



Great Lakes Basin Transportation, Inc.
23860 State Line Road
Crete, IL 60417

September 20, 2016

Ms. Victoria Rutson
Director
Office of Environmental Analysis
Surface Transportation Board
Washington, DC 20423

Re: Finance Docket No. 35952, Great Lakes Basin Transportation, Inc.

Dear Ms. Rutson,

I am writing on behalf of Great Lakes Basin Transportation, Inc. (GLBT) to respond to your letter of July 5, 2016 conveying Information Request Number 1. This response covers the eight questions asked in the letter of July 5, 2016, provides analysis of the comments from political groups and individuals covering our submitted preferred route, and answers specific concerns of which we were unaware when we made our March 7, 2016 submission.

From GLBT's perspective, the NEPA process is working as intended. The company has utilized the public response during the EIS scoping comment period to adjust its network design and create a new preferred route for OEA's consideration. Among other things, the public input process allowed GLBT to move the railroad around a city boundary that was not on our maps, avoid a water well field, move further away from a middle school, gain more efficient alignments into two industrial sites, reduce some of the greenfield interruption in Wisconsin, eliminate the alignment through Boone County, IL, and shorten the overall route by 20 miles. All of these changes are detailed in the materials submitted with this response letter.

When GLBT originally brought this project to your attention, it explained that the project's purpose is to construct a safe, reliable, and entirely new freight bypass around Chicago that would link existing main lines entering the Chicago area, permit trains to bypass the congested terminal area, and add capacity to accommodate existing traffic and reasonably foreseeable future growth—all while avoiding major population centers along its route. That purpose continues to guide the development of the route. To accomplish that purpose, GLBT is proposing an alignment that will allow operating speeds up to 70 mph, and has incorporated

Note from OEA: GLBT submitted a set of 24 files in response to Information Request 1, not all of which can be shared in the ECT system. Please visit the project website to view or download the full set of files in their original formats at http://www.greatlakesbasinraileis.com/links_docs.html

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design objectives derived from discussions with its potential customers. In addition, GLBT is working to develop an alignment will avoid or minimize adverse effects on the environment.

GLBT has considered numerous alternative alignments, many of which it rejected because they did not satisfy the project's purpose or meet its design criteria. These alternatives were mentioned in the March 7, 2016 Route Narrative filed with the Board, but the following response to the Board's questions describes those alternatives in greater detail.

OEA Information Request Questions and Answers

Question 1

On October 15, 2015, GLBT provided OEA with an initial alignment for the proposed rail line construction project. Subsequently, in a letter dated March 7, 2016, GLBT provided OEA with several items determined to be relevant to the proposed project: (1) a .kmz file that shows GLBT's revised alignment for the proposed rail line; (2) a narrative that describes the alignment in detail, and explains why alternative alignments were not preferred; (3) an Excel spreadsheet that contains further information about the specific features of the alignment, including road and rail crossings; and (4) a Power Point presentation that graphically represents the features of the alignment.

Please identify and explain the methodology and criteria used to determine the general placement of the October 15, 2015 and March 7, 2016 alternative alignments within the broader geographic region, including a description of geographic boundaries and environmental considerations. For example, the alignments are located approximately 30 to 50 miles south and west of Chicago. Were any routes or corridors closer to Chicago (e.g., 25 miles outside the city) or further from Chicago (e.g., 75 to 150 miles outside the city) considered? If none were considered, please explain why. If other general routes or corridors were considered but dismissed from further consideration, please provide maps and explain the rationale for their dismissal and identify the criteria used in this evaluation.

Response: The following methodology was used to locate the mainline railroad alignment presented in GLBT's March 7, 2016 submission:

- In order to achieve a 70 mph maximum speed on most of the proposed mainline route from Pinola, IN to Milton, WI, GLBT adopted the following general engineering and environmental requirements for this project:
 - Maximum line curvature of 3 degrees
 - Maximum main line operating grades of 1%
 - Main line switch speeds of 50 mph

- Rail load rating and bridge load ratings for 315,000 pounds (exceeding the current standards for 286,000 pound loadings)
- Installation of Positive Train Control
- Installation of Hotbox Detectors at appropriate intervals
- Installation of Acoustic and Video railcar defect detection equipment along the line
- Installation of rail equipment performance Telematics Infrastructure
- GLBT established a 200-foot right of way width, which provides 150 feet for tracks and 50 feet for cuts and fills, bridge embankments, roadway vehicle access and placement of utilities, signals, cameras and defect detectors to support the operation of the railroad.
- Consistent with the project's purpose of linking existing main lines and creating a bypass around Chicago, GLBT located the railroad to provide practical interchange connections with all six Class 1 Railroads serving Chicago, along with most regional and short lines.
- The railroad was located to minimize environmental impacts by avoiding wetlands, parks, cities, towns, and residential areas to the maximum practical extent without compromising the general engineering and environmental requirements.
- In order to minimize community impacts and avoid interfering with the operations of other railroads, grade separations are planned for all major railroad and road crossings.

The following methodology was used to develop the preferred location for the branch line serving Kingsbury, IN:

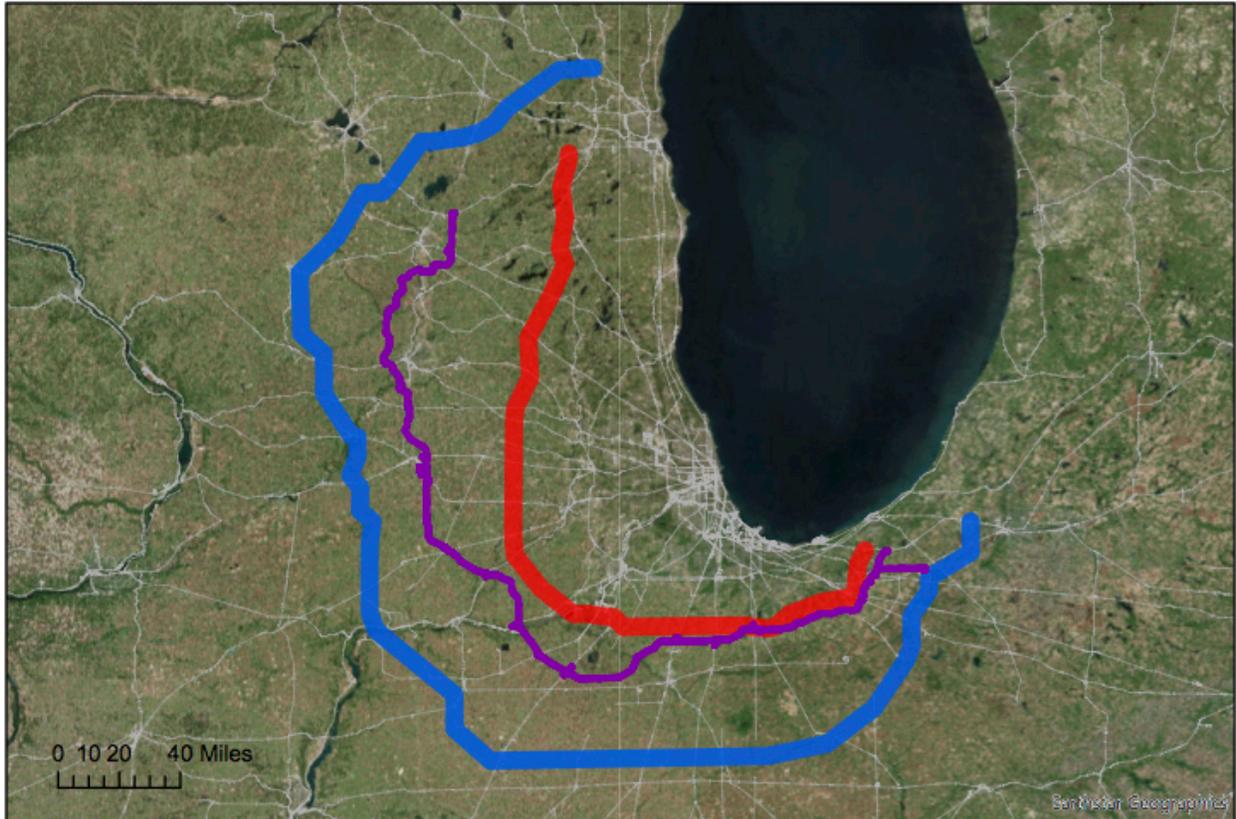
- In order to achieve a 49 mph maximum speed, GLBT adopted the following general engineering requirements:
 - Maximum line curvature of 5 degrees
 - Maximum main line operating grades of 1%
 - Rail load rating and bridge load ratings for 315,000 pounds (exceeding the current standards for 286,000 pound loadings)
 - Installation of Positive Train Control
 - Installation of Hotbox Detectors at appropriate intervals
 - Installation of Acoustic and Video railcar defect detection equipment along the line
 - Installation of rail equipment performance Telematics Infrastructure
- Right of way width was established at 100 feet, providing 75 feet for tracks and 25 feet for cuts and fills, bridge embankments, roadway vehicle access and placement of utilities, signals, cameras and defect detectors to support the operation of the railroad.
- The railroad was located to minimize environmental impacts by avoiding wetlands, parks, cities, towns, and residential areas to the maximum practical extent without compromising the general engineering and environmental requirements of the project.

More broadly, GLBT considered potential route corridors both closer to Chicago and substantially farther from Chicago. Ultimately, GLBT developed a route that struck an economically viable balance between the positives and negatives of these closer-in and further-out corridors. As discussed below, GLBT rejected other route corridors because they were either inconsistent with the project's purpose and need, infeasible from a technical perspective, cost-prohibitive, or some combination of those factors.

Routes closer to Chicago have a number of inherent problems. First and foremost, these routes were rejected due to the significant impacts they inevitably would have on existing developed areas—impacts that would be flatly inconsistent with the project's purpose of avoiding major population centers, and in considerable tension with the project's purpose of developing a new route that would be safe and reliable. The higher property values associated with a "closer-in" route would also result in higher property acquisition costs, undermining the financial viability of the project. From a technical standpoint, the denser road network means that conflict mitigation costs are far higher for a route closer to Chicago.

Routes farther from Chicago are inherently longer than the route GLBT is proposing. That increased length would result in higher land acquisition costs, since the average value of land is similar to the land that would be used for GLBT's proposed route. In addition, a longer track length would mean increased construction and operating costs, which would threaten the project's financial viability. Even more important, a longer route would mean longer travel times for trains taking GLBT's proposed Chicago bypass. Increased travel times quickly reduce the commercial relevance of a project whose central purpose and intended function is to provide an efficient bypass around the Chicago terminal.

To provide a more concrete sense of the issues with routes closer to and farther from Chicago, GLBT identified the following two routes for comparison purposes:

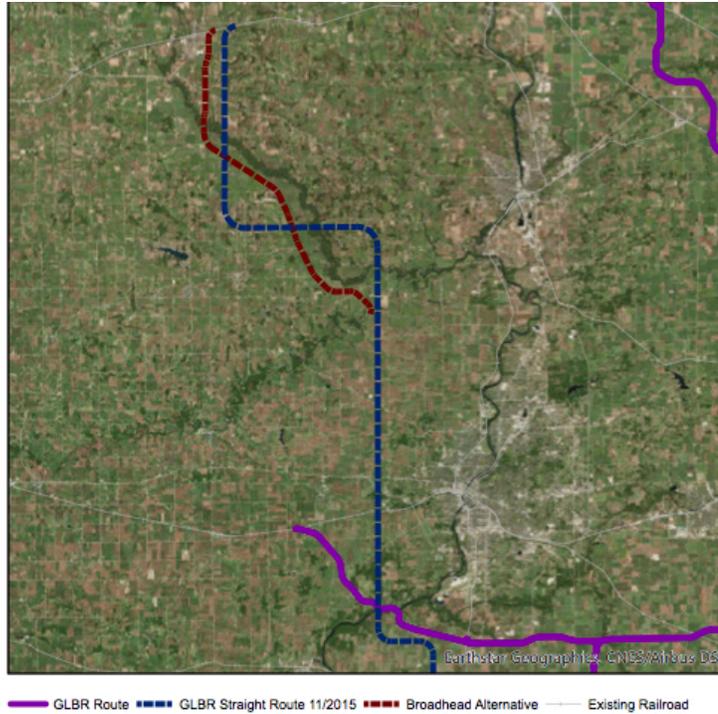


— GLBR New Preferred Route
 — Closer-In Alternative
 — Further-Out Alternative
 — Existing Railroad

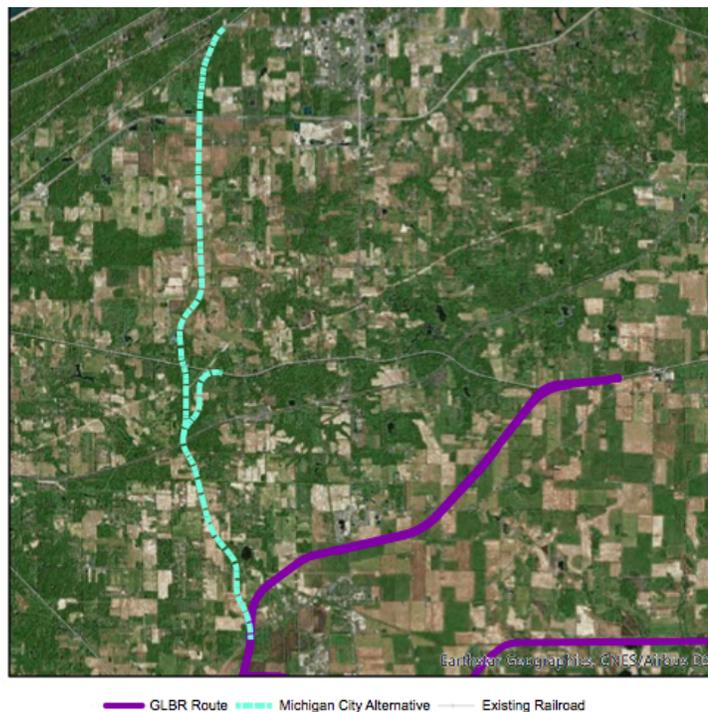
Based on these hypothetical alignments, additional information concerning possible routes closer and further from Chicago, including their potential impacts on the environment and nearby communities, is included in Appendix 1.

Aside from relatively minor alternate routings close to the proposed alignment, which are described under Question 2 in this response, two additional general alternate routes or corridors were evaluated but dismissed from further consideration:

- A route alignment commencing at a connection with Wisconsin & Southern (“WSOR”) between Orfordville and Brodhead, WI to approximately the end of the proposed Rockford Branch was initially considered (map below), but rejected due to the environmental sensitivity of lands along the proposed route and the substantial gradients that would have been encountered. The proposed route running south from a connection with WSOR near Milton, WI was substituted (see response to Question 8).



- A route between the main line’s proposed eastern terminus at a connection with Norfolk Southern Railway (“NS”) near Pinola, IN and a connection with CSX Transportation’s Grand Rapids Subdivision near Michigan City, IN was initially considered, but dismissed due to the environmental sensitivity of lands along the proposed route (map below), as well as the relatively dense areas of population that would have been affected.



Question 2

The "Great Lakes Basin Route Narrative" reviews GLBT's original proposed and revised alternative alignments in 10-mile segments and includes a discussion of "Route Alternatives Considered" for each 10-mile alternative alignment segment. For each 10-mile alternative alignment segment that was considered but discarded, identify the dismissed alternative alignment by segment and specify the rationale and criteria used to dismiss it. For example, on page 11 of the Narrative, GLBT states that it "considered three alignments to cross the Illinois River from the south and four alignments from the north."

Identify each of the six dismissed alternative alignments and specify the environmental and engineering rationale for their dismissal. Repeat this exercise for all dismissed 10-mile alternative alignment segments along the entire length of the proposed rail line.

Response: See attached spreadsheet (Appendix 2) and map reference for identification of each route alternative considered, and the reason(s) why it was discarded.

The maps and shape files for each route alternative identified in the attached spreadsheets (Appendix 2) are also being provided electronically.

Question 3

Provide maps and shape files for all the alternative alignments considered, including those that were dismissed by GLBT.

Response: Maps and commentary of the other alternative alignments that were considered in connection with GLBT's March 7, 2016 submission are provided in Appendix 3.

Question 4

Detail and map the impediments between MP 180.00 to MP 190.00 discussed in the Narrative that resulted in GLBT dismissing the alternative alignment west of Rockford (which would have resulted in the proposed rail line ending near Brodhead, WI).

Response: As stated in response to Question 1, the Brodhead alternative was dismissed due to the environmental sensitivity of lands along the proposed route and the substantial gradients that would have been encountered. Specifically, this route would have encountered the Avon Bottoms Wildlife Area and the Lower Sugar River Wetlands north and west of Shirland, IL. The ruling grade for the most favorable alignment south of Brodhead would have been 2.00%, which would have exceeded our engineering, topographical, and environmental requirements and would likely require the use of helper locomotives to push southbound trains over the grade. The ruling grade for the proposed alignment to Milton, WI, by contrast, is 1.00%, which

conforms to GLBT's engineering requirements. Please see Appendix 4 for further detail and complete descriptions of these areas including maps of the original routing.

Question 5

Were alternative alignments that could entail the use of existing rail corridors, either alone or in combination with new rail line construction, considered by GLBT? If not, using rail engineering standards, develop alternatives that consider these options. If, you believe that such options are neither reasonable nor feasible, please explain.

Response: The proposed Kingsbury Branch would follow a portion the former right of way of the Wabash Railroad (later Norfolk & Western Railway) Fourth District between Kingsbury and Westville, IN, except that the proposed alignment would deviate around towns along the way.

Otherwise, the use of certain existing and former railroad rights of way was considered but dismissed as inconsistent with the project's purpose and need, including for the reasons set forth in the response to Questions 1 and 3. In general, existing rail corridors do not meet GLBT's engineering and environmental requirements because they were laid out over a hundred years ago to accommodate much shorter and lighter freight trains, powered by steam locomotives, overlaid with local freight service to on-line industries and, in most cases, passenger service. These rail corridors ran through (and in many cases were responsible for creating) cities and towns, the avoidance of which is one of the central purposes of GLBT's project, essential to GLBT's goal of avoiding and minimizing community impacts. Also, GLBT is not affiliated with any rail carrier, has no right to use any existing railroad's trackage, and needs to control management, dispatching and maintenance of its own lines in order to offer the expedited connecting service it proposes to provide. If GLBT were to operate over another railroad's track, it would lose the ability to provide service on a neutral basis without prejudice or favoritism for or against any railroad.

Question 6

Were other locations and sizes of the proposed Railport near Manteno considered? If yes, identify the other locations and sizes that were considered and specify why they were dismissed and what criteria were used to conduct this evaluation.

Response: Alternate locations for the Manteno Railport along the GLBT route were not considered in detail because GLBT could not locate another area that met the following requirements for this facility:

- (1) A relatively flat and unobstructed site requiring minimal grading and drainage

- mitigation;
- (2) A site lying between two potentially significant connecting railroads;
 - (3) A site offering the operational flexibility to handle 15,000-foot long trains efficiently
 - (4) A site large enough to provide railroad operating and mechanical services to GLBT's target customers;
 - (5) A site with ready access to the Interstate Highway system.

GLBT recognizes that many commenters were concerned about the proposed size of the Manteno facility. The layout described in GLBT's March 7, 2016 submission was the maximum potential extent of the facility, which GLBT offered in an effort to conservatively estimate potential environmental effects. GLBT does not anticipate that the Manteno facility would operate at the size described in its March 7 submission in the foreseeable future.

Question 7

Provide a list of any GIS layers used during your development and consideration of alternative alignments. Please provide the source of each GIS layer, including web-site links where available.

Response: Applied Ecological Services of Broadhead, WI provided the GIS Layer overview of the preferred route and alternatives that were eliminated prior to our submission of the preferred route to the OEA on March 7, 2016. Data Sources included:

GNIS-US Geographic Names Database from USGS
NRIS-National Register of Historic Places from NPS
PADUS-Protected Area Database of the US from USGS
ESRI-Street Map Data Distributed with ArcGIS (data from public sources)
USGS-US Topography files

These GIS map data were utilized to assist with decision making during development of the preferred route. These data all were derived from publicly available sources that include both historical occurrences that may or may no longer need protection and current or active features including Named Places, Historic Places from the National Register of Historic Places, Airports, Buildings, Cemeteries, Churches, Hospitals, Military Installations, Mines, Parks, Populated Places, Schools, Towers, Parks, Local, Municipalities, Protected Areas, Landmark Areas, Local Airfields, Streams (NHD All), Open Water or Wetlands, Freshwater Emergent Wetlands, Freshwater Forested/Shrub Wetlands, Swamps/Marshes (NHD), Floodways, 100 Year Flood zones, All Hydric Soils. These files were utilized to do a "fatal flaw" analysis with the GIS layers to eliminate route alternatives that did not meet GLBT's preferred operating or ecological profile. In addition, extensive use of Google Earth and driving the route alternatives led to the preferred route submitted for environmental review.

Question 8

Using rail engineering standards, develop rail alternatives consistent with your purpose and need that minimize impacts to farms, homes, and businesses. If you believe that you are unable to do so, please explain why.

Response: The alignment proposed in the October 15, 2015 and March 7, 2016 filings represented GLBT's best effort to develop a route that minimizes impacts to farms, homes and businesses while remaining consistent with the project's purpose—including the goal of expediting the movement of rail freight around the congested Chicago terminal—and the engineering, topographical and environmental requirements described above. After the OEA held the public scoping meetings, GLBT reviewed the public comments and alternative routes around potential environmental conflicts proposed by local government representatives. GLBT took these into account and made several changes that it now asks to be considered the new preferred alternative (map below) for OEA to consider as the EIS process continues. While a project like this one always involves some trade-offs, GLBT believes that these changes will further minimize impacts to farms, homes, and businesses.



In summary, the changes to original preferred alignment are as follows:

Location	Reason for new routing	Alternatives considered
Westville, IN	Original Preferred Route went thru city limits & water well site. Would have restricted future city development and potential GLBT expansion.	Less restrictive and disruptive new route on south side of Westville going east of town and turning north towards Pinola, IN
Kingsbury, IN	Modifications to connection with South Shore Freight and Kingsbury Industrial Park to better support rail carload business opportunities and connect to revised Westville, IN alignment (above).	<p>Route 1 - Connect Kingsbury sub to new Westville mainline alignment, utilize old Wabash ROW to connect to South Shore Freight and Kingsbury Industrial lead. Shorter, direct, less disruptive route (shortens route by one mile).</p> <p>Route 2 - Come off the GLBT Indiana Sub south of Westville and parallel CSX and CN up to the southwest of Kingsbury Industrial park for connections to the rail lines Longer route, disruptive to farm circle irrigation and seed crops being grown in the area.</p>
Lowell, IN	Original Preferred Route was ½ mile from middle school, went through water well field, and close to water collection infrastructure.	<p>Route 1 - Moved south away from Original Preferred Route, 1 mile from middle school, north of water wells, resulting in a slightly longer route.</p> <p>Route 2 - Moved further south of town wells and 2 ponds but on border of Kankakee River flood plain, also a longer route.</p> <p>Route 3 - Moved to the north side of Lowell, parallel to utility corridor, away from south side issues, and shorter route.</p>
Rockford, IL to Milton, WI	Original Preferred Route split west and east around Rockford, the east side route to Wisconsin added another county to the	West side route around Rockford, IL provides improved rail access for industrial park south of Rockford Airport. The alignment over the Rock

	<p>footprint of the route and increased the length of the railroad. The east side route had to go further east to clear population areas around Belvidere, IL and away from I-39 development corridor.</p>	<p>River provides an improved gradient and approach over the north side of the river and clearance over Illinois Highway 2. The route going on the west side of Rockford will provide rail access to industrial development, does not go through any residential developments or near any schools. The new route turns east to go between the borders of Beloit and Janesville, WI in an industrial area. It turns northeast and north around the east side of Janesville to join the Original Preferred Route and proceed onto Milton, WI and connection to the WSOR.</p>
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Please see Appendix 5 for more detailed commentary and maps of the alternatives.

The new preferred route presented for consideration is 260.26 miles long versus 281.00 miles for the Original Preferred Alternative, resulting in a 21.26 mile shorter route with what we believe will be fewer environmental issues. GLBT believes the New Preferred Alternative to be the most effective network solution to connect the current and anticipated traffic patterns of the Class I and regional/short line railroads.

For your convenience, a list of the files uploaded to ICF are included in Appendix 6. If you require any additional information regarding the history of GLBT's route selection, the preferred route it is now proposing, or anything else concerning this project, please let us know.

Very truly yours,

James T. Wilson
President and CEO

Cc: Frank Patton
Mike Blaszak
William Miller
Cassandra Wilson
Kathryn K. Floyd
Jay C. Johnson

Commentary

Early in the process of determining a route that would meet the intended purpose and operating requirements of GLBT, investigations of potential routes closer to Chicago and farther away from Chicago were considered. The general pros and cons of these concepts were evaluated before deciding to invest time and money into conceptual engineering for what became GLBT’s Preferred Alternative. A summary of those considerations is presented here in further response to Question 1 in Information Request No. 1.

	Pros	Cons
Closer-In	Closer proximity to the Chicago market	Greater population density and proximity, greater potential exposure of population to construction disruption, noise, vibration, etc.
	Shorter construction path	More costly real estate, more homes, businesses, etc. to be bought out and/or relocated
	Shorter connection paths, potentially shorter train run times	Larger number and greater cost of grade separations, greater potential for road and street traffic disruption
	Less farmland disruption	More residential, industrial and commercial disruption, development accommodation and mitigation resulting in sharper curves and slower train speeds counter to purpose of project
	Future development	More likely to become land-locked and prevented from cost-effective expansion to accommodate future growth
Further-Out	Potentially less population density (not the case in Wisconsin, and highly dependent on specific routing in any of the 3 states)	Longer route, more river crossings, more real estate must be acquired, more costly track structures must be constructed, greater total construction, material, and operations costs
	Less costly real estate	More farmland disruption
	Potential rail connection benefits, i.e. gets trains off originating carrier sooner	Increased likelihood of disrupting environmentally sensitive areas
	Higher rates or through freight divisions required to support additional costs	Long-haul railroads potentially discouraged by prospect of significantly short hauling themselves (reduced revenue)
	Plenty of space for capacity expansion if needed	More costly to maintain, upgrade and expand due to greater length

After considering these factors in light of the project's purpose and technical design requirements, GLBT applied its financial resources to routing options that struck an economically viable balance between the positives and negatives of closer-in and further-out corridors.

Summary and Conclusion

In summary, the Preferred Alternative has been designed to avoid population centers and environmentally sensitive areas to the maximum extent possible, especially when compared with the urban disruptions associated with many of the other potential alternative alignments (including many of the alternatives proposed in public comments). The Preferred Alternative would minimize the number of homes and business affected by the Project, minimize the disruption to farm fields, satisfy the railroad's purpose and operating requirements, and resolve topographic challenges resulting in the defined route and specific routing options.

GREAT LAKES BASIN RAILROAD PROJECT
 ALTERNATIVE ALIGNMENTS SUMMARY

FORMER PREFERRED ALIGNMENTS WITHDRAWN FROM PREFERRED STATUS

Alignment ID	Alignment Name (Hyperlink to GoogleEarth)	Corresponding Portion of Preferred Alignment	Notes
231	Lowell A-1	MP 32.8 - 50.3	Withdrawn from Preferred status due to shorter length of new Preferred Alignment by approx. 2 miles. Also these two alignments were previously connected by alignment Lowell_A-2, which was rejected due to close proximity to well sites of the Lowell Water Works. However, Lowell_A-1 and Lowell_A-3 remain to be feasible alignments if joined by either alignment Lowell_B or Lowell_C.
233	Lowell A-3		
281	Rockford B-1	MP 166.8 - 184.4	Provides connection between alignments Boone County-1 and Rockford_A-3, which is no longer necessary if BooneCounty-1 and 2 are not reestablished as Preferred Alignment.
291	BooneCounty-1	MP 166.8 - 232.3	Original route to Milton. Retained as possible alternate route, in the event that new Preferred Alignment is determined environmentally unacceptable.
292	BooneCounty-2		
311	Westville	MP 0.0 - 12.0	Withdrawn from Preferred status in favor of new Preferred Alignment in order to avoid Westville city limits and increase distance from residential areas.
321	Kingsbury A	MP 10.5 - 12.3	Connected Kingsbury Sub. with original Westville Alignment, with new Preferred Alignment to east and south of Westville, Kingsbury_A is no longer required.
332	Lowell A-2	MP 32.8 - 50.3	Withdrawn from Preferred status in favor of alternative alignments (including Lowell_B and new Preferred Alignment) in order to increase distance from Lowell Middle School and Lowell Water Works.
351	Rockford B-2	MP 185.0 - 195.0	Unsuitable and redundant upon establishing proposed new Preferred Alternative from Rockford to Milton, WI.
391	EmeraldGrove	MP 234.3 - 236.5	Withdrawn from Preferred status due to close proximity to Emerald Grove cemetery property in favor of new Preferred Alignment.

GREAT LAKES BASIN RAILROAD PROJECT
ALTERNATIVE ALIGNMENTS SUMMARY

OTHER FEASIBLE ALIGNMENTS

Alignment ID	Alignment Name (Hyperlink to GoogleEarth)	Corresponding Portion of Preferred Alignment	Notes
421	Kingsbury F	MP 0.0 - 12.3	Approx. 0.8 mile longer than Preferred Alignment. Closely parallels CN and CSX mainlines for approx. 6.9 miles, and parallels industrial park trackage for approx. 1.5 miles. Minimal intrusion into agricultural lands, except one center-pivot field severely impacted.
431	Dinwiddie B	MP 32.8 - 50.3	Originally developed to avoid pipeline and wetland issues involving alignment Lowell_A-1. Retained as possible alternate route, however, longer route with greater exposure to Kankakee River flood plain.
433	Lowell B	MP 32.8 - 50.3	Developed in order to address issues of alignment Lowell_A-2 by shifting north of the Lowell Water Works and increasing distance from Lowell Middle School by 0.5 mile. Remains a feasible alignment, in conjunction with alignments Lowell_A-1 and Lowell_A-3, in the event that the Preferred Alignment between MP 32.8 and MP 50.3 is determined to be environmentally unacceptable.
434	Lowell C	MP 32.8 - 50.3	Developed in order to address issues of alignment Lowell_A-2 by shifting south of the Lowell Water Works and increasing distance from Lowell Middle School by 1.1 miles. Remains a feasible alignment, in conjunction with alignments Lowell_A-1 and Lowell_A-3, in the event that the Preferred Alignment between MP 32.8 and MP 50.3 is determined to be environmentally unacceptable.
471	PawPaw A	MP 144.9 - 151.6	This alignment increases distance from the main residential area of Paw Paw by about 0.5 mile. Disadvantage is increased curvature and 0.3 mile increase in route length versus Preferred Alignment.
473	Steward	MP 151.2 - 167.4	Provides alternate route if Preferred Alignment between MP 151.2 and MP 167.4 is determined to be unacceptable. However, due to topography, the Steward alignment is expected to have higher earthwork costs and a less favorable profile for the planned interchange yard than the Preferred Alignment.
474	CORR C	MP 0.0 - 3.8	Provides potential alternate alignment for connection to southern end of proposed CORR yard.
482	Rockford A-2	MP 166.8 - 195.0	Uses abandoned roadbed for 7.7 miles for a connection between alignments BooneCounty-1 and Rockford_A-4. Key disadvantage is close proximity to residential areas in Lindenwood and Holcomb.
483	Rockford A-3		Provides 4-mile connection between alignments Rockford_B-1 and Rockford_A-4, along the southern edge of the proposed Rockford Industrial Park.
484	Rockford A-4		Developed for the purpose of connecting to CN west of Rockford and avoids residential development. While still feasible for connecting to CN, this alignment would likely be a costly option due to topography on both sides of the Rock River and is considered redundant due to the new Preferred Alignment from Rockford to Milton, WI.
491	Philhower	MP 223.2 - 226.7	Potential alternate route in the event that the Preferred Alignment between MP 223.2 and MP 226.7 is determined to be unacceptable. Significant issue is close proximity to south side of active business at the intersection of County Road G and Philhower Rd.

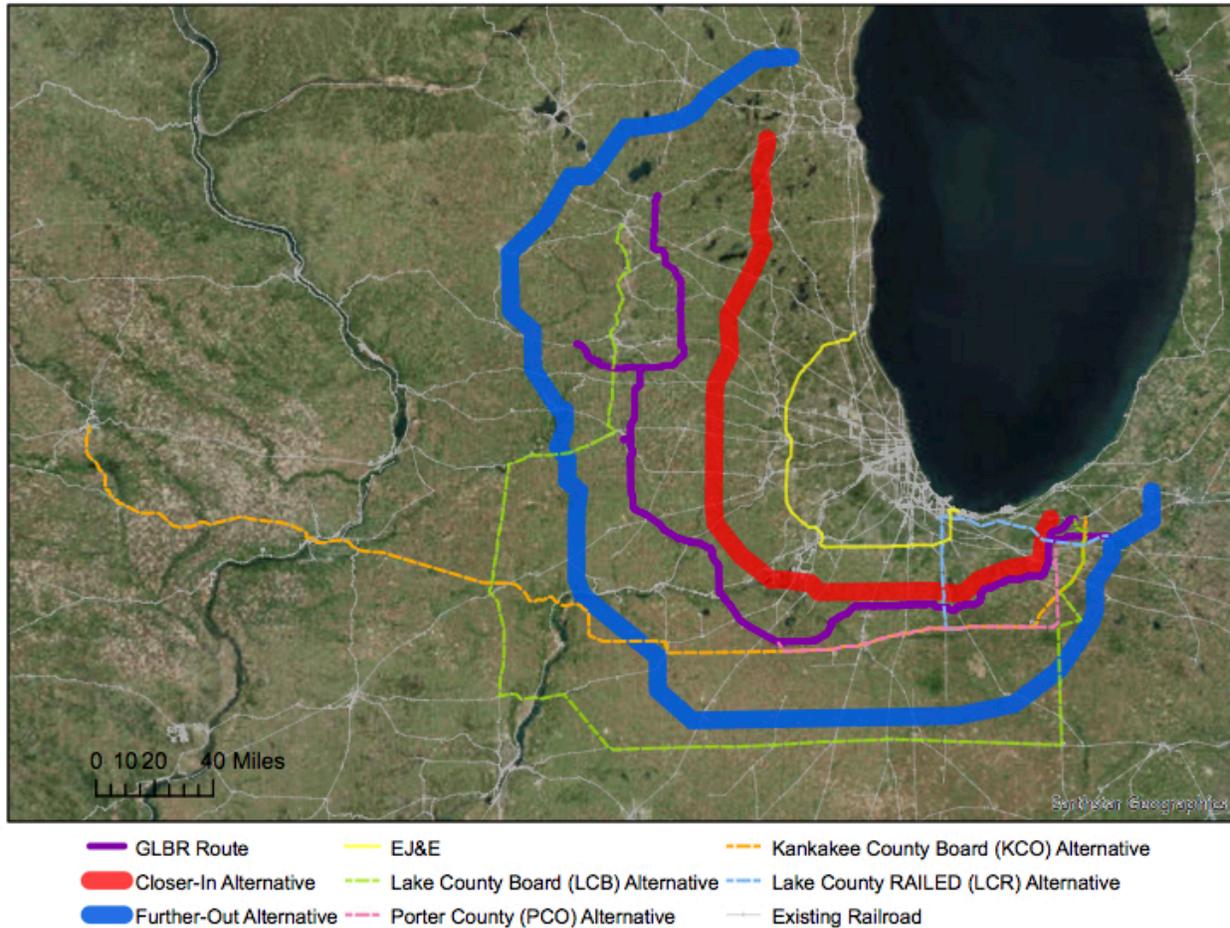
GREAT LAKES BASIN RAILROAD PROJECT
ALTERNATIVE ALIGNMENTS SUMMARY

CONSIDERED ALIGNMENTS INCONSISTENT WITH NEED OR PURPOSE

Alignment ID	Alignment Name (Hyperlink to GoogleEarth)	Corresponding Portion of Preferred Alignment	Notes
511	MichiganCity	MP 0.0 - 6.0	Rejected due to conflicts with a nature preserve and wetlands throughout approx. 20% of alignment. Proposed connections accomplished by connection to South Shore Freight to connect to CSX Grand Rapids Subdivision in Michigan City, IN.
512	Otis	MP 0.0 - 6.0	Rejected in favor of Preferred Alignment to Pinola, due to conflict with wetlands and park areas, and very close proximity to residential developments.
521	Kingsbury B	MP 1.3 - 4.0	Developed to avoid Kingsbury city limits, rejected account of added track length and significant additional curvature.
522	Kingsbury E	MP 0.0 - 12.3	This alignment was rejected account of agricultural impacts versus that of Preferred Alignment.
531	EastHebron	MP 20.3 - 50.3	This alignment was rejected account of routing thru lands reserved for future expansion of Hebron.
541	Braidwood-1	MP 66.5 - 124.1	Rejected due to significant impacts to residential areas in Custer Park and Braidwood, and wetland impacts.
542	Braidwood-2	MP 66.5 - 109.7	
543	KankakeeBridge A	MP 68.9 - 77.9	This alignment was rejected account it crosses Kankakee River State Park on high bridge with significant approach curvature. Also approx. 1.5 miles longer than Preferred Alignment.
544	KankakeeBridge B	MP 68.9 - 81.7	This alignment was rejected account it crosses Kankakee River State Park on high bridge and very close proximity to residential development. Also approx. 2.5 miles longer than Preferred Alignment.
551	LaSalle	MP 109.1 - 145.9	This alignment was rejected account 7.5 miles longer than Preferred Alignment and bridge over Illinois River is considerably longer than that for Preferred Alignment due to significant skew.
581	Rockford F	MP 184.2 - 191.4	Rejected due to necessity of passing between Rockford Airport and the Radar Station along Beltline Road.
582	WinnebagoCounty	MP 186.2 - 191.7	Rejected due to extremely high probable construction cost resulting from heavy earthwork and/or high bridge over Rock River, plus severe impact on a significant number of homes.
583	Janesville	MP 225.3 - 239.8	Rejected in favor of Preferred Alignment, due to significant impact of diagonal route across agricultural lands, particularly high-value center-pivot operations.
591	GardenPrairie	MP 166.8 - 232.3	Rejected in favor of BooneCounty-2 alignment, due to severe impact on large area of sensitive wetlands along Coon Creek.
592	Sharon	MP 166.8 - 232.3	Immediately adjacent (on 25' track centers) to Union Pacific Janesville Branch for 3.7 miles. Rejected in favor of BooneCounty-2 alignment for right-of-way independent of Union Pacific.
593	Clinton	MP 166.8 - 232.3	Rejected in favor of BooneCounty-2 alignment, due to close proximity to housing development along west side of Clinton and probable greater earthwork and grade separation costs.
596	Brodhead	MP 206.0 - 244.1	Original proposed western terminus of GLBR. Brodhead line rejected in favor of other routes to Milton due to environmental issues of wetlands, hunting area, Sugar River Bottoms, route circuitry, and to avoid need for trains to pass through downtown Janesville.

During the Public Comment period, four commenters proposed comprehensive alternative routes for the GLBT project (“Commenter Alternatives”). This segment of GLBT’s response will compare these alternatives (dashed lines) with the original route proposed by GLBT (purple) in the map below). For reference, the “Closer-In” (red) and “Further-Out” (blue) conceptual routes developed by GLBT are provided on the map below for purposes of this commentary (the “GLBR Alternatives”). Also, for reference the EJ&E route (yellow) is included for comparison purposes as it was mentioned by some of the Commenters.

Alternative Routes Summary Map



In analyzing the Commenter Alternatives and evaluating GLBR Alternatives, proximity to population centers and schools near the various alternative right of ways was compiled based on publically available mapping technology (Google Earth Pro) to identify town/city boundaries and school locations, and census data (U.S. Census Bureau decennial 2010 census or 2013-14-15 census survey updates, whichever is most recent). The following table summarizes route length, number of railway connections included, total population of towns and cities within two miles of each alternative right of way, and the number of schools within two miles and the number of schools immediately adjacent to each alternative right of way.

Alternative Route Summary Statistics

Alt#	Alternative Name	Route Length		Connections	Towns	Population		Schools/Adjacent	
NA	GLBR	281		24	31	47,643		23 / 0	
EI25233	Lake Co Board (LCB)	371	(vs GLBR 281)	All	64 (vs 31)	451,723	(vs GLBR 43,643)	156 / 16	(vs GLBR 23 / 0)
EI25037	Porter Co San Pierre (PCO)	94	(vs GLBR 82)	22 (vs 24)	14 (vs 10)	53,622	(vs GLBR 25,013)	33 / 4	(vs GLBR 14 / 0)
EI25045	Kankakee Co Board (KCO)	312	(vs GLBR 171)	13 (vs 24)	56 (vs 23)	567,808	(vs GLBR 42,298)	110 / 12	(vs GLBR 20 / 0)
EI22786	Lake Co RAILED (LCR)	80	(vs GLBR 62)	All	25 (vs 7)	434,938	(vs GLBR 19,909)	74 / 7	(vs GLBR 9 / 0)
NA	Closer In	205	(vs GLBR 281)	All	75 (vs 31)	363,651	(vs GLBR 47,643)	NA	(vs GLBR 23 / 0)
NA	Further Out	386	(vs GLBR 281)	All	68 (vs 31)	167,321	(vs GLBR 47,643)	NA	(vs GLBR 23 / 0)
NA	EJ&E	112	(vs GLBR 281)	All	55 (vs 31)	1,553,200	(vs GLBR 47,643)	281 / 16	(vs GLBR 23 / 0)

Comprehensive Alternatives Offered by Respondents to the STB’s Public Comment

Compared to the route proposed by GLBT (“Original Preferred Alternative”), the common disadvantages of the Commenter Alternatives are as follows:

- Longer than the corresponding segments of the Preferred Alternative
- Greater impact on existing residential and commercial areas with *up to 20 times greater population within two miles*
- Significantly more schools within two miles of the tracks, some of which would be immediately adjacent to the tracks
- Some routes ignore rail connections which would be essential to GLBR’s business, in particular the KCO Alternative which omits 11 of 24 planned connections
- The alternative routes assume Class I and regional/short line railroads would be agreeable to adding GLBR’s traffic to their already busy, and in some cases congested, networks, and/or allowing GLBR to occupy their property to build new track, which is not a realistic assumption
- Route geometry would not be conducive to sustained high speed freight operation (70 mph) and contemporary train profiles
- Alternative options for the location of the Rail Port support and commercial operations are unsatisfactory, impractical, or left out altogether
- Greater exposure to environmentally sensitive areas (generally a product of longer length)
- Route geometry and population exposure compromises GLBT’s safety imperatives

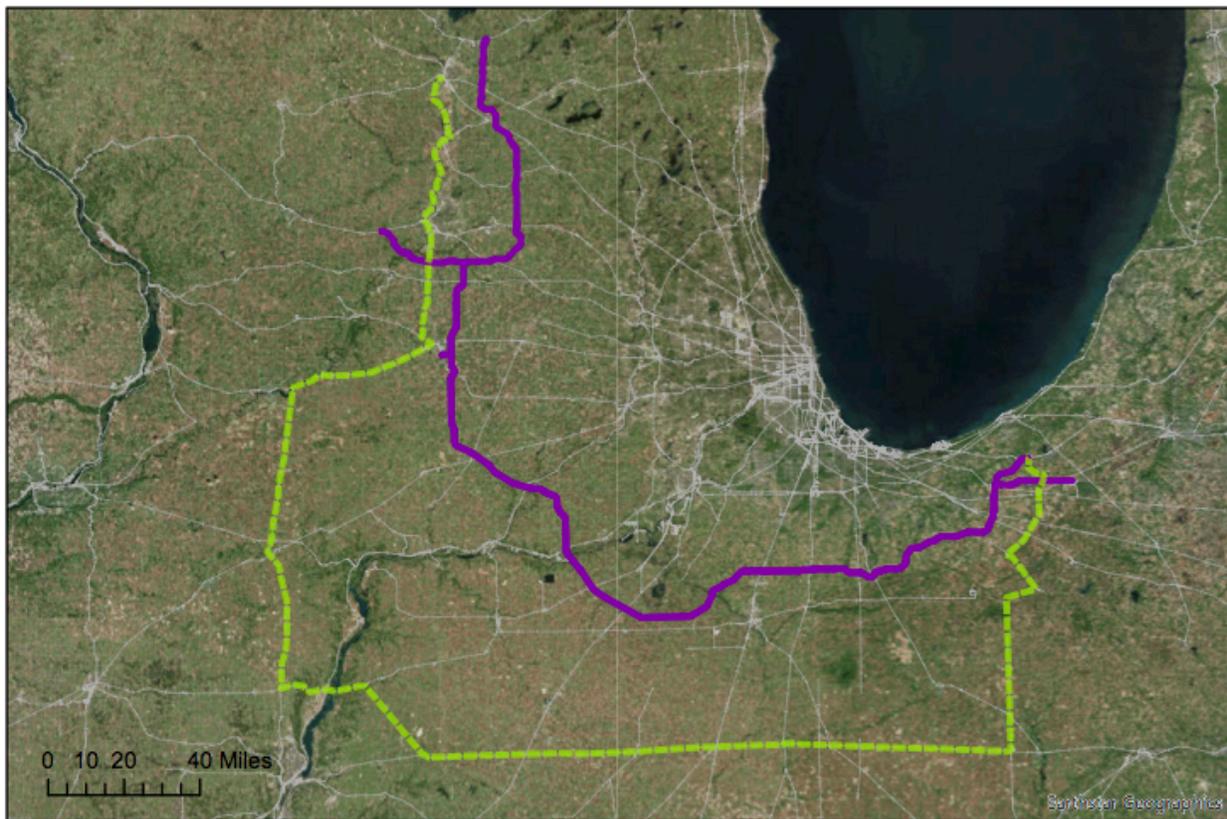
- The alternative routes are generally estimated to be more expensive to build and operate (more and/or more expensive real estate required, more environmental mitigation, etc.)

Detailed commentary regarding these disadvantages is included in the following pages. The following comparisons are “apples to apples”—that is, Commenter Alternatives are compared to the corresponding segment of the original Preferred Alternative.

While the exact numerical comparisons might differ slightly in comparison to the changes in the new Preferred Alternative, the overall disadvantages and conclusions remain unchanged.

Lake County Board (LCB) response & alternative route (the “LCB Alternative”) (EI25233)

LCB Alternative Route Map



— GLBR Route — Lake County Board (LCB) Alternative — Existing Railroad

The LCB Alternative uses existing railroads and three greenfield connectors to define a route that roughly connects the same end points of the GLBR Preferred Route. From east to west the line utilizes the CKIN, CSX, NS (TP&W), BNSF, UP, IR and CP running through numerous towns

and cities including Union Mills/Wellsboro, La Crosse and Kentland in Indiana; Chillicothe, Dixon, Rochelle and Rockford in Illinois; and Beloit and Janesville in Wisconsin.

GLBT has reviewed the LCB's response and notes the following:

- The LCB Alternative would be approximately 371 miles long, or 32% longer than the Preferred Alternative. It would cost roughly a third more to construct, and a train would consume more time and fuel traversing this route, even assuming comparable operating speeds could be achieved. These economic factors would compromise GLBT's competitiveness by increasing its initial, debt service and operating costs.
- The LCB Alternative would route freight through populated areas, rather than around them as the Preferred Alternative would. Under the LCB Alternative, the GLBR would be built alongside, or utilize right to operate over, various existing Class I and regional/short line railroads connected by greenfield construction. By using existing rights of way, the LCB Alternative would put GLBT trains through 65 cities and towns with a total population of approximately 452,000. This would create myriad safety and security issues and increased noise and vibration impacts.

By contrast, the Preferred Alternative is specifically designed to avoid population centers as much as possible, reducing or eliminating such safety and security risks. The Preferred Alternative avoids urbanized areas adjacent to the main line. The population within two miles of the Preferred Alternative main line is about 48,000 (See list of affected towns and cities below).

The LCB Alternative is located within two miles of at least 156 schools with 16 schools immediately adjacent to the route. The Preferred Alternative passes within two miles of 21 schools and is immediately adjacent to none.

- The LCB Alternative assumes use of existing railroads and/or railroad rights of way, including busy, high density main lines. Assuming the existing railroads would be agreeable to granting GLBT the right to use these lines (a doubtful assumption which is examined in more detail below), and assuming the existing railroads could be augmented and/or upgraded sufficiently to handle the increased traffic density, the LCB Alternative would inherit the disadvantages of the existing routes, which include numerous at-grade crossings of other rail lines and highways and routes laid out over a hundred years ago for the operation for significantly shorter trains using steam locomotives. This is entirely inconsistent with GLBT's objective of increasing the velocity of traffic moving between eastern and western carriers, greatly diminishing its competitive advantage.
- It is extremely unlikely that the railroads would agree to accommodate GLBT traffic on their existing lines since the capacity of those lines has been tailored to move their current traffic levels effectively, and additional traffic could cause congestion, delays and additional costs. Based on their responses to proposals to create new or higher frequency Amtrak service,

the railroads could—if they entertain the possibility at all—require GLBT to construct the equivalent of a new railroad alongside their existing tracks negating any savings or potential service improvements. The result would be a railroad that is longer, more expensive to build and operate, and less competitive than the Preferred Alternative, for the reasons explained above.

- Even if the existing railroads were to allow GLBT to use their lines, they almost certainly would retain control of train dispatching. The owner always will have an incentive to prioritize the movement of its own trains over those of a tenant’s such as GLBR. The resulting delays in the movement of GLBT’s trains would frustrate GLBT’s objective of providing expedited service for freight that that doesn’t need to move through Chicago.
- The LCB Alternative would place the GLBT’s Rail Port up to 70 miles further from the Chicagoland markets to be served. Trucks moving the additional distance to and from the Chicago terminal would add to, rather than alleviate, highway congestion on the area’s interstate highways. In any case, no adjacent, level and contiguous site for the Rail Port was identified in the LCB Alternative.
- While the Lake County Board response did not offer any information about the impact the LCB Alternative would have on environmental features such as wetlands, parks and nature preserves, it is likely to have greater impacts than the Preferred Alternative due to its length alone. In particular, the LCB Alternative would include a Kankakee River crossing and numerous potential environmental issues associated with the two greenfield connector segments in Indiana, as well as an Illinois and Rock River crossings and numerous potential environmental issues associated with the greenfield connector segment in Illinois. In addition, there are numerous potential environmental issues associated with expanding the capacity of the existing railroads included in the route.

Conclusion: The LCB Alternative is not feasible and would not solve the rail transportation challenges and deficiencies that the GLBR has been designed to address. Instead the LCB Alternative would entail significantly higher capital and operating costs, involve longer running times, and create significant new safety, security and environmental exposure issues.

POPULATION CENTERS

LCB Alternative			GLBR		
<u>Town or City</u>	<u>Distance</u>	<u>Population</u>	<u>Town or City</u>	<u>Distance</u>	<u>Population</u>
Indiana					
Union Mills, IN	Thru	2,212	Westville, IN	1.05M	5,662
Hanna, IN	Thru	463	Wanatah, IN	1.54M	1,034
La Crosse, IN	Thru	551	Malden, IN	0.36M	NA
North Judson, IN	Thru	1,764	Boone Grove, IN	1.09M	80
San Pierre	Thru	156	Hebron, IN	0.67M	3,731

Medaryville, IN	Thru	596	Lowell, IN	0.75M	9,402
Francesville, IN	Thru	846	Belshaw, IN	Adj	NA
Monon, IN	Thru	1,762			
Reynolds, IN	Adj	533			
Wolcott, IN	Thru	995			
Remington, IN	Thru	1,162			
Goodland, IN	Thru	1,023			
Kentland, IN	Thru	1,720			
IN Subtotals	13 towns	13,783	7 towns		19,909
Illinois					
Sheldon, IL	Thru	1,035	Sollitt, IL	Adj	NA
Watseka, IL	Thru	5,144	Grant Park, IL	1.97M	1,315
Crescent City, IL	Thru	606	Manteno, IL	0.76M	9,072
Gilman, IL	Thru	1,770	Bonfield, IL	0.35M	379
Piper City, IL	Thru	806	S Wilmington, IL	1.38M	671
Chatsworth, IL	Thru	1,175	Gardner, IL	1.52M	1,444
Forrest, IL	Thru	1,194	Mazon, IL	1.77M	1,002
Fairbury, IL	Thru	3,689	Seneca, IL	1.85M	2,322
Chenoa, IL	Thru	1,794	Nettle Creek, IL	0.40M	503
Gridley, IL	Thru	1,465	Sheridan, IL	1.17M	2,120
El Paso, IL	Thru	2,821	Baker, IL	0.72M	NA
Secor, IL	0.56M	370	Earlville, IL	0.69M	1,661
Roanoke, IL	0.50M	2,099	Paw Paw, IL	0.34M	838
Washburn, IL	0.15M	1,145	Scarboro, IL	1.43M	NA
Chillicothe, IL	Thru	6,166	Steward, IL	0.79M	248
Edelstein, IL	Thru	1,073	Creston, IL	1.72M	662
Speer, IL	Thru	193	Fairdale, IL	1.27M	152
Camp Grove, IL	Thru	105	Herbert, IL	0.84M	NA
Bradford, IL	0.89M	756	Grand Prairie, IL	1.38M	909
Morse/Lombardville	Thru	NA	Capron, IL	0.33M	1,357
Buda, IL	0.42M	525			
Sheffield, IL	1.75M	901			
Langley, IL	Thru	NA			
Manlius, IL	Thru	352			
Normandy, IL	Thru	NA			
Hahnaman, IL	Thru	399			
Rock Falls, IL	1.24M	9,213			
Sterling, IL	1.47M	15,152			
Nelson, IL	Thru	164			
Woodland Shores	Adj	170			
Dixon, IL	Thru	15,333			
Nachusa, IL	Thru	493			
Franklin Grove, IL	Thru	985			
Ashton, IL	Thru	928			
Rochelle, IL	Thru	9,451			
Hillcrest, IL	1.86M	1,293			

Kings, IL	Thru	1,164		
White Rock, IL	1.65M	763		
Holcomb, IL	Thru	61		
Davis Jct., IL	Thru	2,300		
New Milford, IL	0.60M	675		
Rockford, IL	Thru	150,251		
Loves Park, IL	Adj	23,703		
Machesney Park/ Harlem	Thru	40,158		
Roscoe, IL	Thru	10,680		
Rockton, IL	Thru	7,613		
South Beloit, IL	Thru	7,773		
IL Subtotals	47 towns	333,906	20 towns	24,655

Wisconsin

Beloit, WI	Thru	36,888	Sharon, WI	1.86M	912
Hillcrest, WI	Thru	NA	Clinton, WI	1.10M	893
Afton, WI	Thru	3,326	Avalon, WI	0.95M	421
Janesville, WI	Thru	63,820	Emerald Grove, WI	Adj	853
WI Subtotals	4 towns	104,034	4 towns	3,079	

Totals:

Mileage	371	- 32% longer	281 total
Towns & Cities	65	- 40% more	31 total
Population	451,723	- 9 x GLBR	47,643 total

Notes:

- “Apples to apples” comparison LCB vs. GLBR
- Includes towns and cities within 2 miles of the tracks
- Based on most recent census data (2015, 2013, 2010)

Porter County (PCO) response & San Pierre alternative route (the “PCO Alternative”) (EI25037)

PCO Alternative Route Map



The PCO Alternative addresses roughly the eastern half of the Preferred Alternative running from a point between Westville and Wanatah in Indiana to a point southeast of Gardner in Illinois where it would join the GLBR Preferred Alternative. The PCO Alternative utilizes the abandoned Monon Railroad right of way parallel to highway 421, a greenfield connector, and the NS Kankakee Line and would run through downtown Kankakee in addition to numerous small towns. The route requires a new bridge over the Kankakee River north of San Pierre and greenfield connector from Reddick IL northwest to the GLBR Preferred Alternative main line.

GLBT has reviewed LCR’s response and San Pierre route alternative noting the following:

- Between Mile Posts 11 and 93 (approximately) of the Preferred Alternative, the PCO Alternative would be approximately 94 miles in length, as opposed to 82 miles for the Preferred Alternative. Constructing and operating the PCO Alternative would cost more than constructing and operating the corresponding segment of the Preferred Alternative.
- Utilizing the abandoned Monon Railroad Michigan City branch right of way and Norfolk Southern’s existing Kankakee Line, the PCO Alternative would run through numerous cities

and towns which would create safety and security issues that the Preferred Alternative is designed to reduce or eliminate.

Specifically, the 94 mile PCO Alternative would run through 14 towns and cities with a total population of about 54,000. The corresponding 82-mile segment of the Preferred Alternative would pass within two miles of 11 towns and cities with a total population of about 30,000 (See list of affected towns and cities below). The PCO Alternative would create safety and security issues in these cities and towns, along with increased noise and vibration impacts.

- The PCO Alternative does not extend far enough north to permit establishment of the northernmost two of the Preferred Alternative’s 24 planned connections to Class I and regional/short line railroads. In addition, the PCO Alternative does not provide realistic access to either the Kingsbury Industrial Park in Indiana or the Manteno Rail Port in Illinois.
- The PCO Alternative assumes that GLBT would be able to use existing railroads and/or railroad rights of way, specifically Norfolk Southern’s Kankakee Line. Even if NS would permit GLBT to operate there, the Kankakee Line is not now and has never been a high-speed, high density route and is not located or aligned to support the geometry necessary for the 70 mph train operations that GLBT’s purpose and business plan requires.
- As mentioned in the response to the LCB Alternative, operating over another railroad would create a potential conflict of interest in dispatching, which historically has been resolved in favor of the owning and dispatching company. The resulting lack of control over this key segment of the railroad would impose a substantial handicap on GLBT’s ability to compete and be of service to the railroads and customers it is designed to satisfy. Using the existing Kankakee Line, or building a new railroad alongside it, also would complicate GLBT’s plan to construct grade separations with other rail lines it crosses, and major highways.
- The PCO Alternative would locate the GLBR main line within two miles of at least 33 schools, for of which would be immediately adjacent to the tracks. The comparable portion of the Preferred Alternative would pass within two miles of twelve schools and would be immediately adjacent to none.
- In support of the PCO Alternative, Porter County claims that it would avoid “taking of about 36.5 [linear] miles of prime farm land in Lake and Porter County.” However, the PCO Alternative does require the conversion of about 24 acres of farm land elsewhere to rail use. This segment of the Preferred Alternative would not run entirely through farm land; some of the Preferred Alternative’s right of way is located in uncultivated land. On the other hand, much of the former Monon right of way appears from observation to have reverted to, or been sold to, farm operators.
- While the Porter County Board response did not offer any information about the impact the PCO Alternative would have on environmental features such as wetlands, parks and nature

preserves, it is likely to have greater impacts than the Preferred Alternative due to its length alone. In particular, the PCO Alternative would involve two Kankakee River crossings, one new bridge in Indiana as well as a significant flood plain alignment, and one on the existing, presumably expanded, bridge in downtown Kankakee, IL.

Conclusion: The PCO Alternative would be longer than the corresponding segment of the Preferred Alternative and would rely on the willingness of NS to grant GLBT trackage rights over its Kankakee Line, or the right to build new track alongside it, which is not likely to occur. Because it would run through numerous towns, the PCO Alternative presents public safety issues that the Preferred Alternative would avoid. Finally, the PCO Alternative would not serve the Manteno Rail Port site.

POPULATION CENTERS

PCO Alternative			GLBR		
Town or City	Distance	Population	Town or City	Distance	Population
Indiana					
Wanatah, IN	Thru	1,034	Westville, IN	1.34M	5,662
La Crosse, IN	Thru	551	Wanatah, IN	1.54M	1,034
San Pierre	0.10M	156	Malden, IN	0.36M	NA
Wheatfield, IN	Thru	853	Boone Grove, IN	1.09M	80
Stoutsburg, IN	Thru	NA	Hebron, IN	0.67M	3,731
Kersey, IN	Thru	NA	Lowell, IN	0.75M	9,402
DeMotte, IN	Thru	3,814	Belshaw, IN	Adj	NA
Shelby, IN	Thru	539			
Schneider, IN	Thru	277			
IN Subtotal	9 towns	7,224		6 towns	19,909
Illinois					
Momence, IL	Thru	3,259	Sollitt, IL	Adj	NA
Kankakee, IL	Thru	27,126	Grant Park, IL	1.97M	1,315
Bradley, IL	Thru	15,793	Manteno, IL	0.76M	9,072
Union Hill, IL	Thru	58	Bonfield, IL	0.35M	379
Reddick, IL	Thru	162			
IN Subtotal	5 towns	46,398		4 towns	10,766
Totals:					
Mileage	94	- 15% longer		82*	(281 total)
Towns & Cities	14	- 40% more		10*	(31 total)
Population	53,622	- 2 x GLBR		30,675*	(47,643 total)

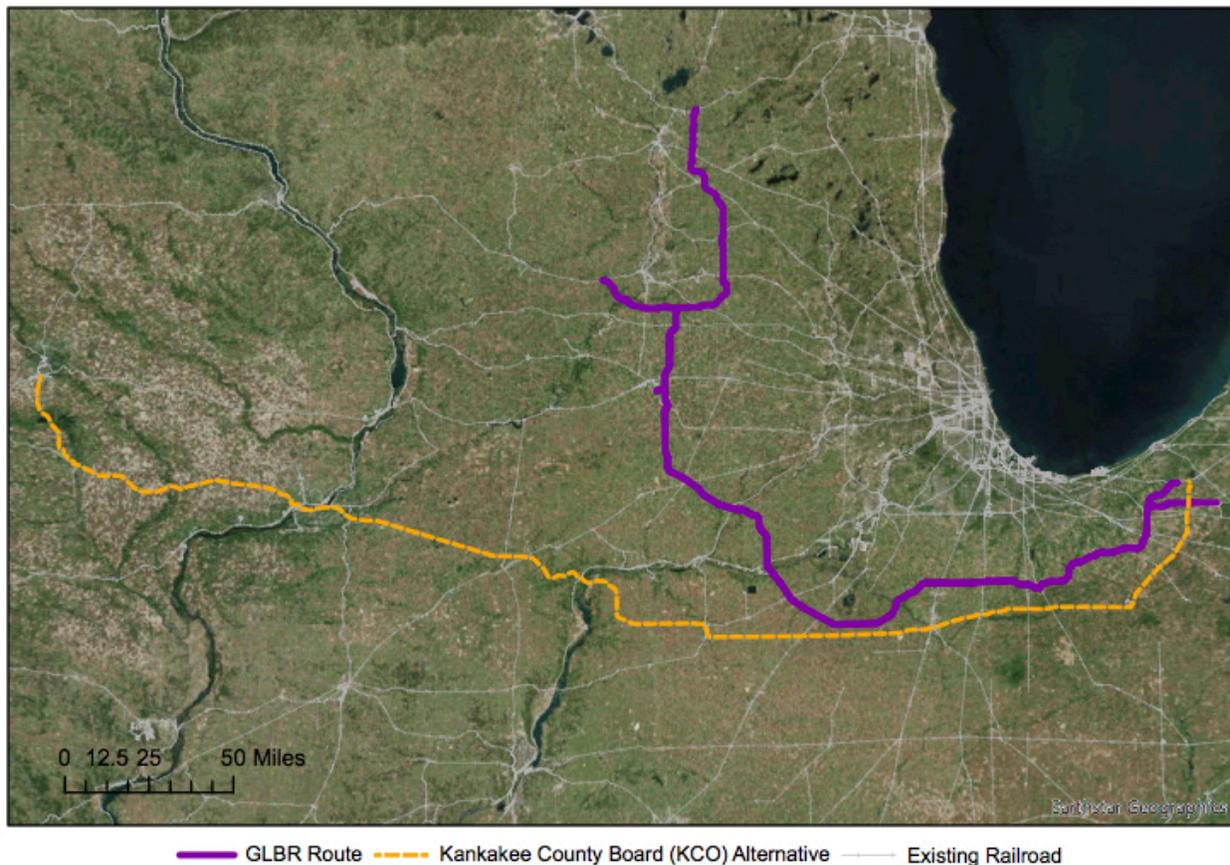
* Denotes “apples to apples” comparison, i.e. includes only the portion of the GLBR route that makes the comparable connections included in the PCO alternative.

Additional notes:

- Includes towns and cities within 2 miles of the tracks
- Based on most recent census data (2015, 2013, 2010)

Kankakee County Board’s (KCO) response & alternative route (the “KCO Alternative”) (EI-25045)

KCO Alternative Route Map



The KCO Alternative runs from the west side of La Porte, IN to an undefined terminus in Iowa generally leveraging existing railroads and three greenfield connectors. From east to west the KCO Alternative utilizes the CKIN, NS (TP&W), IAIS, CIC, and UP running through numerous towns and cities including La Porte and De Motte in Indiana; Kankakee, Streator, Moline, and Rock Island in Illinois; Davenport, and potentially Iowa City and Cedar Rapids in Iowa. The KCO Alternative requires a greenfield connection and new Illinois River bridge near Hennepin, IL and suggests that the Manteno Rail Port be located “Out Here Somewhere (Sorry Iowa)” indicating an undefined location west of Davenport, IA.

GLBT has reviewed the KCO Alternative and notes the following:

- The Kankakee County Board did not define the western terminus of the KCO Alternative. For the purpose of this commentary, GLBT has assumed the KCO Alternative would connect with the Union Pacific in the vicinity of Cedar Rapids, Iowa.
- Based on this assumption, the KCO Alternative would extend approximately 312 miles, compared to the 171-mile segment of the Preferred Alternative from Pinola, IN to the connection with UP at Mile Post 171. The longer KCO Alternative route would be considerably more expensive to build and operate than the Preferred Alternative, and trains using it would consume more fuel and for reasons further described below require more time to make connections between eastern and western railroads.
- The KCO Alternative omits 11 of the Preferred Alternative's 24 planned connections to Class I and regional/short line railroads, completely ignoring the northwest and northern connections and substantially reducing the project's potential for expediting freight movements and reducing Chicago terminal congestion.
- The KCO Alternative would route freight into, rather than around, numerous populated areas. The KCO Alternative passes through 56 towns and cities with a total population of approximately 568,000. The corresponding 171-mile segment of the Preferred Alternative, would pass within two miles of 23 towns and cities with a total population of approximately 42,000 (See list below of affected towns and cities).
- Because the KCO Alternative involves train operations through many towns and cities, this route would be located within two miles of at least 110 schools with 12 of them immediately adjacent. The corresponding segment of the Preferred Alternative would pass within two miles of 18 schools and be adjacent to none.
- The KCO Alternative assumes GLBT would be allowed to operate over, or build new track alongside, existing railroads and railroad rights of way. As discussed in LCB Alternative and PCO Alternative commentaries, this is not a realistic assumption. Even if the railroads would be agreeable to granting GLBT rights to use their tracks and/or property in this manner, the majority of the route would not be located and aligned to support the geometry necessary for the 70 mph freight rail operations GLBT's business plan requires. Lower train speeds make attainment of one of the project's key goals increasing the velocity of traffic moving through Chicago between eastern and western carriers, difficult or impossible.
- The KCO Alternative would place the GLBT Rail Port at an unspecified location in Iowa, a minimum 130 miles further from the Chicagoland markets to be served than the Manteno Rail Port. This location would not be marketable or competitive for traffic coming from eastern and southern connections. As discussed above, the KCO Alternative does not

include connections with rail lines approaching Chicago from the north or northwest.

- While the Kankakee County Board response did not offer any information about the impact the KCO Alternative would have on environmental features such as wetlands, parks and nature preserves, it is likely to have greater impacts than the Preferred Alternative due to its length alone. In particular, the KCO Alternative would involve two greenfield connectors in Indiana, a Kankakee River crossings on the existing, presumably expanded, bridge in downtown Kankakee, IL., a greenfield connector and new Illinois River bridge near Hennepin, IL, a Mississippi River crossing in the center of the Quad Cities, potentially Cedar and Iowa River crossings in Iowa, and numerous wetlands and smaller river crossing along both the existing railroads and greenfield connectors.

Conclusion: This KCO Alternative would do half the job of the Preferred Alternative but would require nearly twice its length. Because this alternative is so much longer than the corresponding segment of the Preferred Alternative, it would cost far more to build and operate, would affect far more people, and would result in greater environmental impacts. As such, the KCO Alternative is not a feasible alternative.

POPULATION CENTERS

KCO Alternative (Indiana)

GLBR

<u>Town or City</u>	<u>Distance</u>	<u>Population</u>	<u>Town or City</u>	<u>Distance</u>	<u>Population</u>
Indiana					
La Porte, IN	Thru	22,053	Westville, IN	1.05M	5,662
Union Mills, IN	Thru	2,212	Wanatah, IN	1.54M	1,034
Hanna, IN	Thru	463	Malden, IN	0.36M	NA
Thomaston, IN	Thru	627	Boone Grove, IN	1.09M	80
La Crosse, IN	Thru	551	Hebron, IN	0.67M	3,731
Wheatfield, IN	Thru	853	Lowell, IN	0.75M	9,402
Stoutsburg, IN	Thru	NA	Belshaw, IN	Adj	NA
Kersey, IN	Thru	NA			
DeMotte, IN	Thru	3,814			
Shelby, IN	Thru	539			
Schneider, IN	Thru	277			
IN Subtotals	11 towns	31,389		7 towns	19,909
Illinois					
Momence, IL	Thru	3,259	Sollitt, IL	Adj	NA
Kankakee, IL	Thru	27,126	Grant Park, IL	1.97M	1,315
Bradley, IL	Thru	15,793	Manteno, IL	0.76M	9,072
Union Hill, IL	Thru	58	Bonfield, IL	0.35M	379
Reddick, IL	Thru	162	S Wilmington, IL	1.38M	671
Blair, IL	Thru	636	Gardner, IL	1.52M	1,444
Dwight, IL	Thru	4,151	Mazon, IL	1.77M	1,002
South Streator	Thru	NA	Seneca, IL	1.85M	2,322

Streator, IL	Thru	13,422	Nettle Creek, IL	0.40M	503
Kangley, IL	Thru	242	Sheridan, IL	1.17M	2,120
Lostant, IL	Thru	493	Baker, IL	0.72M	NA
McNabb, IL	Thru	274	Earlville, IL	0.69M	1,661
Granville, IL	Thru	1,366	Paw Paw, IL	0.34M	838
Mark, IL	Thru	545	Scarboro, IL	1.43M	NA
Hennepin, IL	1.96M	724	Steward, IL	0.79M	248
Bureau Jct., IL	Thru	322	Creston, IL	1.72M	662
Tiskilwa, IL	Thru	798			
Wyanet, IL	Thru	968			
Sheffield, IL	Thru	901			
Mineral, IL	Thru	232			
Annawan, IL	Thru	867			
Atkinson, IL	Thru	956			
Geneseo, IL	Thru	6,549			
Colona, IL	Thru	5,087			
Carbon Cliff, IL	Thru	2,071			
Silvis, IL	Thru	7,604			
Moline, IL	Thru	43,116			
Rock Island, IL	Thru	38,877			
IL Subtotals	28 towns	173,343		16 towns	22,237

Iowa

(Bettendorf, IA)	0.54M	34,707
(Riverdale, IA)	0.96M	410
Davenport, IA	Thru	102,157
Walcott, IA	Thru	1,623
Stockton, IA	Thru	198
Durant, IA	Thru	1,832
Wilton, IA	Thru	2,808
Moscow, IA	Thru	361
Atalissa, IA	Thru	305
West Liberty, IA	Thru	3,726
Downey, IA	Thru	NA
Iowa City, IA	Thru	71,591
University Hgts, IA	Adj	1,120
Coralville, IA	Thru	20,092
North Liberty, IA	Thru	14,971
Swisher, IA	Thru	921
Cedar Rapids, IA	Thru	126,326

IA Subtotals	17 towns	363,076
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Wisconsin

Sharon, WI	1.86M	912
Clinton, WI	1.10M	893
Avalon, WI	0.95M	421
Emerald Grove, WI	Adj	853

WI Subtotals	4 towns	3,079
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Totals:

Mileage	312	- 82% longer	171*	281 total
Towns & Cities	56	- 2.4 x GLBR	23*	31 total
Population	567,808	- 12 x GLBR	42,146*	47,643 total

Notes:

- * Denotes “apples to apples” comparison, i.e. includes only the portion of the GLBR route that makes the comparable connections included in the KCO alternative.
- Includes towns and cities within 2 miles of the tracks
- Based on most recent census data (2015, 2013, 2010)

Lake County RAILED (LCR) response & alternative route (the “LCR Alternative”) (EI-22786)

LCR Alternative Route Map



The LCR Alternative leverages existing railroads in Northwest Indiana—primarily the NS Kankakee Line and CSX Porter Branch—to connect the eastern terminus of the GLBR Preferred Alignment with its alignment near the Indiana-Illinois border. From east to west the LCR Alternative generally utilizes the NS, CSX, and back to NS. The LCR Alternative runs through densely populated Portage, Lake Station, Gary, Hammond, Highland, Schererville, St. John, and Cedar Lake, Indiana.

GLBT has reviewed the LCR Alternative and notes the following:

- The LCR Alternative suggests that GLBT operate its trains primarily along the NS Kankakee Line and CSX Porter Branch rather than the newly designed green field route of the Preferred Alternative between Pinola and Kingsbury, IN and the Lowell, IN area. As explained previously, GLBT's objective is to create a modern, new railroad designed to move today's and tomorrow's long and heavy freight trains quickly and efficiently. Operating over rights of way created over a hundred years ago would not achieve this objective.
- The LCR Alternative from the Pinola/Kingsbury area to the Lowell area would be about 80 miles long. The corresponding segment of the Preferred Alternative would be approximately 48 miles long.
- Trains traversing the LCR Alternative would consume far more time and fuel than trains using the Preferred Alignment, not only because the longer distance, but also due to the need to meet and pass the freight trains currently using the existing tracks and interchanges.
- As discussed in connection with the other Commenter Alternatives, there can be no assurance that the owners of the rail lines included in the LCR Alternative would agree to grant GLBT the rights to use their tracks and/or rights of way and property. Also, if existing lines were to be allowed, a conflict of interest regarding dispatching of owner railroad trains vs. GLBT trains would arise.
- The long-established rail lines incorporated in the LCR Alternative pass through 25 towns and cities with a total population of approximately 435,000. The corresponding segment of the Preferred Alternative would pass within two miles of seven towns and cities with a total population of about 20,000 (See attached list of affected towns and cities).
- Because the LCR Alternative runs through many towns and cities on existing rail lines it would be within two miles of at least 74 schools, seven immediately adjacent to the tracks. The corresponding portion of the Preferred Alternative would pass within two miles of only 7 schools and be immediately adjacent to none.
- Use of existing rail lines with dense adjacent development would make it far more expensive and difficult to construct interchange facilities with other rail lines, if those facilities could be built at all. GLBT's planned operations require long holding tracks for complete trains, which few of the existing crossings of the LCR Alternative with other railroads could accommodate. Putting these holding tracks in populated areas would result in noise, vibration, and other impacts for far greater populations than the Preferred Alternative and greater exposure to vandalism, theft, and tampering.
- The LCR Alternative's connection to CN at Hayes in Highland, IN would require sharp curvature with correspondingly slow track speed, unsatisfactory for GLBR trains and potentially interfering with CN train traffic.

- While the Lake County RAILED response did not offer any information about the impact the LCR Alternative would have on environmental features such as wetlands, parks and nature preserves, it is likely to have significant impacts on the heavily populated areas adjacent to the route. That said, the LCR Alternative would expand the CSX Porter Branch in the Salt Creek and Coffee Creek watersheds and the NS tracks in the vicinity of the Kankakee River flood plain.
- The Lake County RAILED response suggests that the LCR Alternative would “directly [access] the heart of the Northwest Indiana steel industry bypassed by the GLBT proposal.” This is misleading. The steel mills are already served by existing railroads, which would have no obligation to permit GLBR to serve the mills directly—and, given that GLBR access could dilute their own traffic from the mills, would have no incentive to do so. The purpose of GLBR is not to build additional rail capacity to switch existing Chicago-area industries. The purpose of the GLBR is to move freight that neither originates or terminates in the Chicago Terminal service area and its industries. Service into and out of the Northwest Indiana steel industry would be enhanced by construction of GLBR, since routing through traffic around Chicago would enable the existing rail carriers to better serve their steel industry customers by reducing congestion in the Chicago Terminal.
- Lake County RAILED asserts that the LCR Alternative “Eliminates construction of 63 miles of rail line through fertile farm land.” The portion of GLBR that the LCR addresses is 48 mainline miles from its eastern terminus to the NS Kankakee Line and 14 miles of branch line to Kingsbury. Most of the Kingsbury branch utilizes a former railroad right-of-way and the portion of the GLBR mainline in question is not entirely farm land.
- Another Lake County RAILED assertion is that the LCR Alternative “Connects with CN so that CN trains could reach the newly rebuilt Kirk Yard in Gary.” This ignores the fact that CN already has a route from the East to Kirk Yard via Griffith. The Preferred Alternative would give CN the option of routing freight traffic moving through Chicago around the city, relieving congestion on its Chicago lines and pressure on Chicago-area freight yards like Kirk.

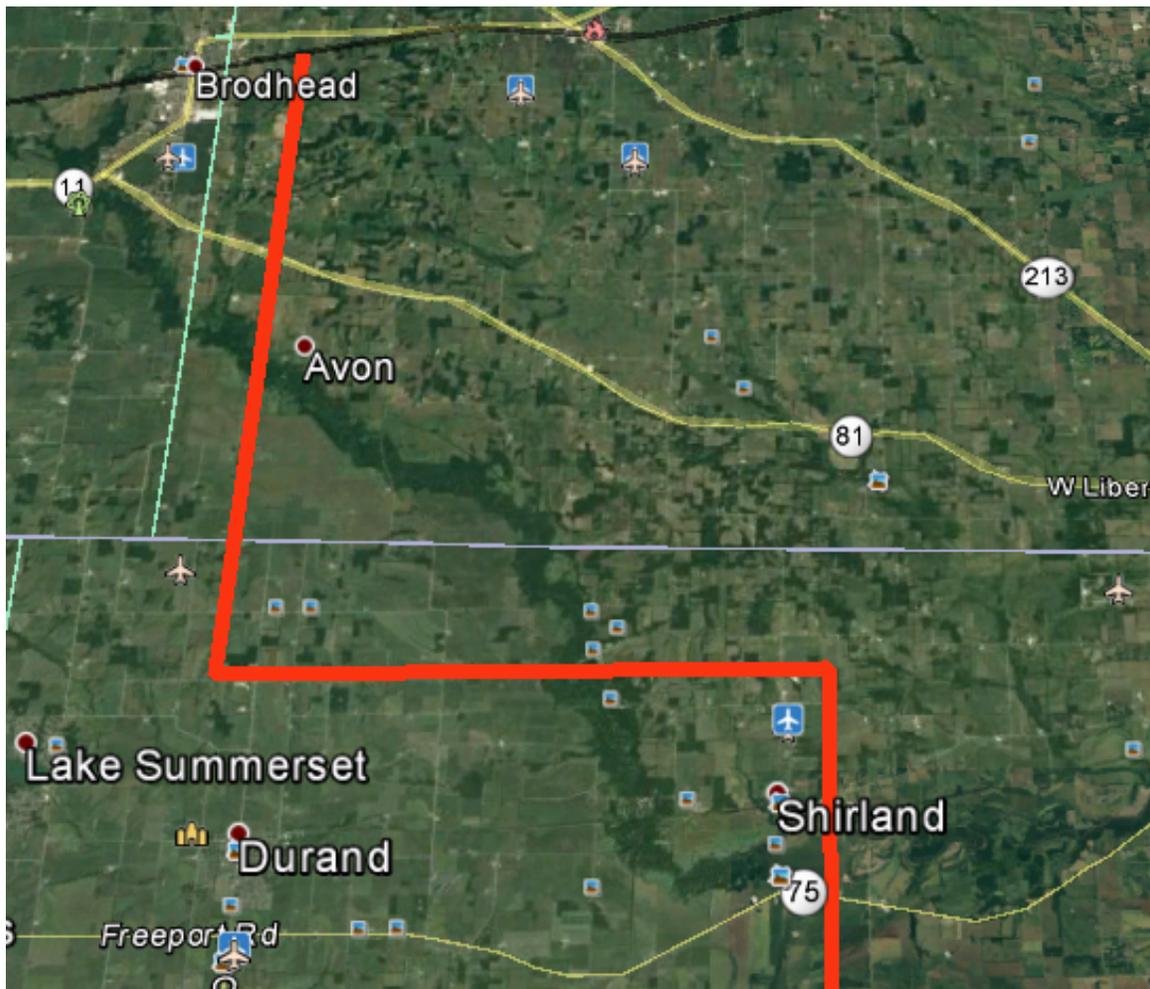
Conclusion: The LCR Alternative relies on GLBT negotiating agreements with the existing freight carriers to use their properties to GLBT’s benefit by opening their tracks and rights of way to GLBR and its trains. For the reasons explained in previous Commenter Alternatives, such negotiations would be unlikely to achieve success. The railroads would have little operational or commercial incentive to permit GLBT to operate over their tracks. In addition, the LCR Alternative would be longer than the Preferred Alternative, require difficult, costly track layouts and offer severely limited opportunity for constructing connecting tracks with other railroads. For these and the reasons detailed above, the LCR Alternative is not feasible for GLBT’s intended purpose.

POPULATION CENTERS

LCR Alternative			GLBR		
<u>Town or City</u>	<u>Distance</u>	<u>Population</u>	<u>Town or City</u>	<u>Distance</u>	<u>Population</u>
Indiana					
Union Mills	Thru	2,212			
Westville	0.41M	5,662	Westville, IN	1.05M	5,662
Valparaiso	1.96M	32,626	Wanatah, IN	1.54M	1,034
Chesterton	0.41M	13,433	Malden, IN	0.36M	NA
South Haven	Thru	5,282	Boone Grove, IN	1.09M	80
Portage, IN	Thru	36,738	Hebron, IN	0.67M	3,731
Lake Station, IN	Thru	12,054			
New Chicago, IN	0.29M	1,999			
Gary, IN	Thru	77,156			
Hammond, IN	Thru	77,614			
Munster, IN	1.69M	23,270			
Highland, IN	Thru	23,285			
Griffith, IN	0.75M	16,619			
Hartsdale, IN	Thru	23,727			
Schererville, IN	Thru	28,791			
Dyer, IN	1.21M	16,051			
St. John, IN	Thru	16,495			
Cedar Lake, IN	Thru	11,706			
Creston, IN	Adj	NA			
North Hayden, IN	Thru	NA			
Lowell, IN	0.58M	9,402	Lowell, IN	0.75M	9,402
Belshaw, IN	Thru	NA	Belshaw, IN	Adj	NA
Schneider, IN	Thru	277			
Shelby, IN	Thru	539			
IN Subtotals	24 towns	434,938		7 towns	19,909
Totals:					
Mileage	80	- 29% longer		62*	(281 total)
Towns & Cities	24	- 3.5 x GLBR		7*	(17 total)
Population	434,938	- 22 x GLBR		19,909*	(33,782 total)

Notes:

- * Denotes “apples to apples” comparison, i.e. includes only the portion of the GLBR route that makes the comparable connections included in the LCR alternative.
- Includes towns and cities within 2 miles of the tracks
- Based on most recent census data (2015, 2013, 2010)
- Does not include revised population of Cedar Lake’s annexation of surrounding unincorporated areas

Avon Bottoms Hunting Grounds and Sugar River Bottoms Maps and Commentary

From Wisconsin DNR Website: <http://dnr.wi.gov/topic/lands/wildlifeareas/avon.html>

Avon Bottoms Wildlife Area

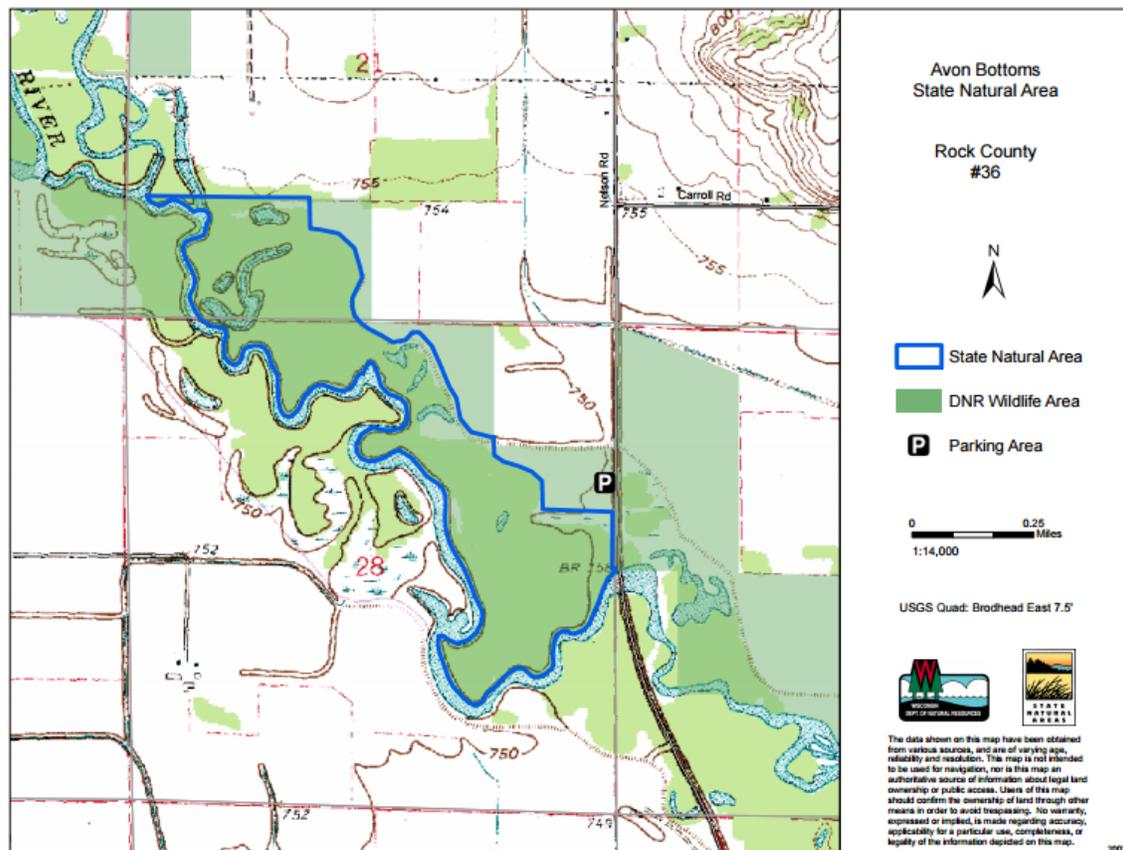
Avon Bottoms Wildlife Area is located in the southwest corner of Rock County. The property currently consists of 2,835 state-owned acres, four acres of easements and 714 acres of leased lands. The property follows the Sugar River bottoms through the Rock County Town of Avon, from County Highway T on the Rock/Green County line to the Illinois border.

Avon Bottoms features a lowland hardwood forest in the floodplain of the meandering Sugar River. Large silver maples, swamp white oaks, and green ash dominate the diverse canopy of this wet-mesic forest. Other tree species are shagbark hickory, hackberry, cottonwood, bitternut hickory, bur oak, American elm, and basswood. Sycamores, at the northern limit of their range, are occasionally present and black willows are common along the river. Numerous sloughs and old oxbows wind among bottomland hardwoods, grassland and agricultural cropland.

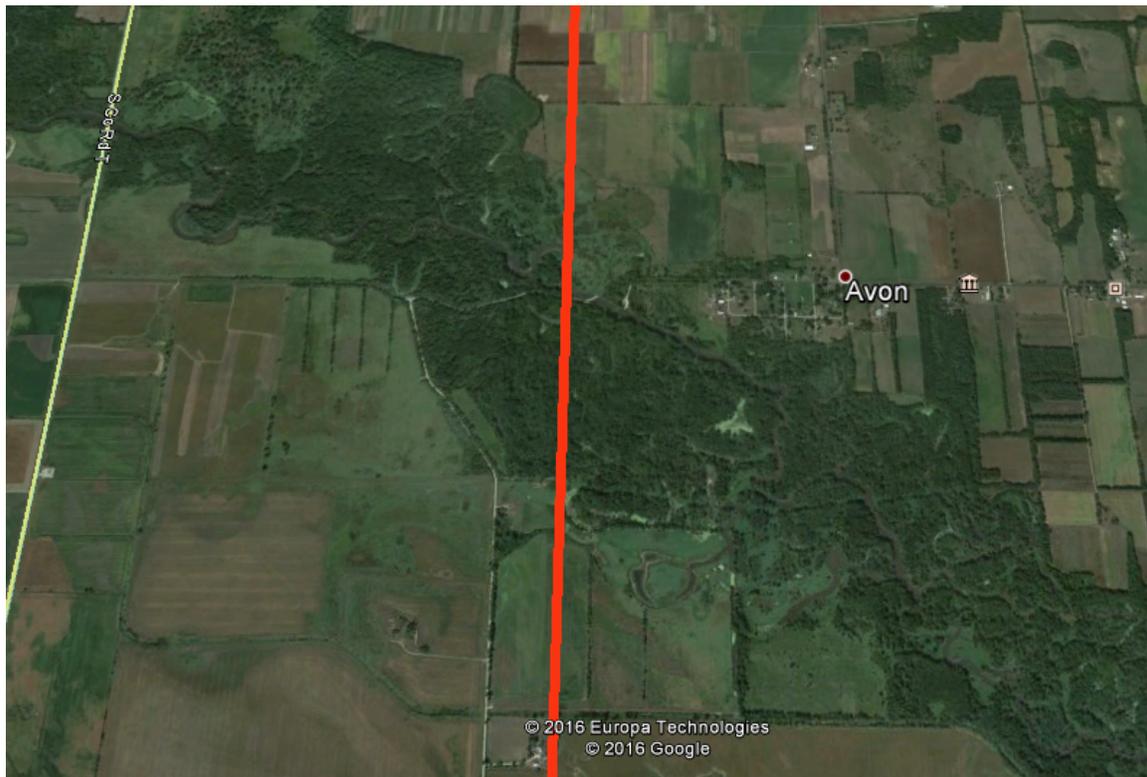
The forest contains a rich herbaceous and shrub layer with many southern-ranging species found at their northern range limit here. Common shrubs are buttonbush and dogwoods and poison ivy is abundant in two forms –shrub and climbing vine. Other common lianas include wild cucumber, river grape, woodbine, and common moonseed. The composition of the understory differs from other Wisconsin floodplain forests due to the presence of rare southern-ranging species including wild chervil (*Chaerophyllum procumbens*), and obovate beak grain (*Diarrhena obovata*). There are a number of oxbows – temporary pond areas made by the cut-off of old stream meanders – along with running sloughs and potholes, which all harbor unusual reptiles, amphibians, and invertebrates. Bird life is diverse with blue-gray gnatcatchers, tufted titmice, blue and green winged teal, and wood ducks. Rare species include yellow-throated (*Dendroica dominica*), cerulean (*Dendroica cerulea*), and prothonotary warblers (*Protonotaria citrea*), yellow-breasted chat (*Icteria virens*), yellow-crowned night heron (*Nycticorax violaceus*), blanchard’s cricket frog (*Acris crepitans blanchardi*), riverine clubtail (*Stylurus amnicola*) and russet-tipped clubtail dragonfly (*S. plagiatus*). Avon Bottoms is owned by the DNR and was designated a State Natural Area in 1958.

Link to Map of area:

<http://dnr.wi.gov/topic/lands/naturalareas/documents/topomaps/map36.pdf>



Original proposed alignment into Broadhead, WI through the Avon Bottoms State Natural Area:

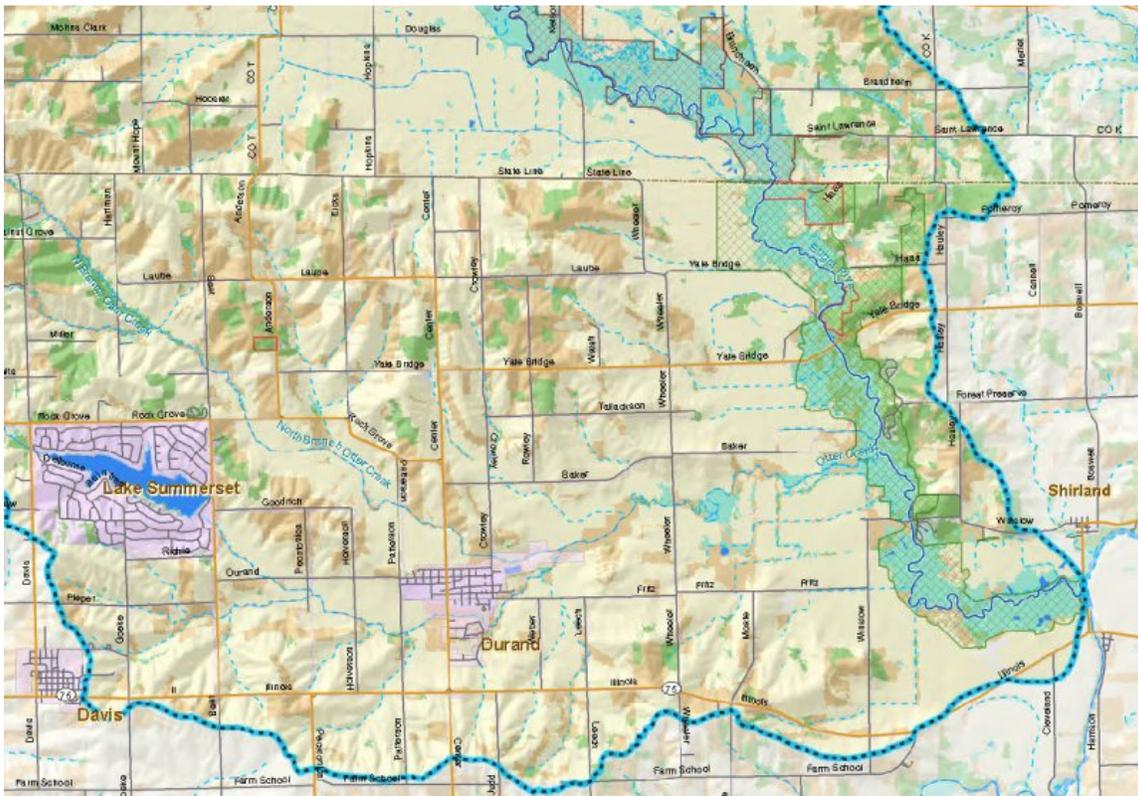
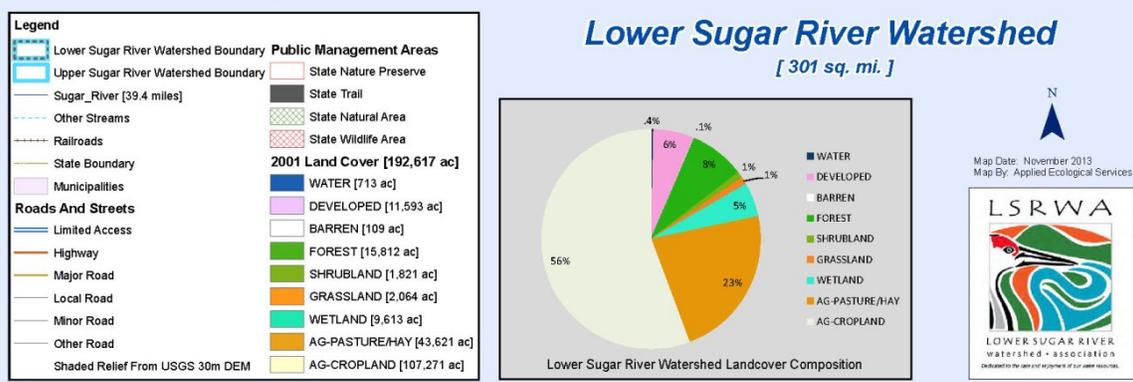


[The Lower Sugar River Watershed](#) – The Lower Sugar River Watershed is composed of the Sugar River and 13 subwatersheds. This unique watershed covers 192,617 acres (301 square miles). It begins near Albany, WI in the north, extends west to the outskirts of Monroe, east to Orfordville, and south to Shirland, IL where it flows into the Pecatonica River, crossing the boundaries of four counties and two states. The watershed covers portions of Green and Rock Counties in Wisconsin and Stephenson and Winnebago Counties in Illinois. The Lower Sugar River, as with the majority of the Sugar River basin, is largely rural in nature with 79 percent of the land use within the watershed consisting of agricultural land. The remaining land use in the watershed is a matrix of forests (8%), developed lands (6%), wetlands (5%), shrublands (1%), grasslands (1%), barren lands (0.1%), and water (0.4%).

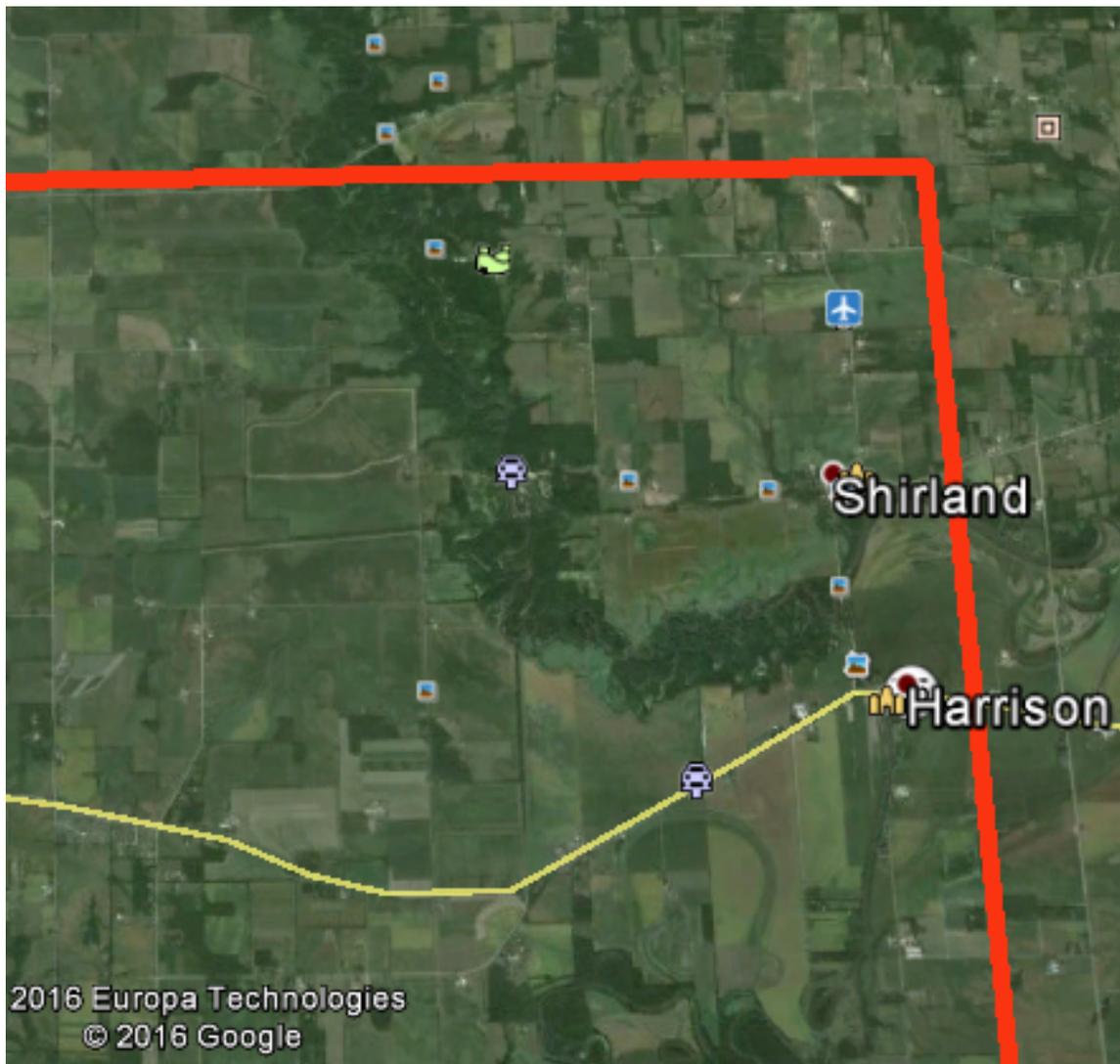
In the Lower Sugar River Watershed alone, over 7,000 acres of restored and protected lands provide flood protection, wildlife habitat, and water quality benefits in and downstream of the watershed, as well as hunting, fishing, trapping and other outdoor recreation opportunities. Of the hundreds of miles of streams and rivers that drain the Sugar River basin, several are considered Outstanding or Exceptional Resource Waters, which are higher quality stream environments containing rare fishes and other aquatic life forms. Three streams in the LSRW are classified as Impaired Waters under the [Clean Water Act Section 303\(d\)](#), due to excessive sediment and nutrient loading. Impaired waters do not meet water quality standards and may not support fishing, swimming, recreating or public health and welfare.

Link to Lower Sugar River Watershed Map:

http://www.lsrwa.org/images/uploads/documents/LSRWA_Landcover_Web.jpg



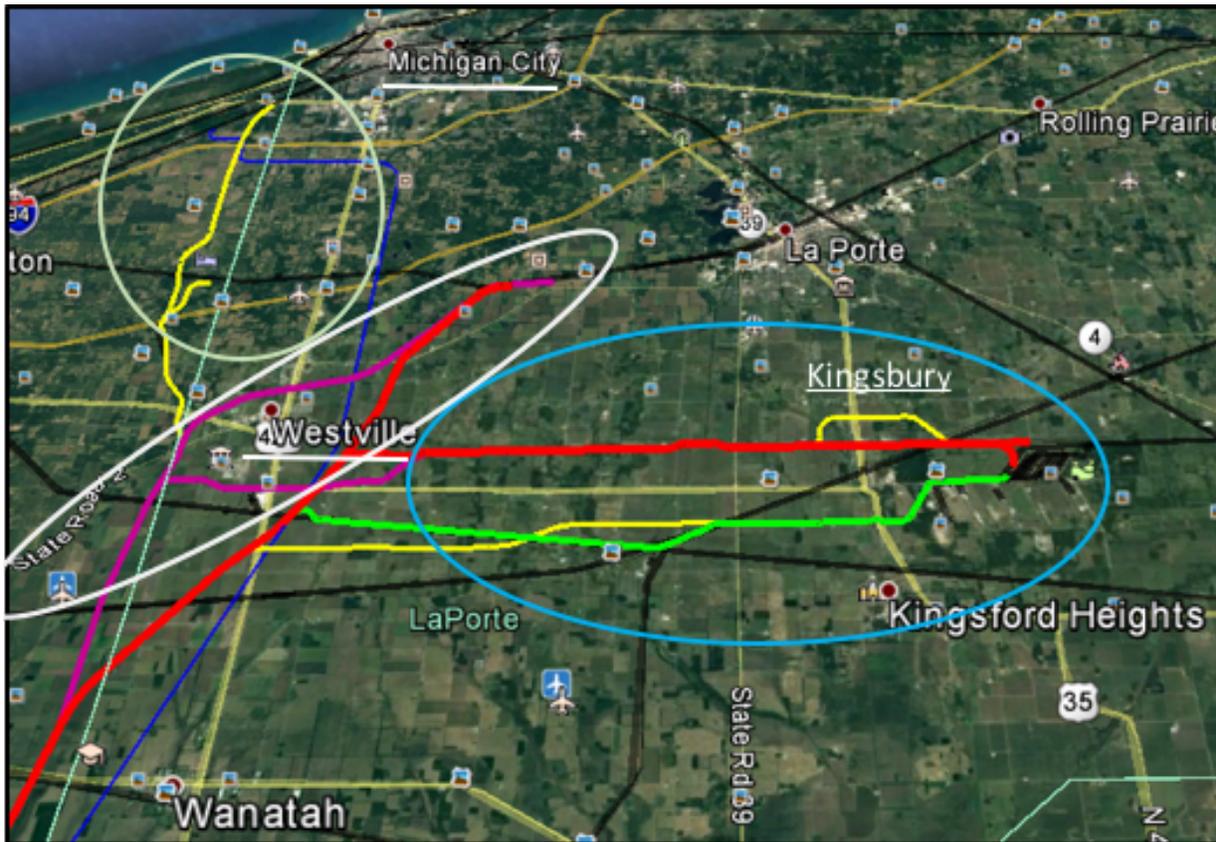
Proposed GLBR Route north and west of Shirland, IL crossing the Lower Sugar River Watershed:



Summary and Conclusion

The environmental sensitivity of the area between Shirland and Brodhead along with gradient and alignment challenges make this alternative for the construction of a route to connect with WSOR too costly and compromised from an engineering and terrain perspective to be consistent with the engineering, topographical, and environmental requirements of the GLBT project.

Michigan City, IN – Westville, IN – Kingsbury, IN Alternate Route Review

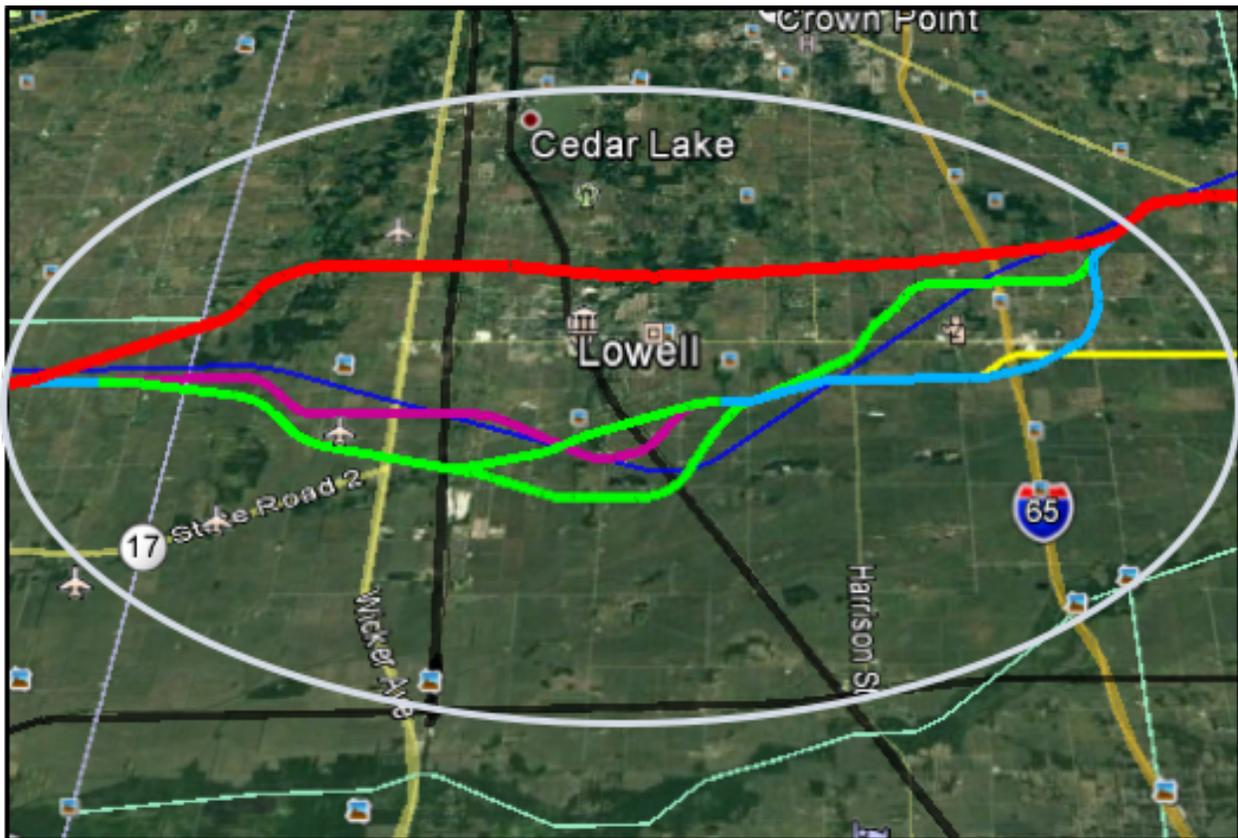


Michigan City, IN – An early route alternative (**yellow**) was determined to be a relatively low volume connection. Investigations from original route studies and driving alternative routes in the field revealed a wildlife park, Indiana DNR hunting grounds, wetlands, and gradient issues reaching CSX west of Michigan City. Solution is to use Kingsbury Branch (**red**) to deliver relevant CSX traffic to South Shore Freight for delivery to CSX in Michigan City.

Westville, IN – Alternative to original preferred route (**magenta**) was designed when informed by Westville officials that the line would divide the city as there was a narrow portion of city boundaries GLBT’s original Preferred Alternative intersected. The new preferred alternative (**red**) provides greater distance between GLBT’s new Preferred Alternative and residential areas and avoids Westville city limits.

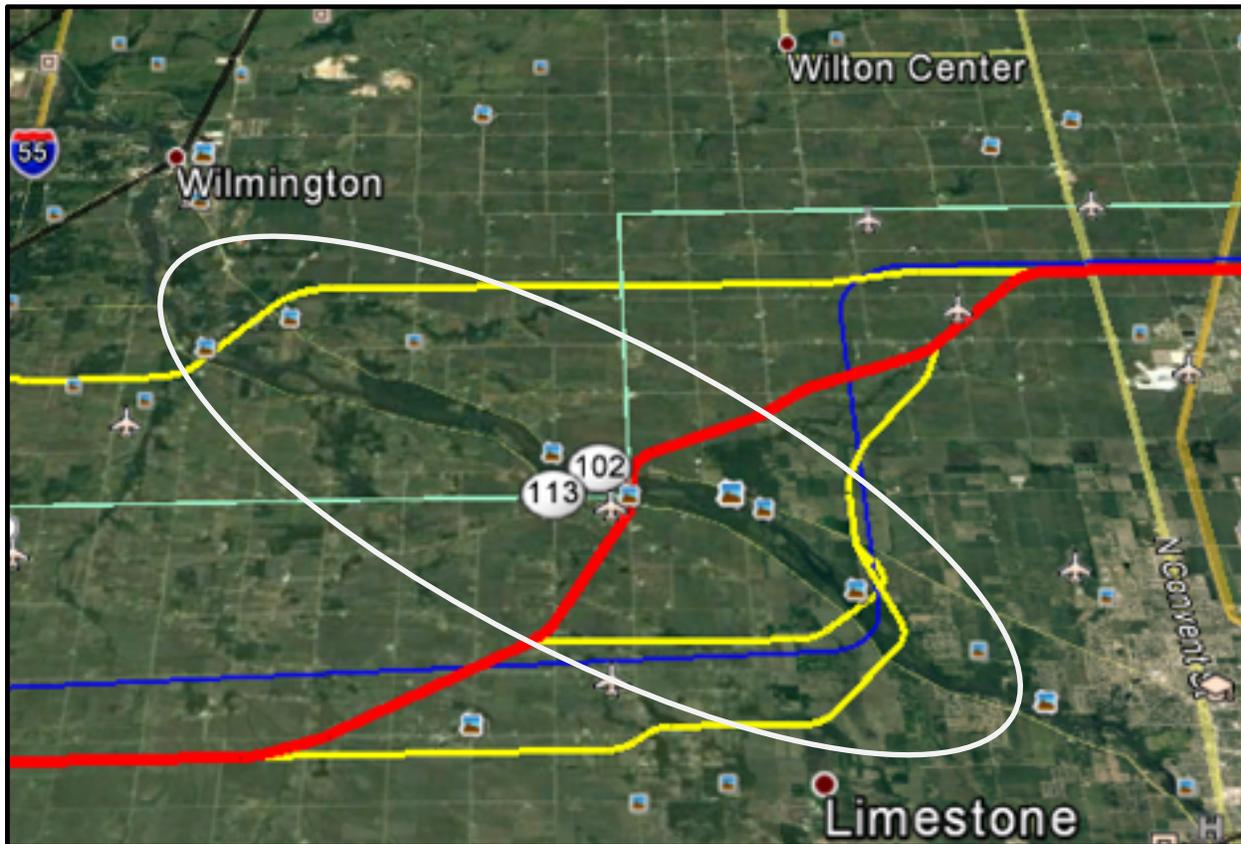
Kingsbury, IN – Alternatives (**green** and **yellow**) to the original preferred route (**magenta** and **red**) were considered to create a different entry point to Kingsbury. Alternatives disrupted more farmland and irrigation. A modification of the original preferred route entry was designed (**red**) to connect to the new Westville alignment and reduce disruption to surrounding farmland.

Lowell, IN Alternate Route Review



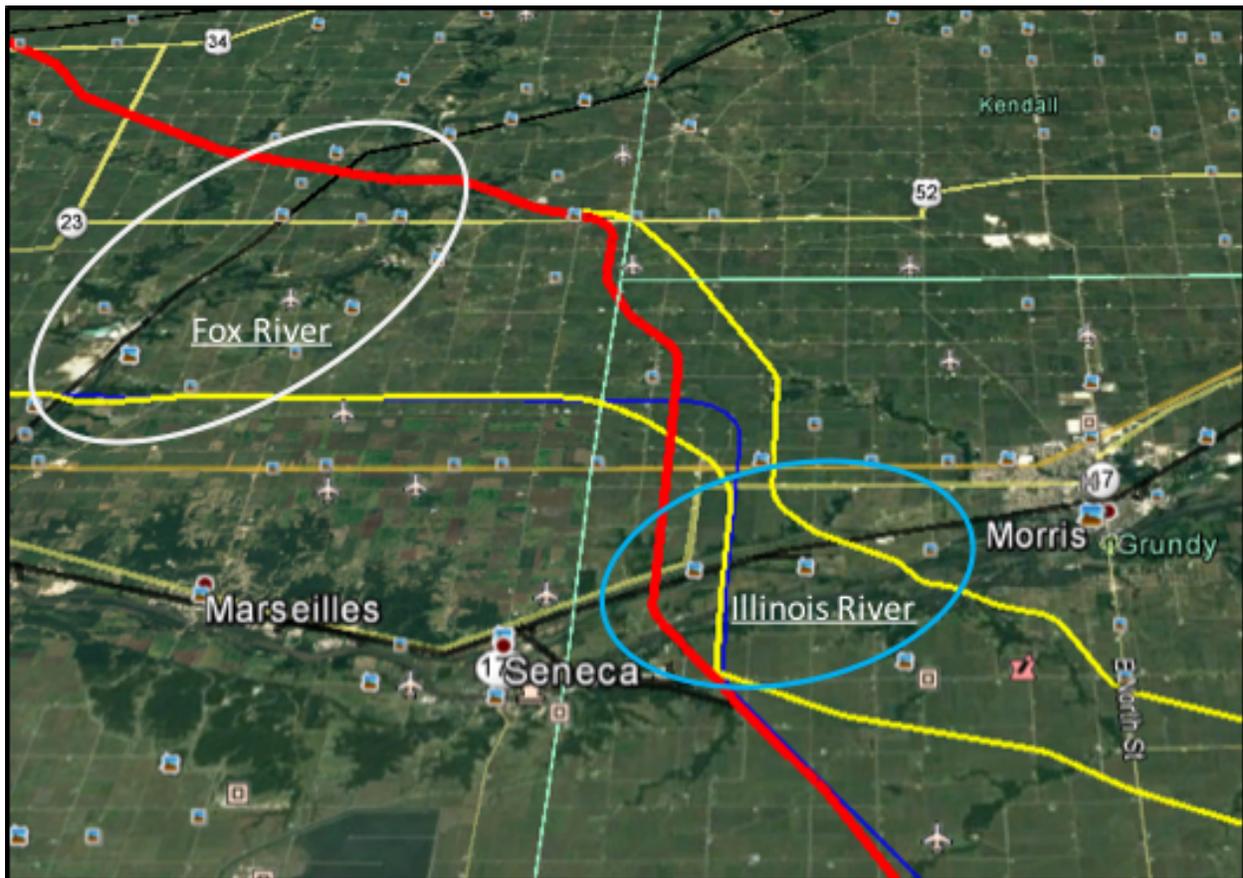
Lowell, IN – After the original preferred route was published, city officials informed us that the route would run through the city’s water well field and within ½ mile of the new Middle School. Alternatives were designed and evaluated before the new preferred route was chosen. Although they remain technically feasible, the **dark blue**, **light blue**, **green**, **yellow** and **magenta** routes are not preferred as they are either too close to the water well field, did not greatly improve the distance from the Middle School, were in or bordering the Kankakee River Flood Plain, or a combination thereof. The new preferred route (**red**) follows a high voltage utility corridor and disrupts less greenfield land along that portion of the route.

Kankakee River Crossing Alternate Route Review



Kankakee River – The Kankakee River crossing was studied extensively with the preferred route outlined in **red** and four alternatives outlined in **yellow** and **blue**. In each case the four alternatives passed through or adjacent to populated areas on both sides of the river. In the case of the three alternatives on the southeast side it was discovered that the proposed crossing area has been obtained by the State of Illinois to make the state park continuous in this location. The alternative on northwest side was reviewed in the field and found to have lakes, wetlands, greater population density as well as gradient challenges that resulted in its rejection (this route was driven with OEA staff in November 2015). The preferred route, in **red**, runs parallel to the Warner Road bridge, a two lane bridge already in service. The route will not disrupt the two roads paralleling the river, will not disrupt the northern walking trail, and would be west of the waterfowl hunting area along the river.

Illinois and Fox River Crossings Alternate Route Review



Illinois River – As a preferred crossing across the Illinois River was sought, various alternatives were considered (shown in **yellow** and **dark blue**). Establishing a point of interchange with the CSX/Iowa Interstate Railroads on the east side of Seneca, IL, residences lining both sides of the river, high bluffs on both sides of the river, and height of the bridge necessary to clear river traffic to meet navigation requirements were taken into account. Additional alignments within 100 feet or less were considered with the preferred alignment (**red**) meeting these and the engineering, topographical, and environmental requirements of the project.

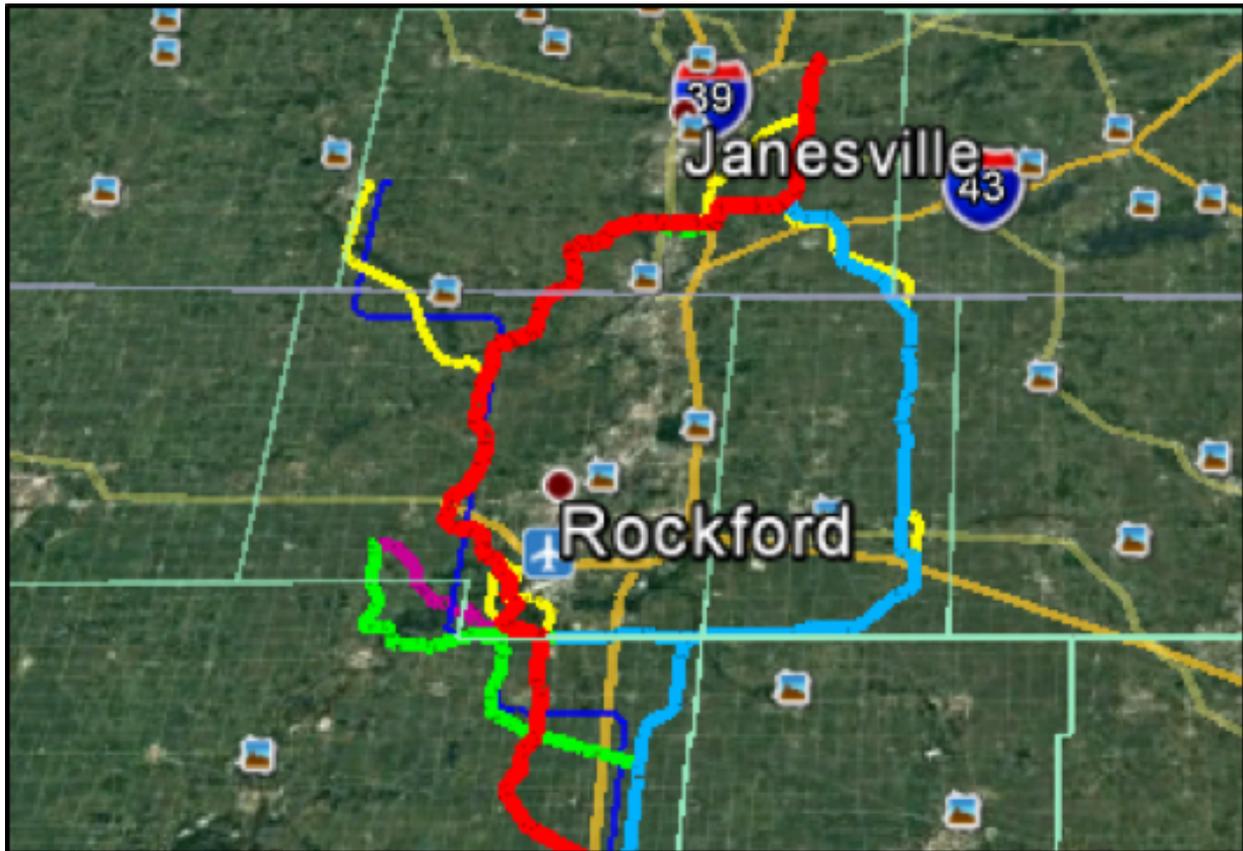
Fox River – The Fox River Crossing near Sheridan, IL shown in **yellow** was considered initially and rejected as the bridge would be extraordinarily high and long to cross the river and the alignment was too close to a small airport for clearance issues. The preferred route (**red**) is a much shorter bridge in length and height, avoids the airport clearance issue, and results in a shorter route overall.

Rock River Crossing and Rockford, IL Alternate Route Review



Rock River – The Rock River crossing alternatives shown in **yellow**, **magenta**, **green**, and **dark blue** were considered in the original draft maps and as we looked for a preferred crossing across the river and to make a point of interchange with the Canadian National Railroad on the west side of Rockford, IL. In addition it was desired to place the railroad close to the Rockford-Chicago International Airport for economic development opportunities (Rockford has completed a study and design for an industrial park to serve the area with a rail component). The Rock River crossing analysis took into account wetlands, park lands, gradients on the north side of the river, residential density and a school on the north side of the river. The preferred route (**red**) provides the best alternative to make a shorter, lower crossing of the river work with the proposed industrial development site and have the least residential impact while meeting the engineering, topographical, and environmental requirements of the project.

Rockford East verses West to Milton, WI



Rockford, IL to Milton, WI – The original preferred route submitted on March 7, 2016 (**light blue**) was split around Rockford, making the CN and Illinois Railway connections on the west side, and connections with the UP and WSOR on the east side via Boone County. Taking into account the feedback received from the public, the economic development opportunities around the Rockford Airport and the west side of Rockford, alternative routings were investigated including revisiting the concept of a route to the WSOR to the west of Rockford (shown in **green**, **dark blue**, **yellow**, and **magenta**). The new preferred alignment (**red**) enables the GLBR to make all the railroad connections, removes the railroad from Boone County, IL entirely, reduces the farmland/greenfield impact in Rock County, WI, and passes through an industrial area between Beloit and Janesville, WI that does not currently have rail service. Also, the new alignment was adjusted to route around the vacant cemetery property in Emerald Grove, WI.

STB OEA GLBT Info Request 1 File Names	Type
Question 1 Response Files	
GLBR_Route_w_Manteno_Mar_2016 <i>Map can be printed up to 24 inches by 36 inches</i>	kmz
Question 2 Response Files	
No separate files, answers in body of response	
Question 3 Response Files	
GLBR_Alternative_Alignments_v07_09202016 <i>Spreadsheet outlining alternatives (Appendix 2)</i>	xlsx
GLBR_Alternatives_Map_15-Sep-2016 <i>File of alternative routes, this map is interactive click on different colored linw segments for data on each segment and cross reference to spreadsheet listing alternative routes for consideration as viable and rejected.</i>	kmz
Question 3 Response Files	
GLBR_Alternatives_Map_15-Sep-2016 <i>Alignment files, file is interactive as noted for Question 3 response above.</i>	kmz
Question 4 Response Files	
No separate files, answers in body of response	
Question 5 Response Files	
No separate files, answers in body of response	
Question 6 Response Files	
No separate files, answers in body of response	
Question 7 Response Files	
GIS Layer Files	
Analysis Boundary Group	kmz
EarthPointTopoMap_000504	kmz
Floodways And Floodzones All (1)	kmz
Hydric Soils All	kmz
Legend for KMZ files AES	pdf
Protected And Sensitive Points Group	kmz
Protected And Sensitive Resource AREAS Group	kmz
Water And Wetlands Group All	kmz
Wetlands-Data	kmz
Question 8 Response Files	
<i>File of new Preferred Route for Google Earth and Printable Map up to 24 inches x 36 inches</i>	kmz
GLBR_Route_w_Manteno_Sep_2016	pdf
GLBR_Complete_Route_13-Sep-2016	kmz
Response & Appendices	
GLBT_OEA_Response_Sep20-2016 <i>Repsonse</i>	pdf
GLBT_OEA_Response_Sep20-2016_App1 <i>Closer-In vs. Further-Out Route Concepts</i>	pdf
GLBT_OEA_Response_Sep20-2016_App2 <i>Route Alternatives Considered</i>	pdf
GLBT_OEA_Response_Sep20-2016_App3 <i>Alternative Route Commentary</i>	pdf
GLBT_OEA_Response_Sep20-2016_App4 <i>Brodhead Alternative</i>	pdf
GLBT_OEA_Response_Sep20-2016_App5 <i>New Preferred Route Commentary</i>	pdf
GLBT_OEA_Response_Sep20-2016_App6 <i>File Index</i>	pdf