Route 120 Corridor Planning Council
Lake County, Illinois

Potential Barriers, Constraints, Opportunities & Resources

Technical Task Force Report

Joint Task Force Meeting - May 4, 2006

Table of Contents

Potential Barriers, Constraints, Opportunities & Resources

Potential Design / Engineering Barriers

- New Alignment Specific:
  - Two railroad crossings - Wisconsin Central and Metra Milwaukee District North Line - Need to have grade separations since neither the Illinois Commerce Commission nor Metra will allow additional at grade crossings. This will escalate the costs of any roadway improvements.
  - Waste Disposal Site and drainage channel is in the corridor
  - Traditional and Innovative Financing Plan
- Existing Road Specific:
  - Two railroad crossings - Wisconsin Central and Metra Milwaukee District North Line - Both near intersections and may desire grade separations. This will escalate the costs of any roadway improvements.
  - Traditional Financing Plan

Design / Engineering Constraints

- New Alignment Specific:
  - Harris Rd. emergency access to Prairie Crossing subdivision
  - Upgrade is needed of the acute angle Rte. 83 and Rte 137 intersection along with the at-grade railroad crossing
  - Town Line Rd is a private road
  - Campbell Airport (private) is in the corridor
  - There is an established sports club in the corridor
  - Public Road access - Full Controlled access vs. Partial Controlled access vs. at grade access
  - Private Property Access - No access vs. partial access
- Existing Road Specific
  - Public Road access – At-grade access.
  - Private Property Access – New partial access and existing unrestricted access.
  - Minimum existing ROW widths
- Both New Alignment and Existing Road
  - Consultant must use same models as LCDOT: VISUM & VISSIM
  - Existing interchange at I-94 is only a partial
  - The approach roadway for the Des Plaines River bridge is in the floodplain
  - Poor alternate road access to south side of IL 120 (I-94 to US Rte 45).
  - Squaw Creek crosses the corridor
  - Fairfield Rd.- most of the population growth in corridor will occur west of Fairfield Rd. Time to improve Route 120 is now.
  - Coordinate with ongoing Volo transportation study.

Design / Engineering Opportunities

- Four lane section of 120 on east and west ends of corridor
- Strategic regional arterials (SRA) link the corridor
- 4 existing interchanges
- Existing freeway portion of 120
- Existing four lane capacity of bridge over Des Plaines River
- Portions of the alignment are compatible with the Regional Transportation Plan
- Portions of the alignment are compatible with the Year 2020 Lake County Transportation Priority Plan
- Existing state owned ROW
- Several additional land service highway connections are possible - Almond Rd, Atkinson Rd, Hainesville Rd and Cedar Lake Rd
- Bacon Rd could be closed at the new alignment

Design/Engineering Resources

- Lake County Transportation Improvement Project (LCTIP) Study
    - LCTIP Transportation Systems Performance Report
    - LCTIP Alternatives Development and Evaluation Report
- IL Route 120 Strategic Regional Arterial (SRA) Report (Draft)
- Belvidere Boulevard Study – Liberty Prairie Foundation

Segment Mainline Characteristics

All Segment Summary: Mainline Characteristics

NAME	TYPE	LIMITS	Classification	AADT	MAX	MIN
E1	Existing	Green Bay Rd. to US Hwy 41				
			Minor Arterial (Urban)	30500	30500	30500
Summary for 'NAME' = AllSegmentSummary (1 detail record)			**Averaged AADT for entire Segment**	30500		
E2	Existing	Green Bay Rd. to US Hwy 41				
			Other Principal Arterial	46500	46500	46500
			Other Principal Arterial	44918	46500	43500
Summary for 'NAME' = AllSegmentSummary (2 detail records)			**Averaged AADT for entire Segment**	45709		
E3	Existing	I-94 to Almond Rd.				
			Freeway and Expressway (Urban)	34838	35700	27800
			Freeway and Expressway (Urban)	35700	35700	35700
Summary for 'NAME' = AllSegmentSummary (2 detail records)			**Averaged AADT for entire Segment**	35269		
E4	Existing	Almond Rd. to US Hwy 45				
			Freeway and Expressway (Urban)	27800	27800	27800
Summary for 'NAME' = AllSegmentSummary (1 detail record)			**Averaged AADT for entire Segment**	27800		
E5	Existing	US Hwy 45 to IL Rte 83				
			Freeway and Expressway (Urban)	19300	19300	19300
Summary for 'NAME' = AllSegmentSummary (1 detail record)			**Averaged AADT for entire Segment**	19300		

NAME	TYPE	LIMITS	Classification	AADT	MAX	MIN
E6	Existing	IL Rte 83 to Alleghany Rd.				
			Other Principal Arterial	19520	20400	18200
			Freeway and Expressway (Urban)	19200	19200	19200
Summary for 'NAME' = AllSegmentSummary (2 detail records)			**Averaged AADT for entire Segment**	*19360*		
E7	Existing	Alleghany Rd. to Wilson Rd.				
			Other Principal Arterial	17741	23600	13900
Summary for 'NAME' = AllSegmentSummary (1 detail record)			**Averaged AADT for entire Segment**	*17741*		
E8	Existing	Wilson Rd. to McHenry County				
			Other Principal Arterial	18200	21800	12300
Summary for 'NAME' = AllSegmentSummary (1 detail record)			**Averaged AADT for entire Segment**	*18200*		
P1	Proposed	Green Bay Rd. to US Hwy 41				
			Minor Arterial (Urban)	30500	30500	30500
Summary for 'NAME' = AllSegmentSummary (1 detail record)			**Averaged AADT for entire Segment**	*30500*		
P2	Proposed	US Hwy 41 to I-94				
			Other Principal Arterial	45050	46500	43500
Summary for 'NAME' = AllSegmentSummary (1 detail record)			**Averaged AADT for entire Segment**	*45050*		
P3	Proposed	I-94 to Almond Rd.				
			Freeway and Expressway (Urban)	34336	35700	27800
			Freeway and Expressway (Urban)	35700	35700	35700

NAME	TYPE	LIMITS	Classification	AADT	MAX	MIN
Summary for 'NAME' = AllSegmentSummary (2 detail records)						
			Averaged AADT for entire Segment	*35018*		
P4	Proposed	Almond Rd. to Wilson Rd.				
			Proposed Roadway			
Summary for 'NAME' = AllSegmentSummary (1 detail record)						
			Averaged AADT for entire Segment			
P5	Proposed	Wilson Rd. to McHenry County				
			Other Principal Arterial	18200	21800	12300
Summary for 'NAME' = AllSegmentSummary (1 detail record)						
			Averaged AADT for entire Segment	*18200*		

Map Products

- **Base Map**
  - Depicts all roadways built as of Spring 2005, Municipal boundaries, Bodies of water, Railroads, Proposed roads, 120 Bypass Conceptual Alignment

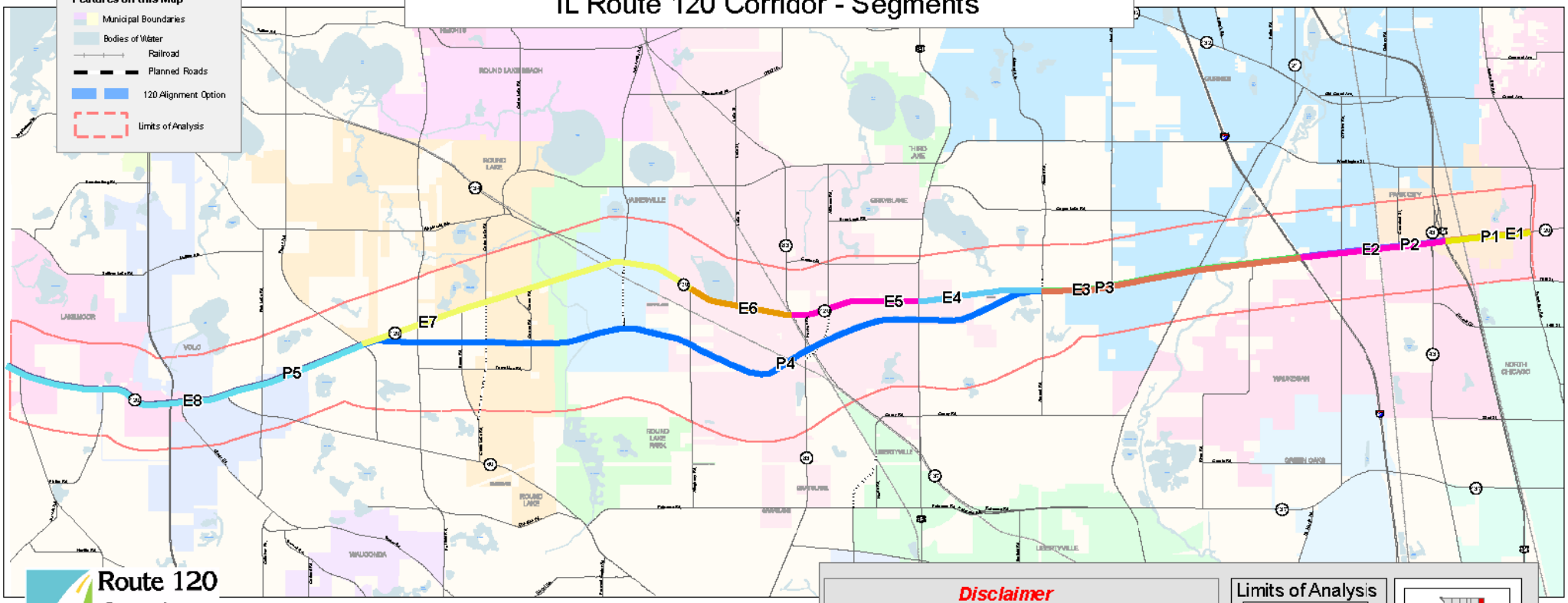
- **AADT Map** – Base map with the following additions:
  - *Annual Average Daily Traffic counts* overlaid on roadways. Data compiled from IDOT IRIS data and re-projected to overlay properly with the Lake County DOT Road Centerline data.
  - Roadways are displayed as a colored line falling into one of five ranges representing progressively greater measured AADT.

- **Functional Classification Map** – Base map with the following additions:
  - *Roadway Functional Classifications* overlaid on roadways. Data compiled from IDOT IRIS data and re-projected to overlay properly with the Lake County DOT Road Centerline data.
  - Roadways are displayed as a colored line falling into one of three general classes; Arterial, Collector, or Local Road / unclassified

- **Access Nodes** – Base map with the following additions:
  - *Potential access points / intersections* of the conceptual alignment with existing roadways and railroads.
  - Access types are differentiated.

IL Route 120 Corridor Segments Map

IL Route 120 Corridor - Segments



Route 120 Corridor Planning Council
Lake County, Illinois

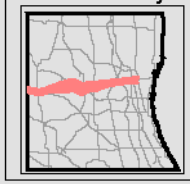
0 0.5 1 2 3 4 Miles

Name	Type	Limits
E1	Existing	Green Bay Rd. to US Hwy 41
E2	Existing	US Hwy 41 to I-94
E3	Existing	I-94 to Almond Rd.
E4	Existing	Almond Rd. to US Hwy 45
E5	Existing	US Hwy 45 to IL Rte 83
E6	Existing	IL Rte 83 to Alleghany Rd.
E7	Existing	Alleghany Rd. to Wilson Rd.
E8	Existing	Wilson Rd. to McHenry County
P1	Proposed	Green Bay Rd. to US Hwy 41
P2	Proposed	US Hwy 41 to I-94
P3	Proposed	I-94 to Almond Rd.
P4	Proposed	Almond Rd. to Wilson Rd.
P5	Proposed	Wilson Rd. to McHenry County

Disclaimer

The IL Route 120 By-Pass Conceptual Alignment depicted in this data layer is intended to be used as a general reference, is subject to change, and does not represent either a precise of a recommended final roadway alignment.
The roadway corridor shown is an approximate depiction of the IL Route 120 By-Pass alternative studied by the Illinois Department of Transporation as part of their Lake County Transportation Improvement Project in 2000.
This line work represents an interpretation of where the road might be placed and is intended to serve as an exhibit for the IL Route 120 Corridor Planning Council and associated task forces for discussion of the technical, environmental and public information issues associated with a project of this type.

Limits of Analysis



Segments

E1 E2 E3 E4 E5 E6 E7 E8 P1 P2 P3 P4 P5

Data Sources:
Illinois Department of Transportation
Lake County Department of Information and Technology, GIS & Mapping Division
Lake County Division of Transportation