State Road 2 at County Road 100 South / 300 West Intersection Improvement

Thursday, March 23, 2017
Welcome

• Rickie Clark, INDOT Office of Public Involvement
• Purpose/explanation of public hearing
• Public hearing format
• Visit our sign-in table
• Informational handouts
• Submitting public comments for hearings transcript
• Project display area
S.R. 2 at C.R. 100 South / 300 West Intersection

- Introduction of INDOT Project Team
  - Project Management
  - Public Involvement
  - LaPorte District – INDOT Regional Office
  - Environmental Services
  - Real Estate
- Troyer Group
  - Engineering, Design & Environmental Analysis Team
- Recognition of elected and local public officials

- Sign-in at attendance table to be added to project mailing list
- A public hearing notice was mailed to known property owners within project area
- Announcement of this hearing was posted to INDOT website. A media release was also issued
- A copy of presentation and project documentation is available on-line via INDOT website

**Legal notice publishing:**
- Times of Northwest Indiana
  - March 8th and March 16th
Project Stakeholders

- Indiana Department of Transportation
- Indiana Division Federal Highway Administration
- Porter County
- Elected & Local officials
- Residents and citizens
- Commuters
- Businesses
- Emergency services
- Schools
- Churches
- Community Organizations
Project Development

- Project Selection
  - Early Coordination
  - Purpose & Need
  - Develop alternatives

- Environmental phase begins
  - Preliminary design phase
  - Release environmental document for public review and comment

- Additional work to finalize environmental document and project design

- Real Estate Acquisition
  - Construction

Public Hearing

Public Involvement – communicate project decision
Environmental Document

National Environmental Policy Act (NEPA)
• Requires INDOT to analyze and evaluate the impacts of a proposed project to the natural and socio-economic environments
• NEPA is a decision-making process
  • Purpose and Need
  • Alternatives Screening
  • Preferred Alternative

• Impacts are analyzed, evaluated and described in an environmental document
  • What are the impacts this project might have on the community?
  • How can impacts be avoided?
  • Can impacts be minimized?
  • Mitigation for impacts?

• Environmental document released for public involvement
  • February 2017
  • Is available for review via public repositories
Environmental Document

• **Environmental Process**
  • Establish Purpose and Need
  • Develop a number of possible alternatives
    • The “Do Nothing” alternative is a baseline for comparison
  • Evaluate and screen alternatives
  • Identify a preferred alternative
  • Solicit public comment on environmental document and preliminary design plan
  • Address and consider public comment as part of decision-making process
  • Finalize and approve environmental document
Items Evaluated

- Right-of-way
- Streams, Wetlands, and Other Waters
- Floodplains
- Endangered Species
- Farmland
- Cultural Resources (Historic/Archaeological)
- Parks and Recreational Lands (Trails)
- Air Quality
- Noise
- Community Impacts
- Environmental Justice
- Hazardous Materials
- Permits
- Mitigation
- Public Involvement
- Commercial Development
Project Resource Locations

• INDOT LaPorte District Office
  315 E. Boyd Boulevard, LaPorte, IN 46350
  • Toll Free 1-855-464-6368
  • LaPorteDistrictCommunications@indot.in.gov
  • http://www.in.gov/indot/2705.htm
  • Planning, Project Development/Delivery, Construction, Maintenance for Northwest Indiana

• Hebron Public Library — 201 West Sigler Street, Hebron, IN 46341; Phone (219) 996-3684

• INDOT Office of Public Involvement
  100 North Senate Avenue, Room N642, Indianapolis, IN 46204
  Phone (317) 232-6601
  rclark@indot.in.gov
S.R. 2 at C.R. 100 South / 300 West Intersection

- Project proposes to enhance safety by improving the intersection

Purpose and Need
- To improve the operational safety and functionality of the existing intersection of State Road 2 at County Road 100 South / County Road 300 West
- Current configuration of five-way intersection requires action due to S.R. 2, a heavily traveled roadway, is aligned on a significant skew
- Existing intersection lies atop a vertical curve along S.R. 2
  - Driver sight distance is impeded
- Existing thru movement along S.R. 2 has posted speed of 45 m.p.h.
  - Speed coupled with intersection sight distance has resulted in crashes (some severe) at this location
Alternatives Considered

• No Build
  • Would not improve safety at intersection
  • Does not address existing roadway geometric deficiencies

• Improved Signage and Markings
  • Low impact improvements
    • Rumble striping, reduced speed limits, advanced warning signage to alert drivers of intersection
  • Still permits high speed accidents to occur
  • Does not address the existing sight distance issues

• Signalized Intersection
  • Does enhance safety at the intersection
  • Still contributes towards high-speed accidents occurring at intersection
  • Does not address sight distance issues from intersection skew
  • Significant grading to accommodate 45 mph thru speed along C.R. 100
Preferred Alternative – Roundabout

- Meets purpose & need of project
- Enhances safety at intersection
- Reduces speeds at intersection while contributing towards efficient traffic flow
- Reduces severity of vehicular collisions
- Addresses sight distance
Enhance Safety

A total of 24 crashes occurred at the intersection from 2010 to 2012 per INDOT Traffic Records. Below is a summary of these crashes:

<table>
<thead>
<tr>
<th>Year</th>
<th>Fatality/Incapacitating Injury</th>
<th>Non-Incapacitating Injury</th>
<th>Property Damage Only</th>
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</thead>
<tbody>
<tr>
<td>2010</td>
<td>0</td>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td>2011</td>
<td>0</td>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td>2012</td>
<td>0</td>
<td>4</td>
<td>4</td>
</tr>
</tbody>
</table>
Benefits of Roundabouts

- Conflict points are dramatically reduced because all vehicles travel in the same direction.

- Enhances Safety
  - Roundabouts reduce the number of potential accident points within an intersection
  - 75% fewer conflict points than four-way intersections

- Slower vehicle speeds
  - Reduces the severity of crashes

- Efficient traffic flow
  - Reduces need for turn lanes
  - Improves traffic flow

- Community benefits
  - Reduces congestion
  - Aesthetic landscaping
Roundabouts Enhance Safety

U.S. DOT
Federal Highway Administration Statistics

Traditional intersections account for:
• 45% of all crashes – FHWA
• 33% of all traffic fatalities – FHWA

Compared to traditional intersections roundabouts:
• Reduce fatalities and injuries by 82% – FHWA
• Reduce total crashes by 44% – FHWA
• Require vehicles to travel at lower speeds

For more information:
http://safety.fhwa.dot.gov/intersection/innovative/roundabouts/

• Collisions at traditional intersections are severe because:
  • High Speed
  • Angle of Impact
Roundabout Layout

LEGEND
- Proposed Asphalt
- Proposed Concrete
- Proposed Sodding
- Permanent Right-Of-Way
- Temporary Right-Of-Way for Construction
- Property Lines
- Proposed Lightpole

SR 2 at CR 100S Roundabout
Des. No. 1298302
Overall Layout

Proposed Stormwater Basin
*Intersection Geometry is for traffic modelling purposes only and does not reflect actual design.

*Playback speed is at 8x actual speed.
Approaching the Roundabout (example)
Approaching the Roundabout (example)
Design Parameters

Fastest Path Speed Calculations
NCHRP 672 6.7.1.2

<table>
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<tr>
<th>Segment</th>
<th>Radius (ft)</th>
<th>Speed (mph)</th>
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<tbody>
<tr>
<td>R1</td>
<td>156</td>
<td>24</td>
</tr>
<tr>
<td>R2</td>
<td>196</td>
<td>24</td>
</tr>
<tr>
<td>R3</td>
<td>176</td>
<td>25</td>
</tr>
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TURNING MOVEMENT VEHICLE
Interstate Semi-Trailer (WB-62)
Truck Turning Movement – Southbound S.R. 2
Truck Turning Simulation (AutoTurn)
Fastest Path Checks

Legend:
- Proposed Asphalt
- Proposed Concrete
- Proposed Sodding
- Permanent Right-Of-Way
- Temporary Right-Of-Way for Construction
- Property Lines
- Fastest Path Through Intersection

Fastest Path Speed Calculations
NCHRP 672 6.7.1.2

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### INTERSECTION SIGHT DISTANCE

<table>
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<tr>
<th>Approach</th>
<th>Vehicle</th>
<th>Sight Distance (ft)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Left off SR 2</td>
<td>Passenger Car</td>
<td>365</td>
</tr>
<tr>
<td>Left off SR 2</td>
<td>Single Unit Truck</td>
<td>430</td>
</tr>
<tr>
<td>Right off CR 300 W</td>
<td>Passenger Car</td>
<td>430</td>
</tr>
<tr>
<td>Right off CR 300 W</td>
<td>Single Unit Truck</td>
<td>565</td>
</tr>
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**Stopping Sight Distance for Right off CR 300 W: 305 ft**
Proposed Lighting Plan
Real Estate

Real Estate

ACQUISITION
ACQUIRING REAL PROPERTY FOR FEDERAL AND FEDERAL-AID PROGRAMS AND PROJECTS
June 2005

RELOCATION
YOUR RIGHTS AND BENEFITS AS A DISPLACED PERSON UNDER THE FEDERAL RELOCATION ASSISTANCE PROGRAM
June 2005
Real Estate Acquisition Process

- "Uniform Act of 1970"
  - All federal, state and local governments must comply
  - Requires an offer for just compensation

- Acquisition Process
  - Appraisals
  - Review Appraisals
  - Negotiations

- INDOT Real Estate Team to work with impacted property owners

- Right-of-way
  - Permanent ROW: 4 acres
    - Permanent ROW is land, once purchased by INDOT from legal land owner, becomes ROW owned by INDOT
  - Temporary ROW: 0.8 acre
    - Temporary ROW is land required during the construction of a project and is used for the purposes of construction related activity
    - INDOT pays legal land owner a fee for land use during construction

- Project includes possible residential relocation located northwest of the intersection
Project Schedule

• Public Hearing: 3/23/17

• Public comments requested by COB 4/10/17
  • finalize environmental document
  • design
  • project decision

• INDOT review and consideration of comments – Spring 2017

• Real estate acquisition phase – Summer 2017

• Construction: 2018
Submit Public Comments

• Submit public comments using the options described in first page of information packet:
  • Public Comment Form
  • Via e-mail
  • Participating during public comment session via microphone
  • Verbal comments recorded and transcribed for inclusion into public hearings transcript

• INDOT respectfully requests comments be submitted by Monday, April 10, 2017

• All comments submitted will become part of public record, entered into transcript, reviewed, evaluated and given full consideration during decision making process.
Next Steps

• Public and project stakeholder input
  • Submit comments via options described on page 1 of information packet

• INDOT review and evaluation
  • All comments are given full consideration during decision-making process
  • Address comments, finalize/approve environmental document, complete project design

• Communicate a decision
  • INDOT will notify project stakeholders of decision
  • Work through local media, social media outlets; paid legal notice
  • Make project documents accessible via repositories

• Questions? Contact Public Involvement Team
Thank You

• Please visit with INDOT project officials following the public comment session

• Project Open House
  • Project maps, displays, real estate acquisition table, INDOT project team and informal Q & A
  • INDOT LaPorte District page [http://www.in.gov/indot/2705.htm](http://www.in.gov/indot/2705.htm)
  • LaPorteDistrictCommunications@indot.in.gov