

IL 47 Improvement Study

From Kennedy Road in Yorkville to Cross Street in Sugar Grove

MEETING SUMMARY

Community Advisory Group Meeting #3

September 13, 2011

The third meeting of the IL 47 Improvement Study Community Advisory Group (CAG) was held at the Sugar Grove Public Library on Tuesday, September 13th, 2011, at 6:00 P.M.

Representing IDOT's Study Team were the following individuals:

- Ted Fultz, Location & Environmental Studies Engineer (IDOT)
- Dave Alexander, Studies and Plans Unit Chief (IDOT)
- Elizabeth Jensen, Studies and Plans Unit member (IDOT)
- Mike Zorn, Consultant Project Manager (H.W. Lochner, Inc.)
- Jeff Schlotter, Consultant Facilitator/Urban Planner (H.W. Lochner, Inc.)
- Laura Gawinski Sharfman, Consultant Civil Engineer (H.W. Lochner, Inc.)

Presented below is a summary of the meeting, organized by the meeting's agenda items. Elements that appeared on the flip chart are designated in *bold blue italics*.

INTRODUCTIONS AND OPENING REMARKS

- Mr. Schlotter and IDOT opened the meeting by welcoming the CAG members.
- IDOT Study Team members and CAG members were asked to introduce themselves and to state either the organization they represent or their main interest in the study.
- Mr. Zorn presented the General Study Schedule to explain past and future developments, including a review of Meeting 2. CAG members requested an updated schedule be placed on the study web site.
- Mr. Fultz and Mr. Alexander then proceeded to explain funding developments for the Project. The portion of the study within District 3 is funded through Phase II and the portion within District 1 has received commitment from District 1 to fund the project through Phase II. The project is not currently funded for land acquisition or construction.
- Mr. Fultz further explained that the public can attend meetings to comment on the proposed highway improvement program. Public meetings are held through November within metropolitan areas inside each district. IDOT will send an email to the CAG members containing a comment form for IDOT funding and programming.
- Mr. Schlotter then reviewed the goals for the meeting:
 - 1) to provide an update on the study
 - 2) to gain consensus on the study's Purpose and Need statement
 - 3) to present and discuss the alternatives at four key areas of interest
 - 4) to preview the next steps in the Improvement Study process.



II. PURPOSE AND NEED

Mr. Schlotter discussed changes that had been made to the study's Purpose and Need Statement since the draft statement was developed at CAG Meeting 2. Mr. Schlotter explained that since this is a context sensitive solutions project, CAG endorsement of the statement is sought by IDOT. He mentioned that the updated statement was included in the agenda package sent in advance of this meeting.

- The following Purpose and Need statement developed by the CAG members in meeting 2 was reviewed by the Project Study Group (PSG) members:
- *The purpose of the proposed action is to provide an improved transportation facility to safely serve existing and proposed demand in the project corridor. Specifically, the purposes of the project are to*
 1. *accommodate local and regional planning,*
 2. *provide the traffic capacity necessary to accommodate existing and projected traffic volumes at an acceptable level of service,*
 3. *correct existing geometric deficiencies,*
 4. *accommodate all appropriate users,*
 5. *address pavement flooding issues and without exacerbating current area drainage issues.*
- Mr. Schlotter explained that after review, PSG members made the following changes:
- *The purpose of the proposed action is to provide an improved transportation facility to serve existing and proposed demand in the project corridor. Specifically, the purposes of the project are to*
 1. ~~accommodate~~ **CONSIDER** local and regional planning
 2. *Provide the traffic capacity necessary to accommodate existing and projected traffic volumes at an acceptable level of service*
 3. **PROVIDE REASONABLE ACCESS**
 4. ~~correct existing geometric deficiencies~~ **MODERNIZE GEOMETRICS**
 5. *accommodate all appropriate users*
address pavement flooding issues and without exacerbating current area drainage issues
- Mr. Alexander then explained the reasons cited by the PSG members for these changes:
 1. The word "accommodate" implies that all planning developments will be incorporated into the planning of the highway facility, which may not be feasible. The word "consider" was seen by the PSG members as more accurate.
 2. No change.
 3. The phrase "provide reasonable access" was added to the statement because IDOT policy is that Strategic Regional Arterial (SRA) facilities have limited access points. Access along the route will therefore be "reasonable," based on need and existing conditions.
 4. The term "Modernize geometrics" was seen by the PSG as more accurate because the road's existing geometrics may have been acceptable at the time it was originally built.



- “Modernize” more accurately reflects that changes have occurred in policies regarding geometrics.
5. No change.
 6. No change.
- The following questions and comments were raised about the draft Purpose and Need statement:
 - Q. What is the target level of service (LOS) for the project?*
 - A. Mr. Zorn noted that this is an SRA route, and rural SRA criteria for LOS is C; suburban SRA criteria for LOS is C or D. Mr. Zorn further stated that these are design criteria associated with the SRA designation. The criteria to be applied along the project have not yet been determined.*
 - C. It was noted that adding the reasonable access statement is appropriate for the project.*
 - Mr. Schlotter asked if any CAG member felt additional modifications to the Purpose and Need Statement were needed. There being none suggested, he then asked if everyone could agree to the Statement as written. With no CAG member objecting, it was concluded that the CAG had reached consensus on the Purpose and Need Statement.
 - Mr. Zorn noted the Purpose and Need statement would be reviewed at the next meeting to ensure that its components were continuing to be addressed in the development of the study’s design concepts.

IV. REVIEW OF DESIGN FACTORS

Mr. Zorn gave specific details on design factors used in the development of alternatives.

- Mr. Zorn reviewed that IL Route 47 was designated as an SRA, he noted that there are design criteria associated with the SRA designation. These design criteria include: LOS; median widths; minimum radius; and sight distance.
- Next, Mr. Zorn identified features of the project and project area that would constrain designs and provided examples of each at specific locations. The constraints identified included:
 - Roadway/railroad crossings
 - Waterways
 - Floodplains/floodways
 - Staged construction
- Mr. Zorn then discussed the existing speed limit along IL Route 47 and the average annual daily traffic (AADT). The existing AADT shown were for the year 2009 and projections were



for the year 2036. The projections show a significant increase in traffic and a capacity improvement would be necessary to provide the LOS needed per criteria. IDOT explained that roadways are typically designed for a 20 year life.

V. PRESENTATION OF ALTERNATIVES

As a prelude to the discussion of “build” alternatives, Mr. Zorn explained that the “no build” alternative will remain under consideration throughout the study process and that it will be compared to the recommended build alternative, once that alternative is identified. The study team does not anticipate that the no build alternative will satisfy the Purpose and Need.

Mr. Zorn then described to the CAG the initial alternative alignments that have been prepared for the project, beginning with a discussion of the typical cross sections used in these alternatives.

- Mr. Zorn explained that the roadway elements for each typical section include: lanes, shoulders, medians, ditches and curbs.
- The existing rural typical section includes two lanes with a variable width shoulder and variable width ditch. The existing suburban cross section, specifically at the railroad crossings, includes two lanes, a paved shoulder with concrete curb and gutter and a variable width ditch.
- The proposed typical sections consider pedestrian and bicycle use and include a 10-foot wide multi-use path. Mr. Zorn explained that inclusion of a multi-use path requires cost participation and maintenance by the local agencies. IDOT added that a multi-use path in an unincorporated area would require participation and maintenance by the counties or other local agency.
- Mr. Zorn next described the proposed rural typical section, noting the section has an approximate proposed right-of-way width of 180 feet. This typical section requires four 12-foot wide lanes, two on either side of a 32-foot wide median. Concrete curb and gutter runs along the inside of the roadway and 10-foot wide shoulder on the outside with a 6' wide flat bottom ditch. On the right side of the typical section, the 10-foot wide multi-use path is shown. The location of the multi-use path can vary based on intersection design and route access.
- The proposed suburban typical section has an approximate proposed right-of-way width of 135 feet and includes four 12-foot wide lanes, two on either side of a 32-foot wide median. Concrete curb and gutter runs along the inside and the outside of the roadway. On the right side of the typical section is the 10-foot wide multi-use path set back 5 feet from the face of curb. Again, the location of the multi-use path can vary based on intersection design and route access. A V-ditch on the outside of the roadway provides drainage for areas outside the curb and gutter.



- Mr. Zorn presented a 6-lane rural section that is being considered along the Rob Roy Creek, specifically from south of the Galena Road intersection to the Baseline Road/US 30 intersection.
- Mr. Zorn explained that while the 6-lane section would not be built as part of this project, allowance for the footprint for a 6-lane section would accommodate future capacity improvements while minimizing impacts to Rob Roy Creek.
- The following questions were raised about the typical sections:

Q. Should the multi-use path cross Route 47?

A. Path crossings are likely to occur at sideroad intersections; the locations of these crossings will be determined after the preferred mainline IL Route 47 alignment is determined.

Q. How will tractors be accommodated while still providing adequate drainage designs?

A. The design team will look into the need for tractors to be on the route and take this into consideration as a potential local need.

Q. Why such wide ditches in rural typical? Why does the road need to be so wide, and take up so much land?

A. Roadway and ditch widths are based on SRA criteria. The rural typical section has a 6-foot wide ditch bottom to drain and convey the roadway stormwater. The suburban typical section would drain and convey the roadway stormwater via curb and gutter and storm sewer. The actual right-of-way width will vary. What is needed would be purchased, if the project moves forward.

Q. Were wetlands determined in the field? Does IDOT have a wetland bank that could help mitigate impacts?

A. Wetlands were delineated this year as part of the study's environmental survey process. The proposed design will first try to avoid wetlands and then mitigate onsite, if practical. If onsite mitigation is not practical, there are wetland banks located within the IDOT district that could be used.

Q. Are transition locations of the typical sections considered?

A. Yes. Appropriate transitions from one typical cross section to the next will be developed, based on traffic and land use.



- Mr. Zorn continued on his discussion of the design alternatives by stating that for the purposed of the study the project was divided into four segments: 1) Southern; 2) Galena; 3) Baseline; and 4) Northern. Each segment has multiple alignment alternatives, based on constraints and design criteria at the location. Mr. Zorn explained that these alignments were for review and discussion and should not be viewed as the preferred alternative. IDOT is not committed to any particular alternative at this time. If the CAG members wish for additional alternatives to be studied, these ideas can be submitted to IDOT on handouts provided.
- Mr. Zorn began the alternative review starting with the Southern segment. The Southern segment of the project includes the area from the south terminus of the project just south of the Kennedy Road intersection to north of the Cannonball Trail intersection. IL Route 47 crosses Blackberry Creek in this segment. The suburban typical section and SRA suburban design criteria are used for each alternative in the Southern segment
- On the handouts provided, and Mr. Zorn's presentation, properties where the proposed right-of-way would be within 10 -feet of a building are shown with a red "X." Properties where the anticipated right-of-way line is more than 10-feet from the building but impact may be considerable are shown with a white "X."
- Alternative 1 uses the existing alignment. The benefits of this alternative include the use of the existing bridge and minimizing the project footprint. The impacts of this alternative include the properties in the northeast quadrant of the Kennedy Road intersection, properties in the southwest quadrant of the Cannonball Trail intersection and the wetland adjacent to the bridge.
- Alternative 2 shifts the alignment approximately 15-feet east of the existing alignment at the intersection with Cannonball Trail. The benefits of this alternative are fewer impacts to properties at the intersection of Cannonball Trail and being in-line with the existing bridge.
- Alternative 3 shifts the alignment approximately 30-feet west of the existing alignment at the intersection of Kennedy Road and shifts the alignment east at the intersection of Cannonball Trail. This alternative reduces impacts on the west side at Cannonball Trail intersection and on the east side of the Kennedy Road intersection, compared to Alternatives 1 and 2. It would, however, increase impacts to the property west of Kennedy Road, south of the Blackberry Creek crossing. The alignment is not in-line with the bridge, which could affect its reuse.
- Mr. Zorn explained that in all of the alternatives, the costs and impacts will be compared.
- The following questions were raised about the southern segment:

Q. Should we consider six lanes?

A. The use of a six-lane typical section will depend on local and regional planning and the AADT growth.



Q. Could six lanes be squeezed into the suburban typical section right-of-way?

A. Yes, it could be done. Lanes could be placed in the median with a concrete barrier separating directions of traffic. IDOT has, however, found that this type of typical section can create a sense of community separation and limited access.

- Between the southern segment and the Galena segment, the roadway is anticipated to be widened equally on either side of the existing centerline. The typical section is anticipated to transition from the suburban section south of the Wheaton Avenue intersection to the rural section north of the intersection.
- Mr. Zorn next discussed the Galena segment, which includes the area from Rosenwinkle Street to just north of Galena Road. Rob Roy Creek runs to the west of IL 47. The alternatives in the Galena segment shift the existing alignment east to minimize impact to the floodway.
- Alternative 4 shifts the alignment to the east and improves the existing skew at the Galena Road intersection. The 6-lane typical section and SRA suburban design criteria are applied. The benefit of this alternative is that the 6-lane section footprint would allow for future widening in the area, with minimal impact to Rob Roy Creek. A wetland located just east of existing right-of-way would be affected, however.
- Alternative 5 minimizes the shift in alignment, holds the west edge of pavement constant, and improves the skew of the Galena Road intersection. The rural 4-lane section is applied with suburban SRA criteria. This alternative requires less right-of-way than Alternative 4 and would allow future improvement to a 4-lane closed suburban section. This alternative would affect the same wetland as Alternative 4.
- Alternative 6 minimizes the shift in alignment and holds the west edge of pavement constant, applying the 4-lane suburban typical section. The footprint for this alternative requires less right-of-way than Alternative 5. This alternative would affect the same wetland as Alternatives 4 and 5 and would not improve the Galena Road intersection skew.
- Alternative 7 moves the north horizontal curve south of the Galena Road intersection and applies the rural typical section and SRA suburban criteria. The advantages of this alternative are that it shifts the roadway away from Rob Roy Creek and the existing bridge at the Galena Road intersection and improves intersection sight distance. This alternative has the largest impact to wetlands in this segment and would also require the largest amount of new right-of-way.
- The following questions were raised about the Galena segment:

Q. What is the advantage of Alternative 5 over Alternative 6?



A. Alternative 5 improves the skew of the Galena Road intersection and uses open ditches to convey stormwater.

Q. Can the grade be raised to avoid floodway impacts?

A. While raising the grade would prevent the roadway from flooding, the fill material required to do so would need to be placed in the floodway, which would not negate the floodplain impact. Additional land for compensatory storage would also need to be acquired.

Q. What would happen to the abandoned sections of the roadway in Alternative 7?

A. There are several possible uses for this section. The area could be used as compensatory storage; the multi-use path could be built on the west side of the roadway in this section; or it could otherwise be made available for public use or sold as excess.

- Between the Galena segment and Baseline segment it is anticipated that the roadway would be offset to the east, away from Rob Roy Creek, using a typical section determined by the preferred Galena segment alternative.
- Mr. Zorn next discussed the Baseline segment, which includes the area from Baseline Road/US 30 intersection to the Jericho Road intersection. Rob Roy Creek crosses IL Route 47 north of the Baseline Road/US 30 intersection. Both Alternatives 8 and 9 show a rural 6-lane typical section applied south of Baseline Road/US 30.
- Alternative 8 uses the 4-lane rural typical section with SRA rural design criteria, and shifts the alignment to meet the existing centerline. A painted median may be considered in this segment to allow residential access. A disadvantage of this alignment is that a wider structure would be needed at the intersection of Baseline Road/US 30 for the Rob Roy crossing. The wide right-of-way would affect the properties north of the Baseline Road/US 30 intersection, and the wetland north of Jericho Road.
- Alternative 9 is shown with a 4-lane suburban typical section and uses SRA suburban design criteria. An advantage of this alternative is that the proposed alignment meets the existing centerline closer to the Baseline Road intersection than Alignment 8. This alternative would require less right-of-way and would result in fewer impacts to properties and to the existing wetland.
- The following comments were made about the Baseline segment:

Comment: It was noted there is an inconsistency between the white "Xs" on the handout and those shown in the presentation.

Response: The handout has the correct "X" locations.



Comment: It was noted that traffic becomes heavy because IL Route 47 and US 30, which are large roadway facilities, come together at this location. The CAG requested that existing traffic numbers in this section be provided with the alternatives.

Q. Why were six lanes of traffic studied south of the Baseline Road intersection when there are higher traffic volumes to the north?

A. This area was studied to consider the impacts of additional lanes adjacent to the Rob Roy Creek.

- Between the Baseline segment and the northern segment it is anticipated that the roadway will be widened equally on both sides of the existing centerline, and that the rural typical section will be applied.
- Mr. Zorn next discussed the northern segment, which includes the area from the Prairie Street intersection to the north terminus of the project, at the Cross Street intersection. The roadway includes an underpass of the BNSF railroad in this section. The proposed underpass is anticipated to have a 16-foot 6-inch vertical clearance, which is approximately 3 feet more than the existing clearance. Due to the change in elevation from the underpass to the railroad, and the horizontal distance needed for the ditch slope to meet the existing ground elevation, the proposed right-of-way required near the underpass is approximately 150 feet. A suburban typical section and suburban SRA design criteria are used for this segment.
- Alternative 10 widens about the existing centerline. As previously described, the change in elevation at the underpass would affect the properties west of the railroad crossing due to the larger right-of-way width. At the intersection of Prairie Street, the property in the southeast corner would be affected.
- Alternative 11 shifts the alignment approximately 35 feet east and maintains the west edge of pavement. The right-of-way necessary would affect the western properties due to the change in elevation at the underpass, but would have fewer impacts than Alternative 10.
- Alternative 12 shifts the alignment approximately 150 feet east traversing undeveloped land to the east of IL Route 47. This alternative would eliminate the impacts on the properties west of the railroad underpass. Also, the property in the southeast corner of the Prairie Street intersection would be west of the alternative. A redesign of the Prairie Street intersections would be required and could require a longer span for permanent and temporary rail structures.
- The following questions were raised about the northern segment:

Q. How would Route 47 tie into W. Prairie with Alternative 12?



A. Intersection designs have not been developed at this point in the study. Intersection concepts will take into consideration the concepts already developed by local agencies.

Q. Alternatives 10 and 11 do not use retaining walls? Wouldn't retaining walls reduce the need for proposed right-of-way?

A. Retaining walls could reduce the need for proposed right-of-way and were not considered at this time. Retaining walls will be investigated in development of the preferred alternative, with consideration for safety and cost.

IV. Meeting Wrap Up

Mr. Schlotter reviewed the outcome of the meeting with the CAG members:

1. CAG members came to a consensus on the wording of Purpose and Need Statement
2. The study's design factors, which were presented in detail at the previous CAG meeting, were reviewed
3. The proposed typical cross section alternatives and alignment alternatives were presented in detail.

Mr. Alexander then gave a preview of future meetings, anticipating a Public Meeting in November, with a Project Study Group Meeting prior to the Public Meeting to present the alternatives. He encouraged CAG members to attend the Public Meeting.

Mr. Schlotter noted the Action Items identified during the meeting:

1. Post updated schedule on web site
2. Provide comment forms about transportation program priorities to CAG members
3. Review Purpose and Need at next CAG meeting to make sure we're still on track
4. Provide traffic counts and projections north and south of Baseline Road
5. Provide information about where "hybrid" typical sections mixing rural and urban cross section element and design criteria will be used
6. Provide typical sections between segments

Mr. Schlotter and the rest of the Study Team thanked the members for their attendance and closed the meeting at approximately 8:10 P.M. At the close of the meeting the Study Team invited any CAG members who wished to do so to remain in attendance for an informal question and answer and discussion session. During this time, the following comments and questions were raised:

Q. How realistic is Alternative 7?

A. IDOT is not committed to any alternatives, but all are under consideration.

Q. Is Alternative 6 rural at 45 mph?



A. Alternative 6 uses a suburban typical section and suburban SRA criteria, which includes the 45 mph design speed.

Q. Does data show high crash rates?

A. No segment or intersection within the project appears on the 2010 Five Percent Report. The report is generated by IDOT to identify the top five percent of intersections and roadway segments with potential to reduce crash rates.

Q. When do we consider future land uses? There is a lot of change to land use plans that need to be monitored.

A. IDOT has current land use maps and is looking to the CAG members and local governments to provide us with information about any upcoming changes.

Comment: This area could rebound faster than other areas, economically.

Q. How do we consider impacts to individual properties or different land uses?

A. Impacts to properties will be considered on a case by case basis.

Q. Is it fair to say our first choice is to stay on centerline?

A. That alternative will be considered. Alternative evaluation will consider impacts, cost and other criteria.

Q. How do proposed speed limits affect geometry?

A. Generally, the higher the speed limit, the more conservative the design criteria (example: larger radii, longer sight distances are required as speed limits increase).

Comment: South of W. Prairie Street, east of IL Route 47 – look at possible additional existing wetland locations.



APPENDIX A – MEETING FLIP CHART NOTES

APPENDIX B – MEETING INFORMATION PACKAGE