

# Potential I-55 Improvements at Airport Road and at IL Route 126/Essington Road

Community Advisory Group  
Meeting #3  
September 21, 2011



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## Introductions

Village of **Romeoville**



**Bolingbrook**  
a place to grow

VILLAGE OF  
**PLAINFIELD**



Illinois Department  
of Transportation



**V**  
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***CAG Members***



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## Meeting Agenda

- Project Status Update
- Revised Problem Statement
- Draft Purpose and Need
- Engineering Toolbox
- Recap and Next Steps
- Open to Public Comments



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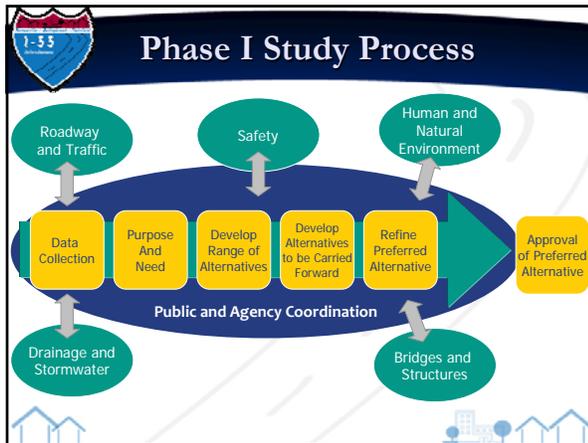
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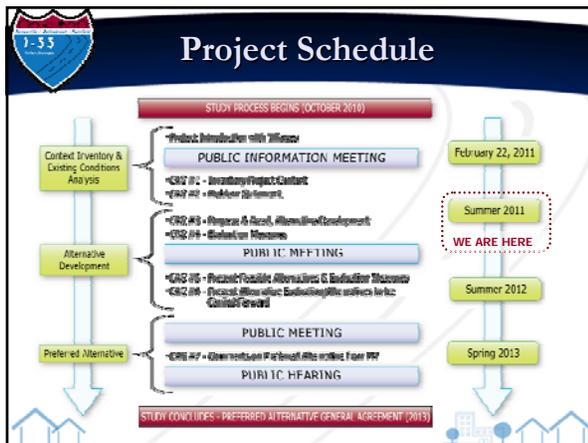
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**CAG Meeting #2**

Meeting objectives:

- Review of community context
- Draft Problem Statement workshop
- Discussion of Purpose and Need Statement
- Introduction to Alternative Evaluation and access improvement options

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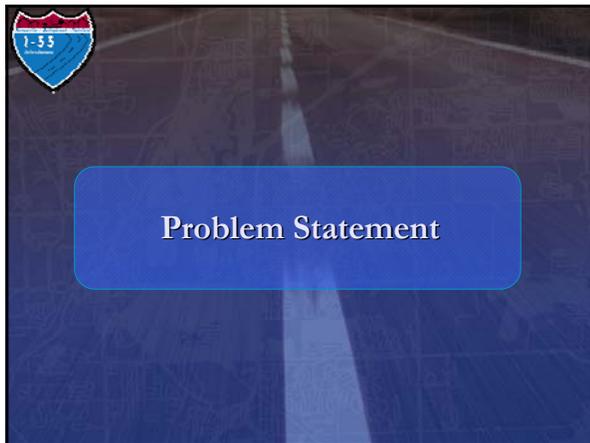
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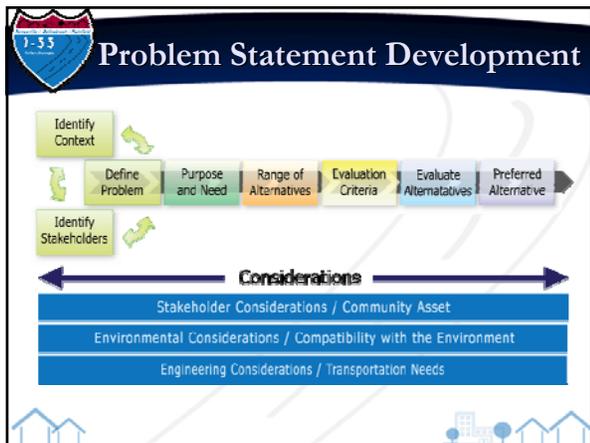
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- 1-55
- ## What is a Problem Statement?
- Concise Narrative
  - Defines a transportation situation or circumstance to be solved
  - Expresses a desired condition not being achieved
  - Identifies factors that contribute to the unacceptable performance
  - Does not describe specific solutions

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 **Revised Draft Problem Statement**

Changes Made:

- More emphasis on regional mobility
- Explanation of traffic impacts due to partial I-55 access at IL 126
- Facilitate both vehicular and non-motorized travel
- Include sensitivity to community values



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 **Open Discussion**

Revised Draft Problem Statement



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 **Purpose and Need Development**



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### What is the Purpose & Need Statement?

- Need is a tangible fact based problem – example: low Level of Service
- Purpose is an overarching statement of why to pursue the project; objectives that will be met to address the need

The Purpose and Need explain the “why” of a project. It Combines the Community Context Audit with Transportation Needs



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### Draft Purpose & Need

The purpose of the proposed action is to provide improved access to Interstate Route 55 (I-55)

- Improve regional connectivity
- Accommodate forecasted growth



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### Chicago Metropolitan Agency for Planning (CMAP)

- Planning agency for seven-county northeastern Illinois area
- Integrates future planning for land use and transportation
- Review and approve transportation projects
- CMAP projects population, employment and traffic volumes for the study area from 2010 to 2040



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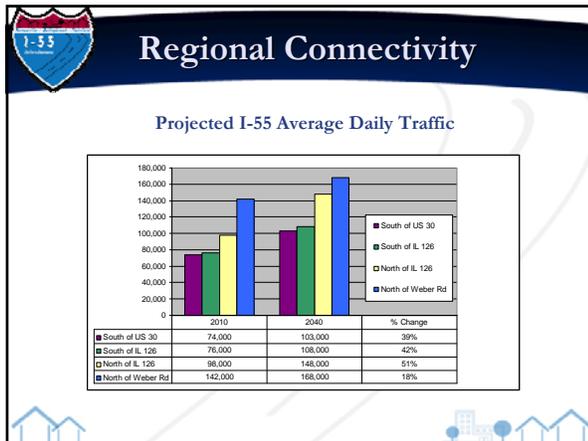
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## Regional Connectivity

### Level Of Service

ACCEPTABLE

**LOS A**

- Free flow

ACCEPTABLE

**LOS B**

- Reasonably free flow
- Ability to maneuver is only slightly restricted
- Effects of minor incidents still easily absorbed

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## Regional Connectivity

### Level Of Service

ACCEPTABLE

**LOS C**

- Stable flow
- Freedom to maneuver is noticeably restricted
- Queues may form behind any significant blockage

ACCEPTABLE

**LOS D**

- Approaching unstable flow
- Speeds decline slightly with increasing flows
- Density increases
- Freedom to maneuver is noticeably limited
- Minor incidents create queuing

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# 1-55 Regional Connectivity

UNACCEPTABLE



UNACCEPTABLE



### Level Of Service

**LOS E**

- Unstable flow
- At or near capacity
- No usable gaps in flow
- Any disruption causes queuing

**LOS F**

- Forced or break down in flow
- Queues form behind breakdown points
- Demand is greater than capacity

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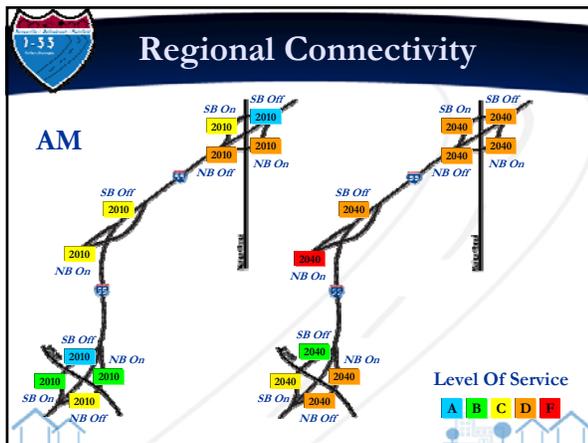
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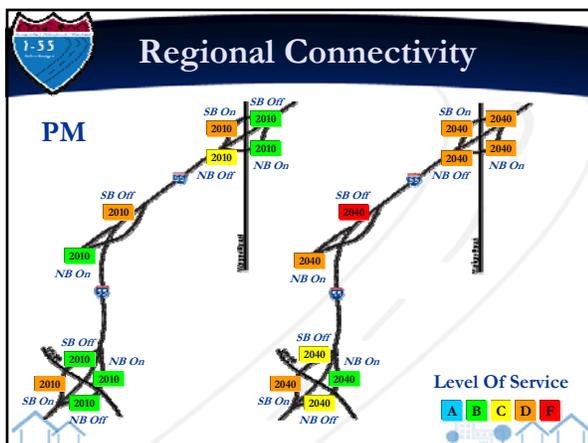
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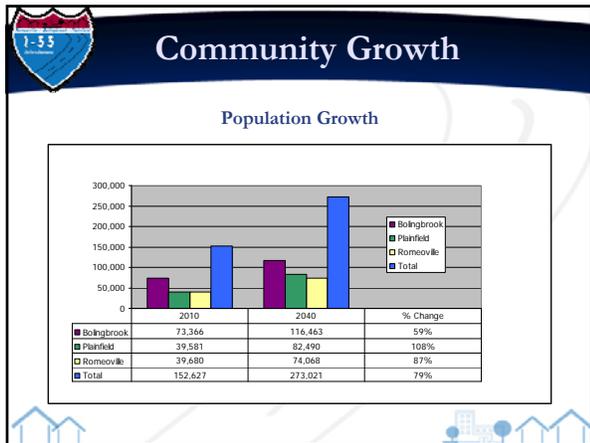
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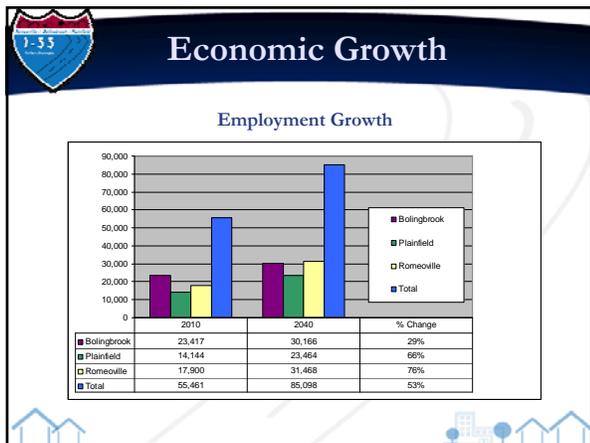
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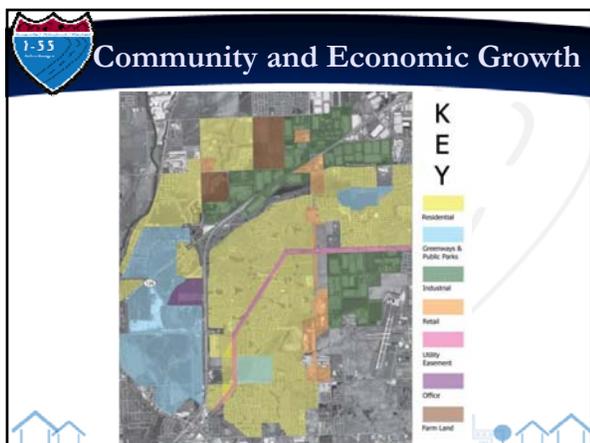
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 **Workshop Exercise**

**Purpose & Need**



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 **Alternative Development**



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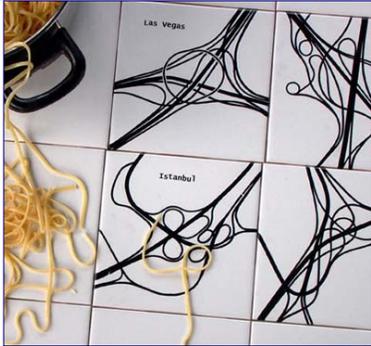
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 **Engineering Tool Box**



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 **Arterial Roadway Improvements**



- Roadway widening
- Intersection improvements
- Frontage road system enhancements
- New/extended arterial roadways



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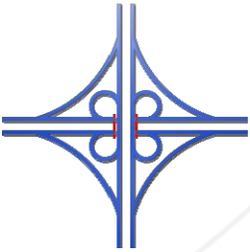
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 **Full Cloverleaf**



- Free Flowing
- Does not allow for pedestrian access
- Large footprint
- Weaving of exiting and entering traffic



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I-55 and I-80

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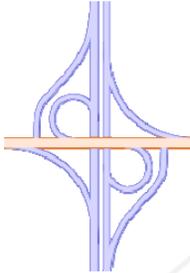
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 **Partial Cloverleaf**



- Some free flow movements
- No weaving
- Smaller footprint than full
- Some signal control

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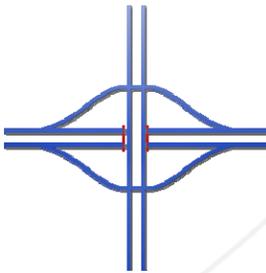
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 **Diamond Interchange**



- Smaller footprint
- Signal controlled

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I-355 and 63<sup>rd</sup> Street

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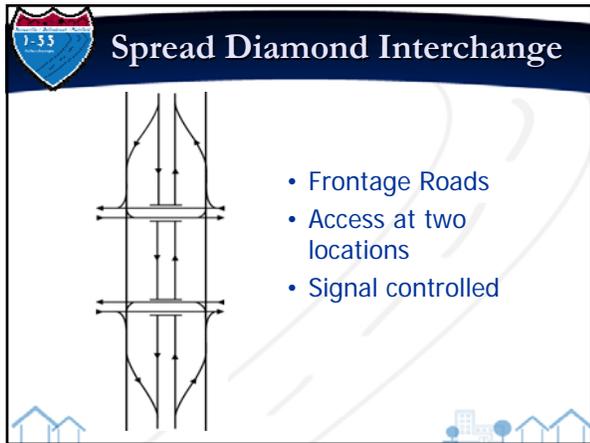
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### Spread Diamond Interchange

- Frontage Roads
- Access at two locations
- Signal controlled

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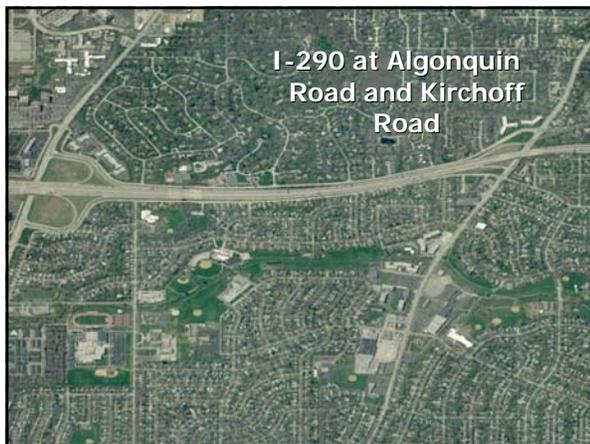
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I-290 at Algonquin Road and Kirchoff Road

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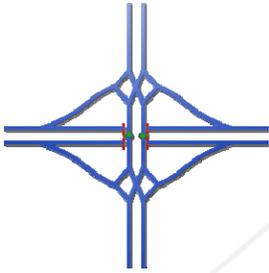
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 **Double Divergent Diamond**



- Signal Controlled
- Small Footprint
- Free flow entering traffic
- Unfamiliar configuration

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 **Double Divergent Diamond**



[www.youtube.com/watch?v=LqE1Z77ccwQ&feature=related](http://www.youtube.com/watch?v=LqE1Z77ccwQ&feature=related)

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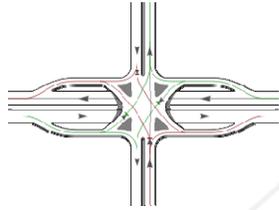
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 **Single Point Urban Interchange**



- Smaller footprint
- Allows for wider turns
- Longer or wider bridges
- Not pedestrian/bicycle friendly
- One signalized intersection

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### Non-Motorized Improvements

- Sidewalks
- Multi-use paths
- ADA compliant facilities
- Pedestrian signals



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### Workshop Exercise

#### Alternative Development



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## Wrap up

- Meeting Recap
- Next Steps
- Future Meeting Schedule



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## Thank You



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## Open Meeting

### Open for Public Comment

Comments received by 9/28/11 will become part of the public meeting record

[airportand126study.com](http://airportand126study.com)



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