



Illinois Department
of Transportation

May 12, 2011



ILLINOIS 47
US Route 14 to Charles Road

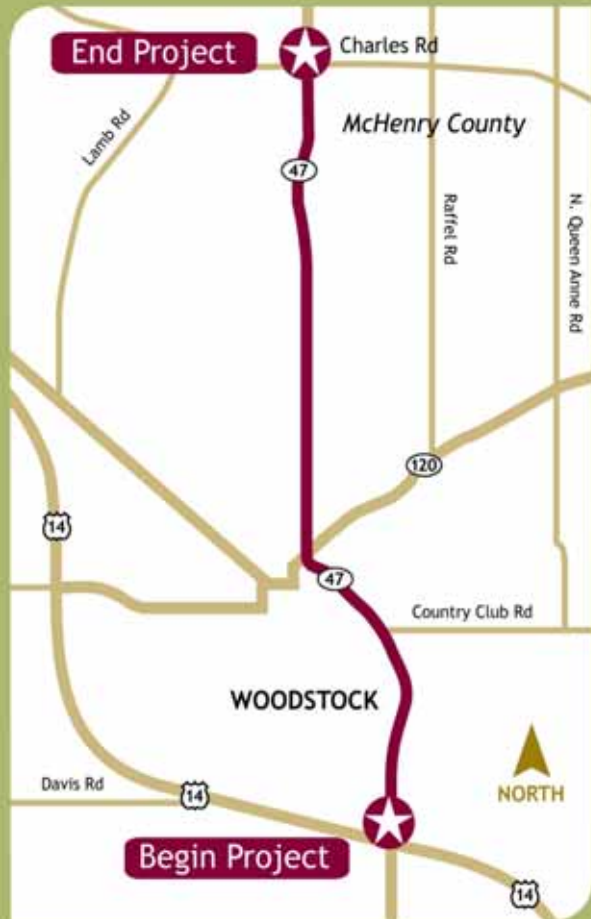
**Illinois Route 47
Citizen Advisory Group Meeting #4**



Meeting Agenda

- Review of Study Process
- Meeting Results/Milestone Decisions
- Alternatives Development
- Evaluation Criteria
- Preliminary Alternatives Presentation
- Alternatives Workshop
- Next Steps

Project Overview



- Prepare as Environmental Assessment (EA)
- CSS will facilitate an open study process
- Solicit, develop, and evaluate alternatives
- Reach consensus on a preferred alternative
- Obtain Design Approval
- Funding exists only for this Phase I Study

Project Process – Purpose & Need



Community
Involvement

- Transportation Issues
- Problem Statement

Purpose & Need

*Identify Possible
Alternatives*

*Alternatives to be
Carried Forward*

Preferred Alternative

Agency
Input





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Meeting Results/Milestone Decisions



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CAG #1 Workshop Summary – January 21, 2010

Issues and Concerns

1. Congestion
2. Safety
3. Environmental/Aesthetics
4. Access/Business Impacts
5. Land Acquisition
6. Alternative Modes of Transportation
7. Funding
8. Utilities

Goals and Objectives

1. Reduce congestion
2. Increase mobility
3. Improve safety
4. Economic development impacts
5. Sense of urgency
6. Quality of life

CAG #2 Meeting Summary – March 18, 2010

- Draft Problem Statement – Discussion/Consensus
- Presentation of Existing Conditions and Corridor Deficiencies



CAG #3 Meeting Summary – September 1, 2010



- Problem Statement Affirmed
- Purpose and Need
- Alternatives Workshop
 - 4 segments
 - 4 tables
 - Sample tools
 - Intersection improvements, signals, turn lanes, access management, roundabouts

Public Meeting #2 – September 15, 2010



SUGGESTED ALTERNATIVES

- Support for a western by-pass
- Widen Route 47 on existing alignment
- Support for eastern by-pass (Zimmerman to Raffel)
- Inclusion of sidewalks, bike paths
- Improve signal timing
- Consolidate access points
- Reconfigure Calhoun intersection
- 5-lane cross section with center continuous turn lane

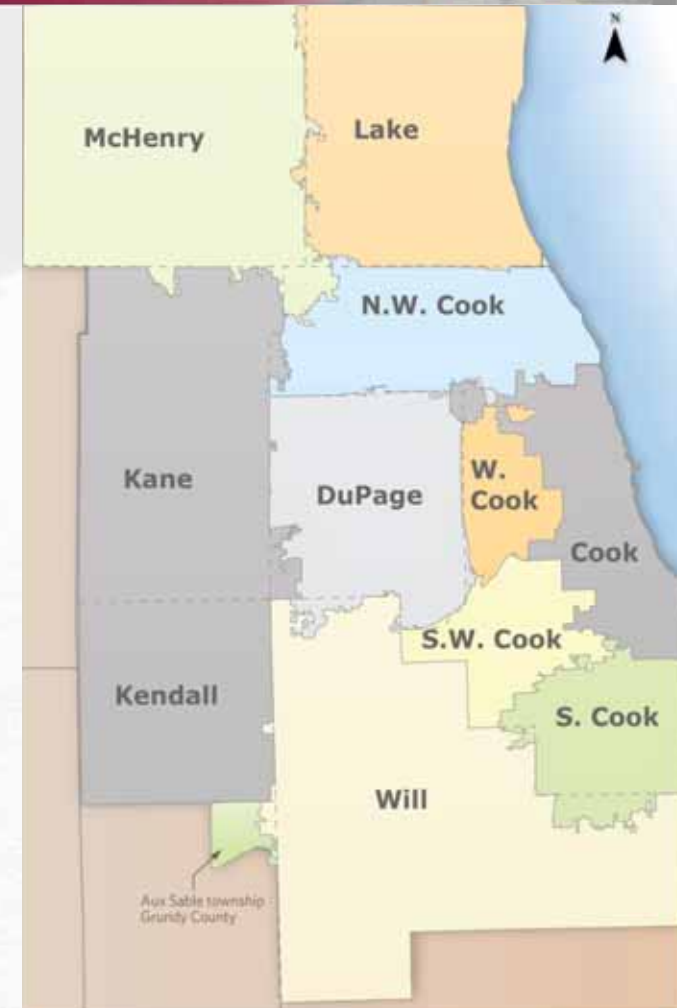


Travel Pattern Analysis



What is CMAP?

- Official Metropolitan Planning Organization (MPO) for Northeastern Illinois
- MPO's required by Federal Law
 - Urbanized areas over 50,000 population
 - Long range transportation plans
 - Clean Air Act requirements
- Travel Demand Model used



Travel Pattern Analysis

CMAP's Travel Demand Model Uses:

- Long Range Transportation Planning
 - Major project evaluation
 - Travel benefits
 - Air quality changes
- Travel Forecasts – Regional and Project Level
- Travel Pattern Analysis
(*"Select Link"*)

What's Been Happening?



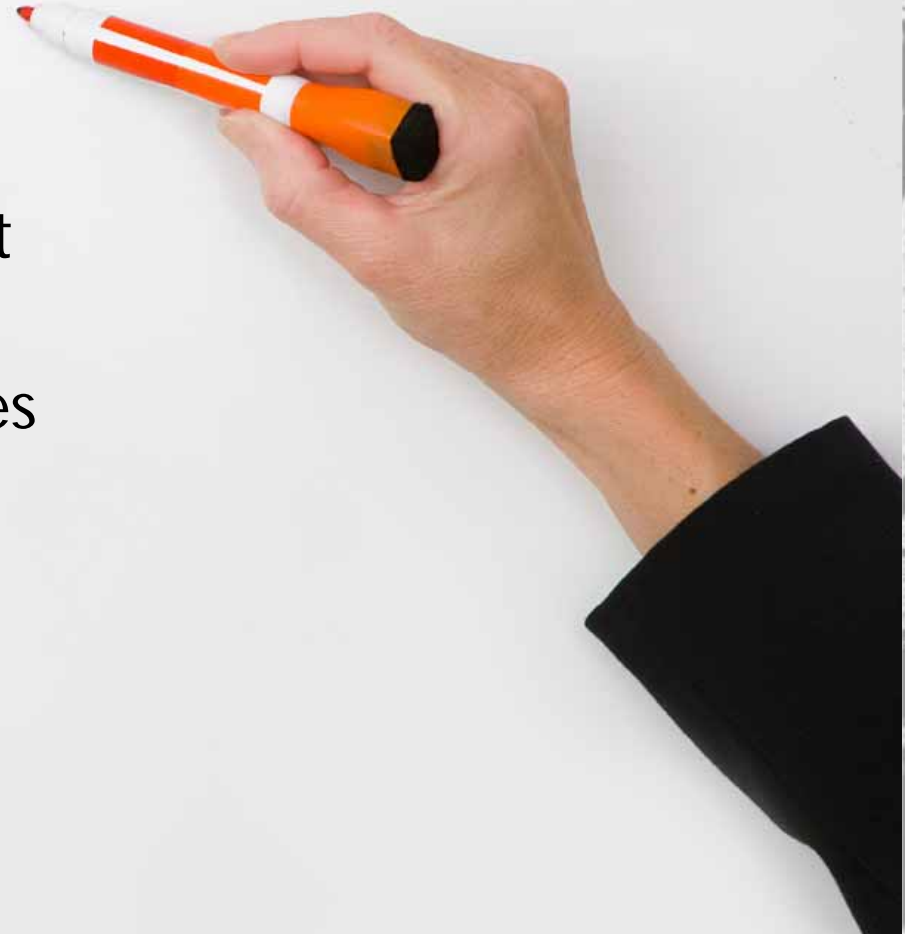
CMAP 2040 Detailed Woodstock Traffic Model

- Update from 2030 to 2040 projections
- To address bypass alternatives
- Created subarea model to more accurately predict future traffic
 - Resulted in preparation of the modeling/ alternative scenarios to be presented

What's Been Happening?

Modeling Scenarios for:

- A: Existing Alignment Alternatives
- B: Bypass Alternatives
- C: One-Way Couplet Alternatives



Existing Conditions & Deficiencies Highlights

Geometric Deficiencies

- Intersections skewed
- Union Pacific Railroad constriction
- Insufficient turn lanes
- No managed access of driveways

Bridges

- Existing UPRR vertical clearance of 14'2" vs. 14'9" standard
- **Condition:** No major structural issues; ordinary repair and maintenance expected

Existing Conditions & Deficiencies Highlights

Operation and Capacity Deficiencies

- 4 intersections - LOS D
- 2 unsignalized intersections warrant signals (Charles Rd. and St. John's Rd.)
- Lack of traffic signal coordination
- Existing and projected traffic volumes exceed design capacity of road

Existing Conditions & Deficiencies Highlights

Safety

- 635 crashes from 2006-2008
 - Majority rear-end
 - 108 injury crashes
- Intersection crashes
 - Lake Ave. and Country Club Rd. highest occurrence
 - Most injuries at U.S. 14, Lake and Judd

Existing Conditions & Deficiencies Highlights

Non-Motorized Transportation

- Intermittent sidewalks
- No bike paths in corridor
- Limited pedestrian crossings

Public Transportation

- 2 Pace bus routes serving corridor, but no regular coverage from US 14 to IL 120
- 12 Metra trains daily from Woodstock station

Purpose & Need

- Foundation for identification and evaluation of Project Alternatives
- Incorporates technical analysis and public involvement findings
 - Problem Statement
 - CAG, PM, and submitted comments
 - Technical and gathered data

IL 47 – Purpose and Need

- The purpose of the proposed action is to address transportation safety, capacity, access management, pedestrian and bicycle needs, and geometric deficiencies.

Needs:

- Safety
- Capacity/Operations
- Access Management
- Geometric Deficiencies
- Bicycle/Pedestrian Accommodation

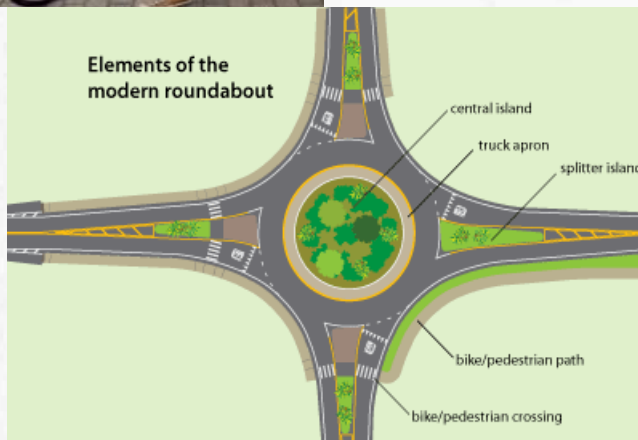




Project Elements



- Number of lanes
- Median treatment
- Roundabouts
- Edge treatments
- Bicycle/pedestrian accommodation





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Alternatives Development



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Alternatives Development

- Alternatives development combines:
 - Stakeholder input to date
 - Project purpose and need
 - Project elements
 - Analysis of existing environment
 - Technical analysis of design requirements and constraints



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Evaluation Criteria



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Evaluation Process



Evaluation Criteria - Discussion

- Environmental impacts
 - Parks, drainage, wetlands
- Accessibility
 - Traffic control, vehicles, bikes/ped
- Identified needs
 - Safety, capacity, operations/mobility
- Property impacts
 - Residential, commercial, industrial, land use plans
- Construction cost
 - Construction, maintenance

Design Considerations

- Medians - flush or barrier
- Roundabouts
- Complete Streets
- Access management



Design Considerations

- Complete Streets
 - New policy requires incorporation of bike/ped into State Hwy. projects
 - Construction cost share: 80% IDOT/20% local agency
- Access Management
 - Better traffic flow
 - Consolidation/separation of access points





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Preliminary Alternatives



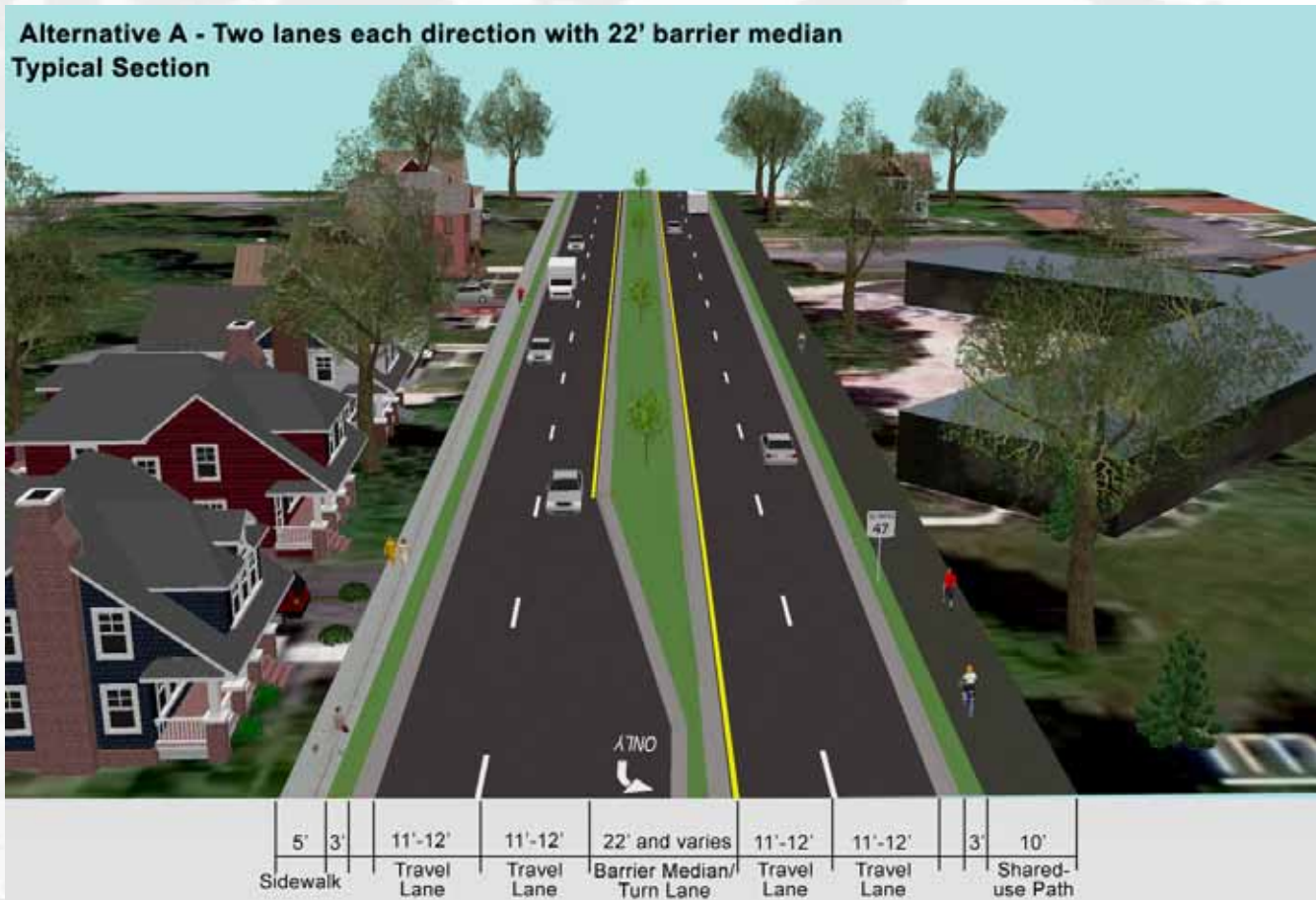
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Illinois Route 47 – Full Range of Alternatives

- A: Existing Alignment Alternatives
 - 2-lanes each direction, 22' barrier median
- B: Bypass Alternatives
 - B1: Full Western
 - B2: Full Eastern
- C: One-Way Couplet Alternatives:
 - C1: Southview to St. John's
 - C2: Southview to Ware
 - C3: Irving to St. John's
 - C4: Irving to Ware

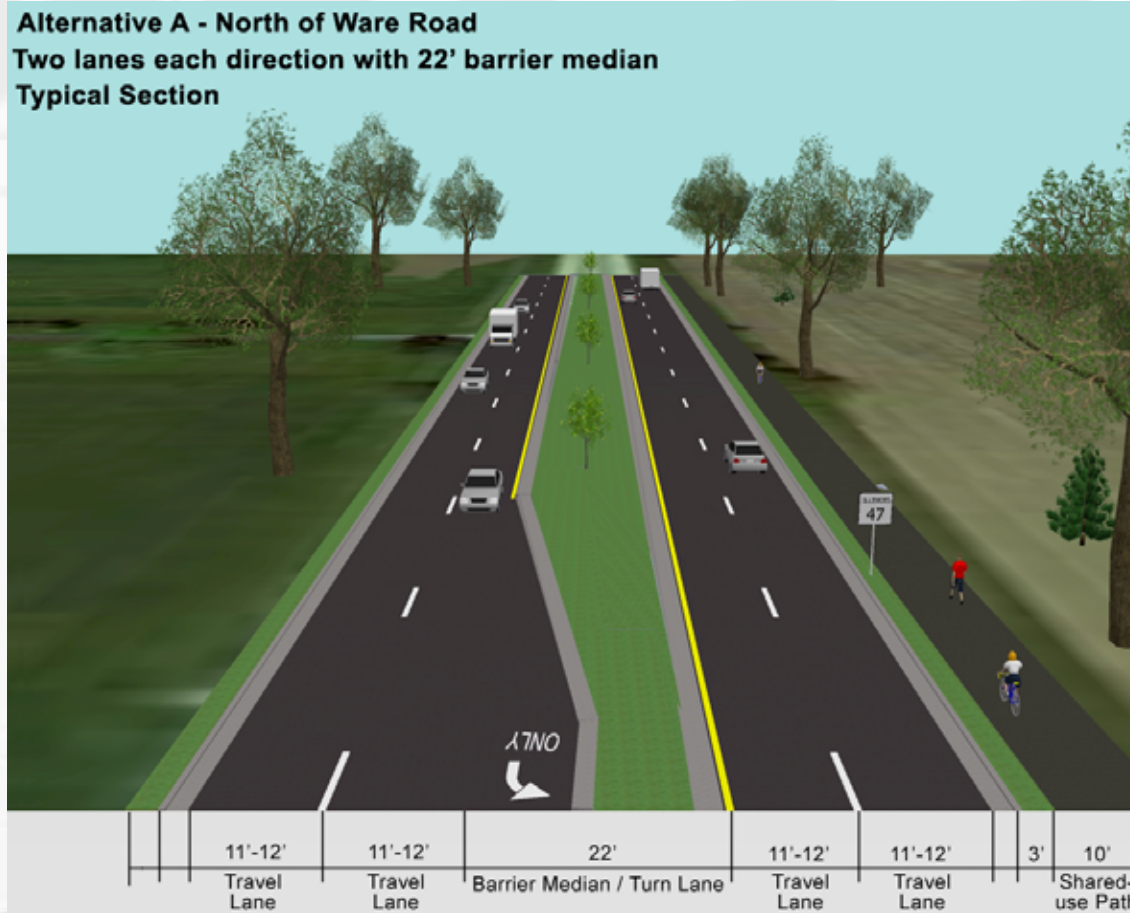
Illinois Route 47 – Full Range of Alternatives

- Existing alignment alternatives



Illinois Route 47 – Full Range of Alternatives

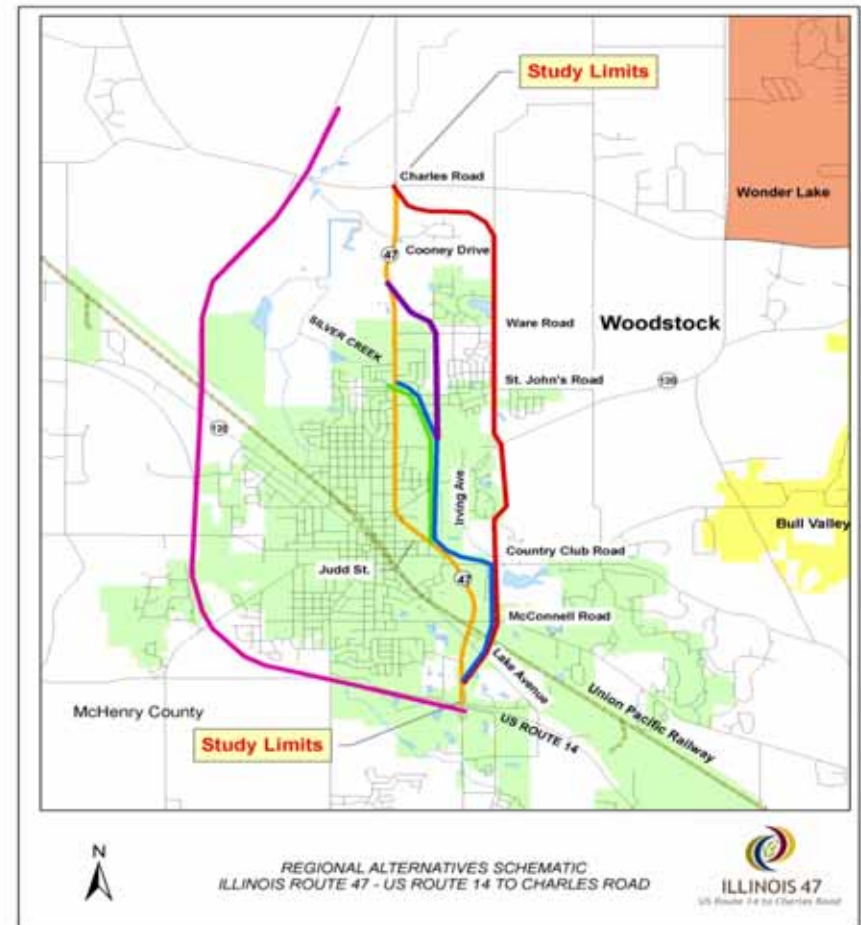
- Existing alignment alternatives



Illinois Route 47 – Full Range of Alternatives



- Bypass Alternatives
 - B1: Full Western
 - B2: Full Eastern
- One-Way Couplet Alternatives:
 - C1: Southview to St. John's
 - C2: Southview to Ware
 - C3: Irving to St. John's
 - C4: Irving to Ware



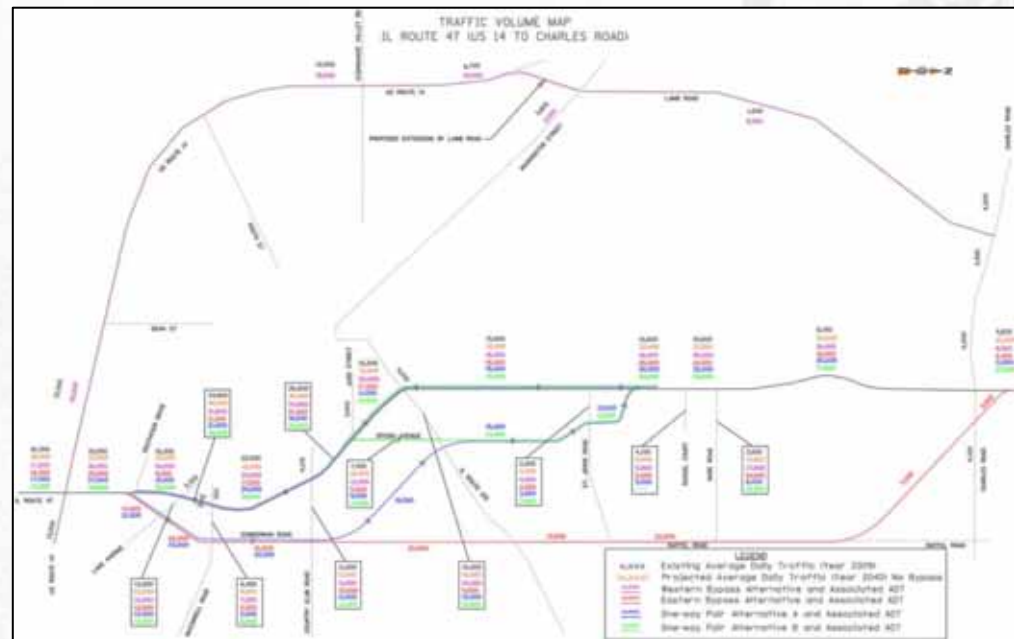
CMAP Model Results



- Schematic shows the Average Daily Traffic projected by CMAP for each alternative
- Generally, a three-lane roadway can accommodate up to 18,000 vpd and a four-lane up to 43,000 vpd

CMAP Model Results

- Existing IL Route 47
- West Bypass
- East Bypass
- One-Way Couplets (C1, C2, C3, C4)





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Alternatives Discussion Workshop



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Alternatives Discussion Workshop

How well do the alternatives:

- Satisfy project Purpose?
- Meet project Needs?
- Minimize impacts?

What changes could be made?

*Note positives/negatives of each

Alternatives Discussion Workshop

- Each table evaluates all alternatives
 - +/- 20 minutes per alternative
 - Facilitator records pros/cons
- Report back to group



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Next Steps



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Next Steps

- CAG #5 - Continue to evaluate/refine alternatives
- Public Meeting #3 - Alternatives Evaluation Continues
- Select Alternatives to be Carried Forward
- Refine Alternatives Based on Stakeholder Input/ Technical Analysis
- Presentation of Refined Alternatives to CAG, PM
- Development of Preferred Alternative





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Thank you! Questions?



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