

December 10, 2013

VIEW NORTH
Project Location

Illinois Route 47 at Plato Road
**Project Purpose**

- Improve Safety and Operations

**Transportation Need**

- Safety
  - Rear End and Angle Crashes
  - Injuries
  - Fatalities

- Operations
  - Traffic Flow
STUDY PROCESS OVERVIEW

**Phase I**
- Data Collection
  - Collect Existing Data
  - Notify Project Stakeholders
- Analyze Existing Conditions
  - Identify Deficiencies & Countermeasures
- Develop Concept Geometry & Alternatives
  - Develop Concept Geometry
  - Refine & Evaluate Alternatives
  - Coordinate Alternatives with a Multi-Disciplinary Peer Review Team
- Alternative Evaluation & Selection
  - Identify Impacts & Costs
  - Public Involvement
- Final Project Report & Design Approval

**Phase II**
- Design/Contract Plans and Right-of-Way (ROW) Acquisition

**Phase III**
- Construction Begins
EXISTING CONDITIONS

TRAFFIC

PLATO ROAD

EAST LEG: 3,400 VEHICLES PER DAY
320 (10.6% TRUCKS)

WEST LEG: 2,700 VEHICLES PER DAY
110 (4.1% TRUCKS)

ILLINOIS ROUTE 47
5,600 VEHICLES PER DAY
925 (16.5% TRUCKS)
27 Reported Crashes

5 (18.5%) Crashes with injuries
  6 People were injured
    0 Type A
    2 Type B
    4 Type C
    1 Fatality (2010) Type K

6 (22%) Crashes on wet pavement
20 (74%) Crashes during daylight hours

17 (63%) Rear End Crashes
8 (30%) Angle Crashes
6 (22%) Sideswipe Same Direction & Turning (each) Crashes
<table>
<thead>
<tr>
<th>Injury Types</th>
<th>Severity</th>
<th>2006-2010 Crashes with Injuries</th>
</tr>
</thead>
<tbody>
<tr>
<td>K</td>
<td>Fatal</td>
<td>1</td>
</tr>
<tr>
<td>A</td>
<td>Incapacitating</td>
<td>0</td>
</tr>
<tr>
<td>B</td>
<td>Injury Evident</td>
<td>2</td>
</tr>
<tr>
<td>C</td>
<td>Injury Possible</td>
<td>4</td>
</tr>
<tr>
<td>O</td>
<td>Property Damage Only</td>
<td>0</td>
</tr>
</tbody>
</table>
PROPOSED SCOPE OF WORK

ALTERNATIVE 1: SIGNALIZED INTERSECTION

- Install traffic signals
- Construct left turn lanes and paved shoulders on each leg
  - Shared through/right turn lanes remain
- Drainage improvements, profile modifications
- ±5.2 acres of ROW
- Cost: $2.6 M
- 55 MPH remains
PROPOSED SCOPE OF WORK

ALTERNATIVE 2: MODERN ROUNDBOUT

- Intersection relocated northeast of existing
- Truck Apron and single circulating lane
- Splitter islands provide deflection and guidance
- Drainage Improvements, profile modifications
- ± 6.0 acres of ROW
- Cost: $2.8 M
- Reduced approach speeds
CHARACTERISTICS OF A MODERN ROUNDABOUT

• Geometric features that create a low-speed environment
• Circular Shape
• Yield control on entry

Illinois Route 47 at Plato Road
Illinois Route 47 at Plato Road

Proper signing and markings help drivers navigate the roundabout.

ROUNDABOUTS-KEY FEATURES

Illinois Department of Transportation
ALTERNATIVE 3: NO BUILD

Illinois Route 47 at Plato Road

No build/Do nothing

- Safety issues not addressed
- Intersection delay will increase
- Overall, not effective
POTENTIAL IMPACTS AND BENEFITS

- Increase **visibility** of intersections and traffic control devices
- Increase **awareness** of intersections
- Improve the **design** of intersections to reduce conflicts
- Improve driver **comprehension** to reduce confusion
- Improve the **operations** of intersections
- Improve **sight distance** at intersections
- Improve driver **compliance** with traffic control devices

Illinois Route 47 at Plato Road
## Alternative Comparison

**Illinois Route 47 at Plato Road**

<table>
<thead>
<tr>
<th></th>
<th>Signal</th>
<th>Roundabout</th>
<th>No Build</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Right Of Way Impact</strong></td>
<td>±5.2 Acres</td>
<td>±6.0 Acres</td>
<td>N/A</td>
</tr>
<tr>
<td><strong>Level of Service</strong></td>
<td>A (AM) / A (PM)</td>
<td>B (AM) / B (PM)</td>
<td>C (AM) / C (PM)</td>
</tr>
<tr>
<td><strong>Construction Cost</strong></td>
<td>± $2.6 M</td>
<td>± $2.8 M</td>
<td>$0</td>
</tr>
<tr>
<td><strong>Safety Improved</strong></td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td><strong>Construction Traffic</strong></td>
<td>Staging and Detour</td>
<td>Staging and Detour</td>
<td>N/A</td>
</tr>
<tr>
<td><strong>Driver Familiarity</strong></td>
<td>Common in Illinois</td>
<td>New to Illinois</td>
<td>N/A</td>
</tr>
</tbody>
</table>
This improvement is included in IDOT’s FY 2014-2019 Proposed Multi-Modal Transportation Improvement Program.
SIMULATION STATIONS
THANK YOU for ATTENDING

• Please browse the exhibits
• Direct questions to the project staff
• Please fill out a comment form and:
  either place it in the comment box, mail to the address on the form, or E-mail to Carlos.Feliciano@illinois.gov
• Comment period ends January 9, 2014