



GATEWAY TO MCHENRY COUNTY

# Randall Road Improvements Study

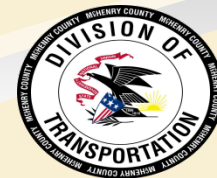
## Crystal Lake City Council Presentation

March 3, 2009

7:30 pm

City Council Chambers

100 W Woodstock St, Crystal Lake, IL



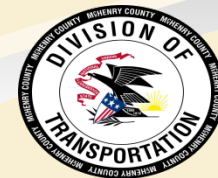
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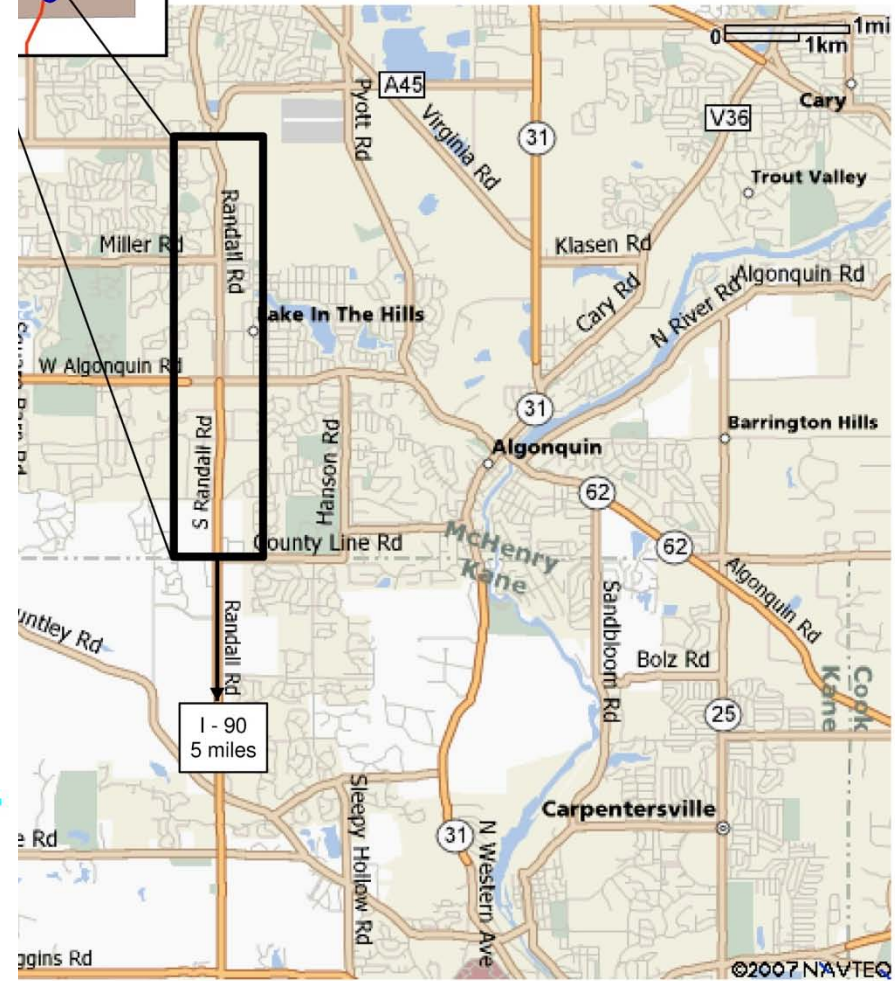
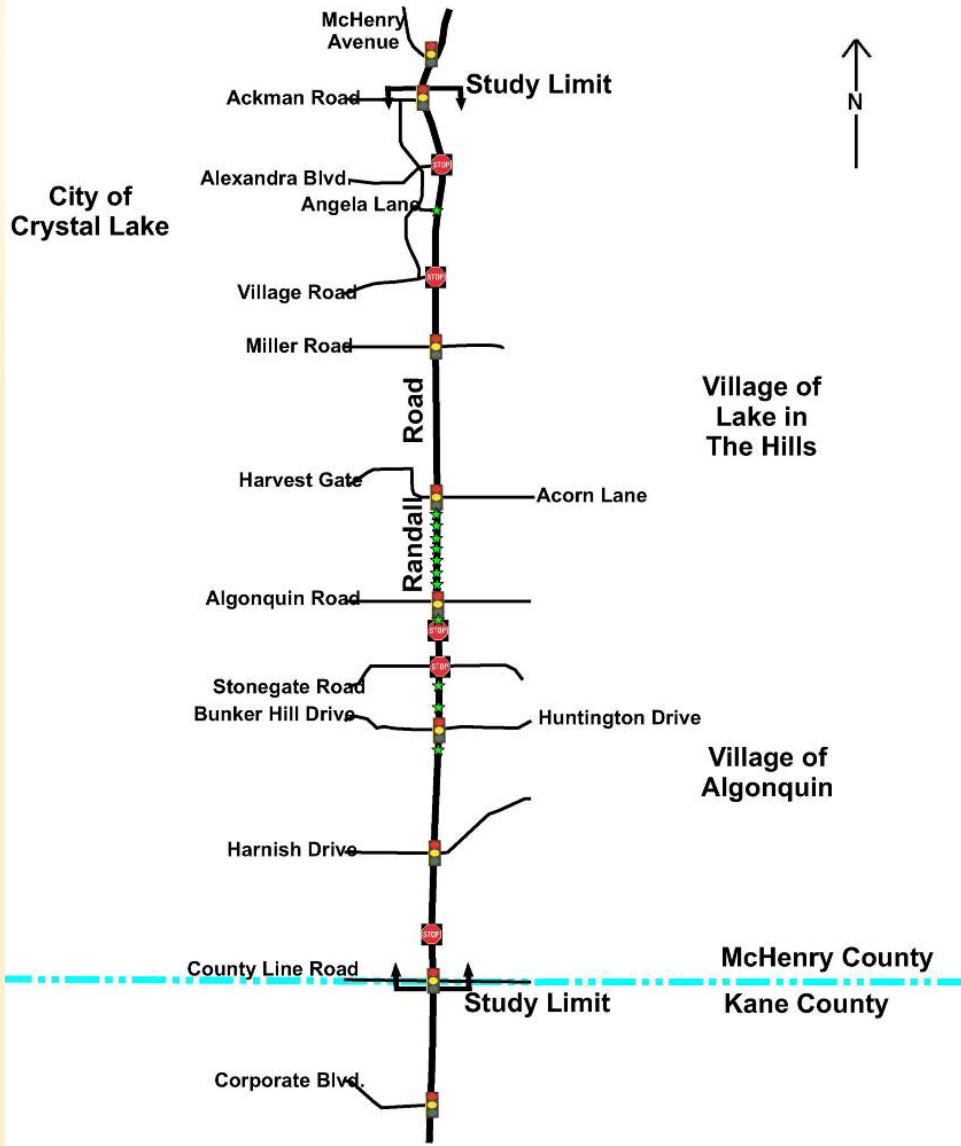
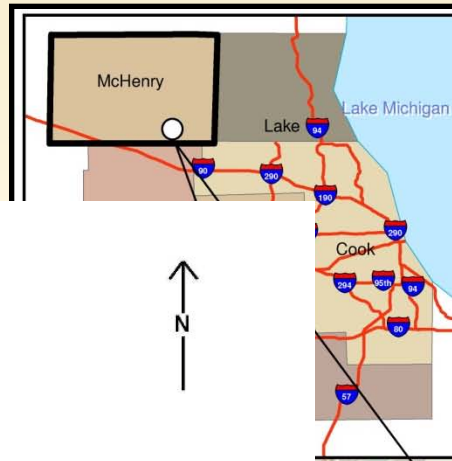
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# Agenda

- Randall Road Improvements Study Update
  - Community Advisory Council Meetings Update
  - Summary of Public Informational Meeting 2
  - Alternatives Development
  - Detailed Evaluation Analysis Results
  - North Section Options
- Next Steps
  - Finalize Development of a Preferred Alternative
  - Prepare Phase I Report
- Schedule



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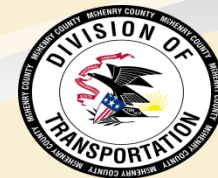
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# Purpose and Need

**Purpose:** Identify transportation system improvements that will enhance mobility and local access while addressing safety issues, community values, and environmental impacts within the study area.

**Need:**

- Improve regional mobility
- Enhance local access/local system deficiencies
- Improve local access/bicycle mobility
- Accommodate community values/land use planning goals
- Address safety concerns

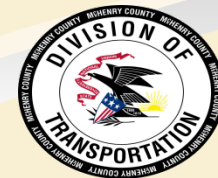


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# Randall Road Improvements Study Update

- This past year the following has occurred:
  - Continued to meet with Community Advisory Council (CAC)
  - Conducted Second Public Informational Meeting
  - Further Developed Alternatives based on Comments
  - Completed Evaluation of Alternatives
  - Coordinated with Municipalities



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# CAC Update

- The CAC membership consists of approximately 35 individuals that represent approximately 16 agencies and interest groups.
  - City of Crystal Lake
  - Crystal Lake Chamber of Commerce
  - Village of Lake in the Hills
  - The Algonquin/Lake in the Hills Chamber of Commerce
  - Village of Algonquin
  - Kane County
  - IDOT District 1 BLRS
  - Illinois State Representative, 64<sup>th</sup> District
  - FHWA
  - CMAP
  - McHenry County Bicycle Club
  - McHenry County Conservation District
  - McHenry Co. Economic Development Corporation
  - McHenry County Board
  - McHenry County Defenders
  - Pace



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# CAC Update

- The CAC is a liaison between the public and McHenry County
- 11 CAC Meetings have occurred
- To date the CAC has successfully helped ...
  - Identify stakeholders and critical issues along the corridor
  - Develop a Purpose and Need for the study
  - Identify (Achieve Consensus on) an Alternative Evaluation Process
  - Develop Evaluation Criteria
  - Develop improvement options to be evaluated
  - Achieve consensus on Functional Evaluation Results
  - Contribute to the Comparative Evaluation
  - Provide comments to the alternatives
  - Contribute to the Detailed Evaluation
  - Supported project team at Public Meeting
  - Provide comments to the Preferred Alternative



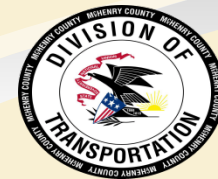
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# Public Meeting Summary

- 76 signed in
- 95 comments received
- Many website hits
  - 3,040 hits since Public Meeting
- Content of comments covered the following topics:
  - General Support/Opposition of alternatives and/or project
  - North Section - Miller to Ackman
  - South Section - County Line to Miller
  - Public Lands Section 4(f) Evaluation
  - Business Concerns
  - Other Corridor Concerns: access, traffic signal timing, other projects, new alternatives, project termini, cost, speed limits, etc.



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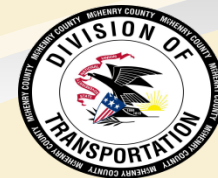


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# Alternatives Development

## Alternatives Evaluation:

- 3-Level Process
- Started with 30+ options
- Narrowed down/  
Combined Options to 4  
Alternatives plus
  - Pedestrian/Bicycle Options
  - HOV Option



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# Alternatives Evaluated in Functional Level

## Lane Options

- No-Action
- Reduce/ manage / consolidate access along Randall Road
- Dedicated HOV / HOT / Bus / Shuttle lane
- Add thru / turning / auxiliary lanes
- Grade-Separated express lanes
- Enhance parallel corridors
- Reversible express lane
- Frontage roads

## Intersection Options

- Modified Diamond Interchange
  - Grade-Separated Intersection
- Quadrant Roadway Intersection
- Continuous Flow Intersection
  - Parallel Flow Intersection
  - Super Street Intersection
- Michigan Urban Diamond Interchange
  - Paired Intersections
- Modern Roundabouts
- Install Traffic Signal
- Close Intersection
- Michigan Lefts

## Pedestrian/Bicycle Options

- Install/Remove pedestrian signalization at all traffic signals
- Improve pedestrian circulation within business areas
- Grade-Separated ped/bike crossings
- Bicycle parking facilities
- Sidewalks/Trails
- Add bike lane
- Hawk signals



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# Alternatives Evaluated in Comparative Level 2

## Lane Options

- No-Action
- Reduce/ manage/ consolidate access along Randall Road
- Dedicated HOV/ HOT/ Bus/ Shuttle lane
- Add thru/ turning/ auxiliary lanes

## Intersection Options

- Modified Diamond Interchange (SPUI)
- Grade-Separated Intersection
- Continuous Flow Intersection
- Parallel Flow Intersection
- Continuous Green-T Intersection
- Install Traffic Signal
- Additional Turn Lanes
- Convert to Right-In / Right-Out
- Close Intersection

## Pedestrian/Bicycle Options

- Install/Remove pedestrian signalization at all traffic signals
- Improve pedestrian circulation within business areas
- Grade-Separated ped/bike crossings
- Bicycle parking facilities
- Sidewalks/Trails
- Add bike lane
- Hawk signals





# Alternatives Evaluated in Detailed Level 3

- **Alternative 1: Modified Diamond Interchange (SPUI)**
- **Alternative 2: Grade-Separated Turning Movements**
- **Alternative 3: Additional Turning Lanes**
- **Alternative 4: Continuous Flow Intersection (CFI)**
- **Pedestrian/Bicycle Options**
- **HOV Lane Options**



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# What is the Preferred Alt?

N  
Randall Road  
Widen to 6 Lanes

- Ackman Rd: No improvements
- **Alexandra Blvd: Close Access**
- **Angela Ln: Add turning lanes and signalize**
- **Village Rd: Convert to right-in/right-out access**
- **Miller Rd: Add turning lanes**
- Section 4(f) Option A – shift alignment to the west
- Acorn Ln/Polaris Dr: Add turning lanes
- Algonquin Rd: Continuous Flow Intersection
- Stonegate Rd: Convert to right-in/right-out access
- Bunker Hill Dr/Huntington Dr: Add turning lanes
- Harnish Dr: No improvements
- County Line Rd: No improvement



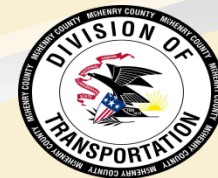
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# Preferred Alternative Selection – CL Concerns

## ■ North Section Options

- What other options are available between Village Road and Alexandra Boulevard?



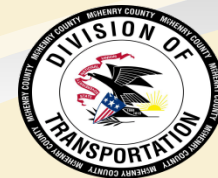
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# North Section Options

- Project team met with Crystal Lake twice
- 4 Options developed with Crystal Lake
- Signal Warrant Analysis Conducted
  - Village
  - Angela
  - Alexandra



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# Evaluation Constraints

- Traffic Signal Warrants must be met
- SRA/McHenry County traffic signal intersection spacing distance minimums
- IDOT SRA design criteria
- Acceleration/deceleration distances must be available
- Avoid providing access on curved segments or in areas with grade  $> 3\%$

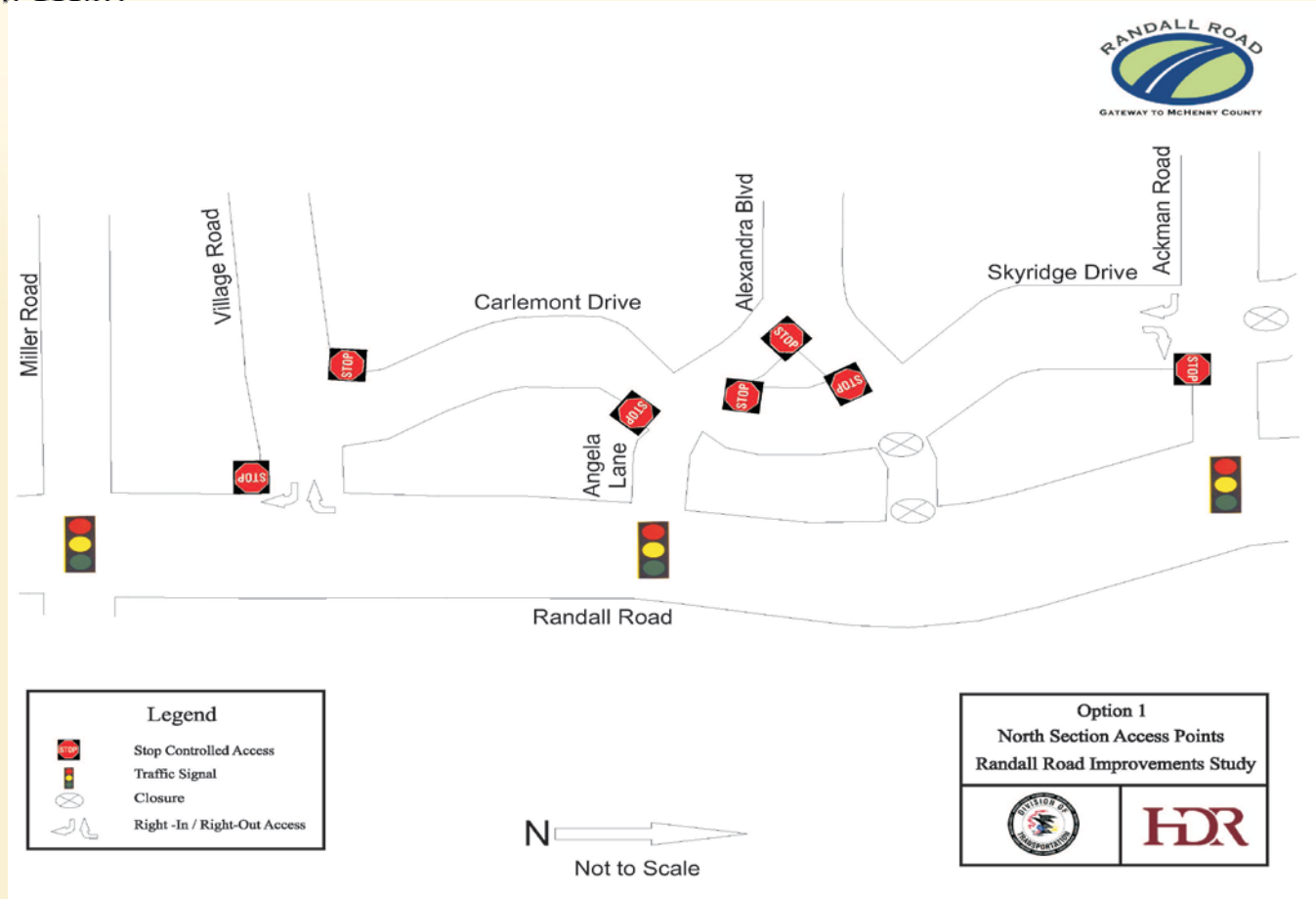


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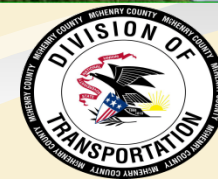
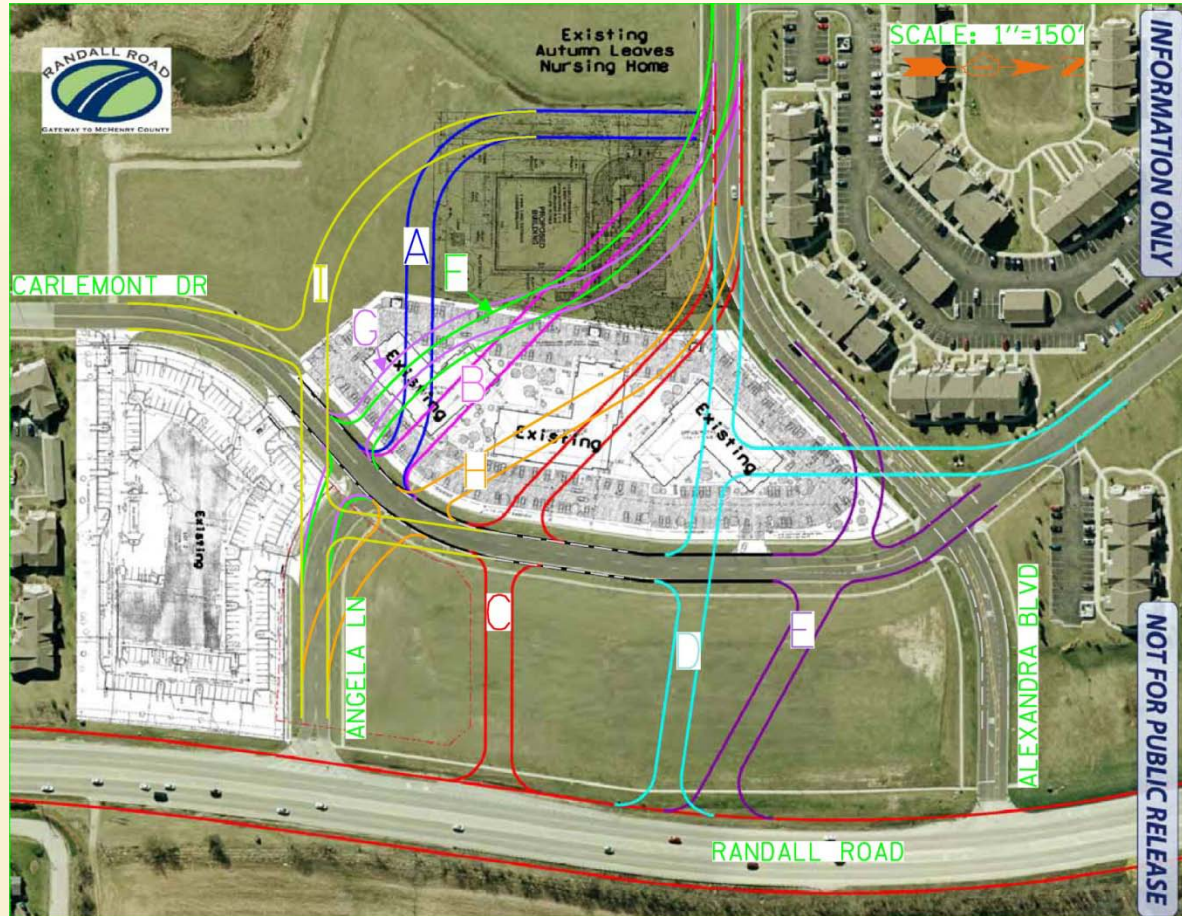
# North Section – Option 1





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# Various Realignment Options

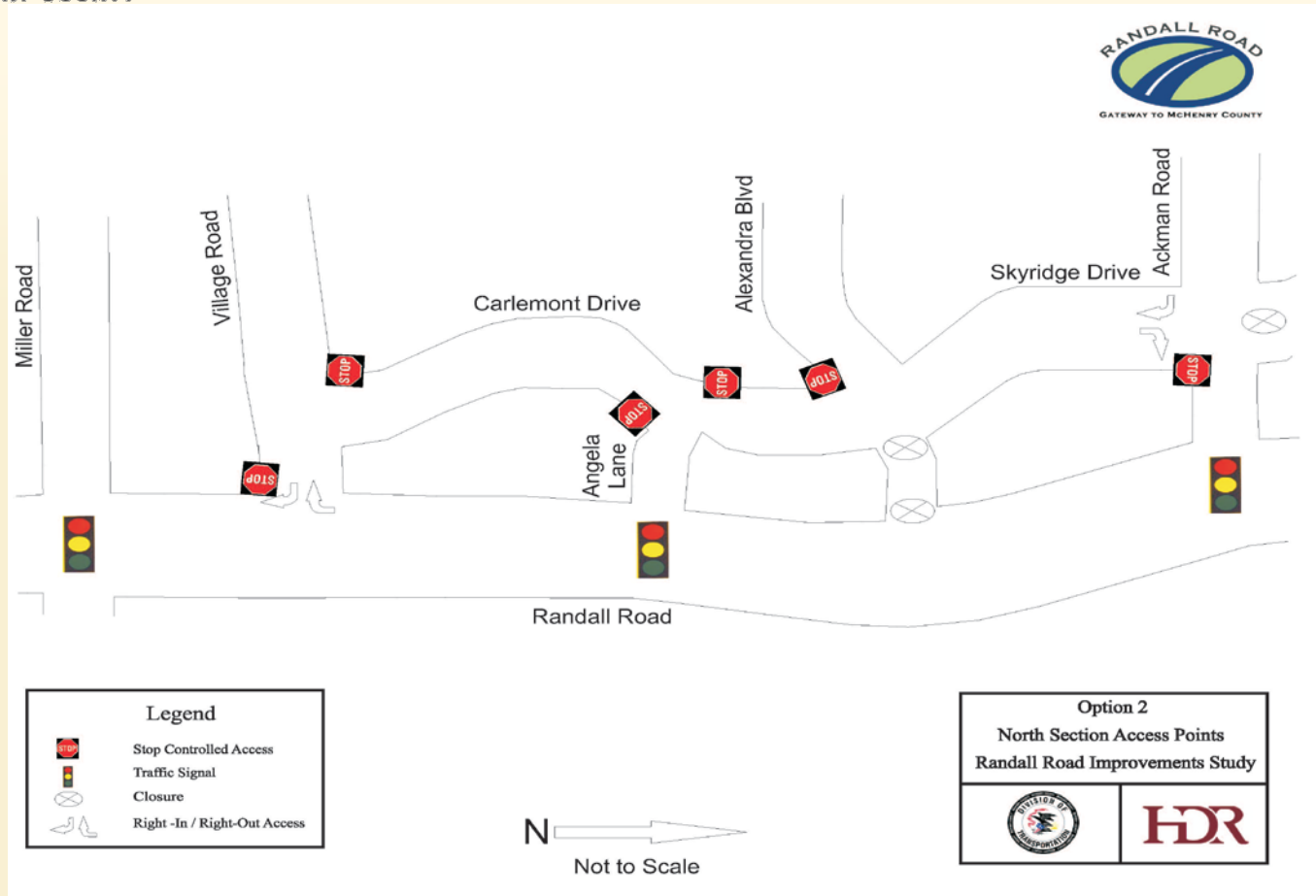


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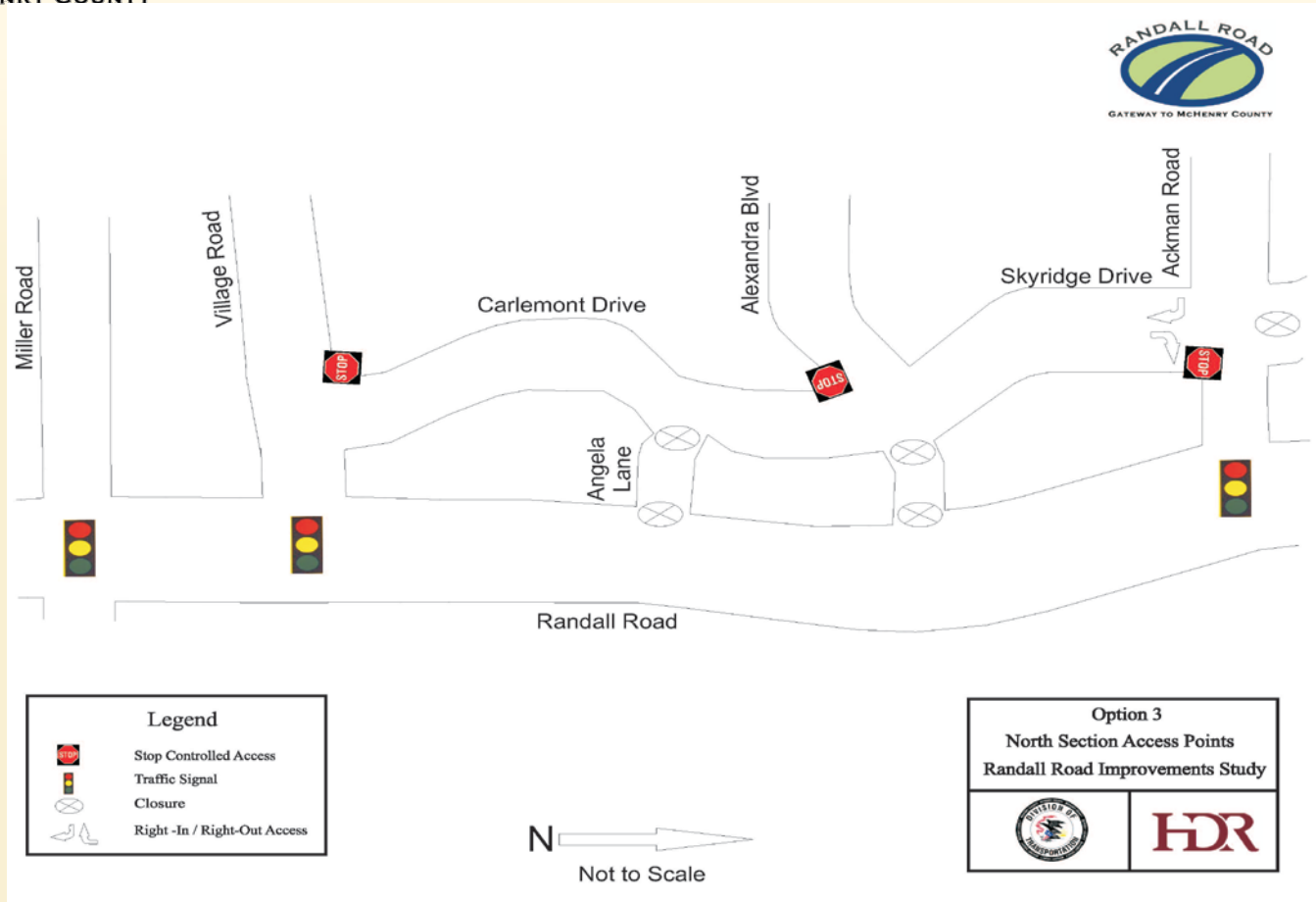
# North Section – Option 2







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# North Section – Option 3



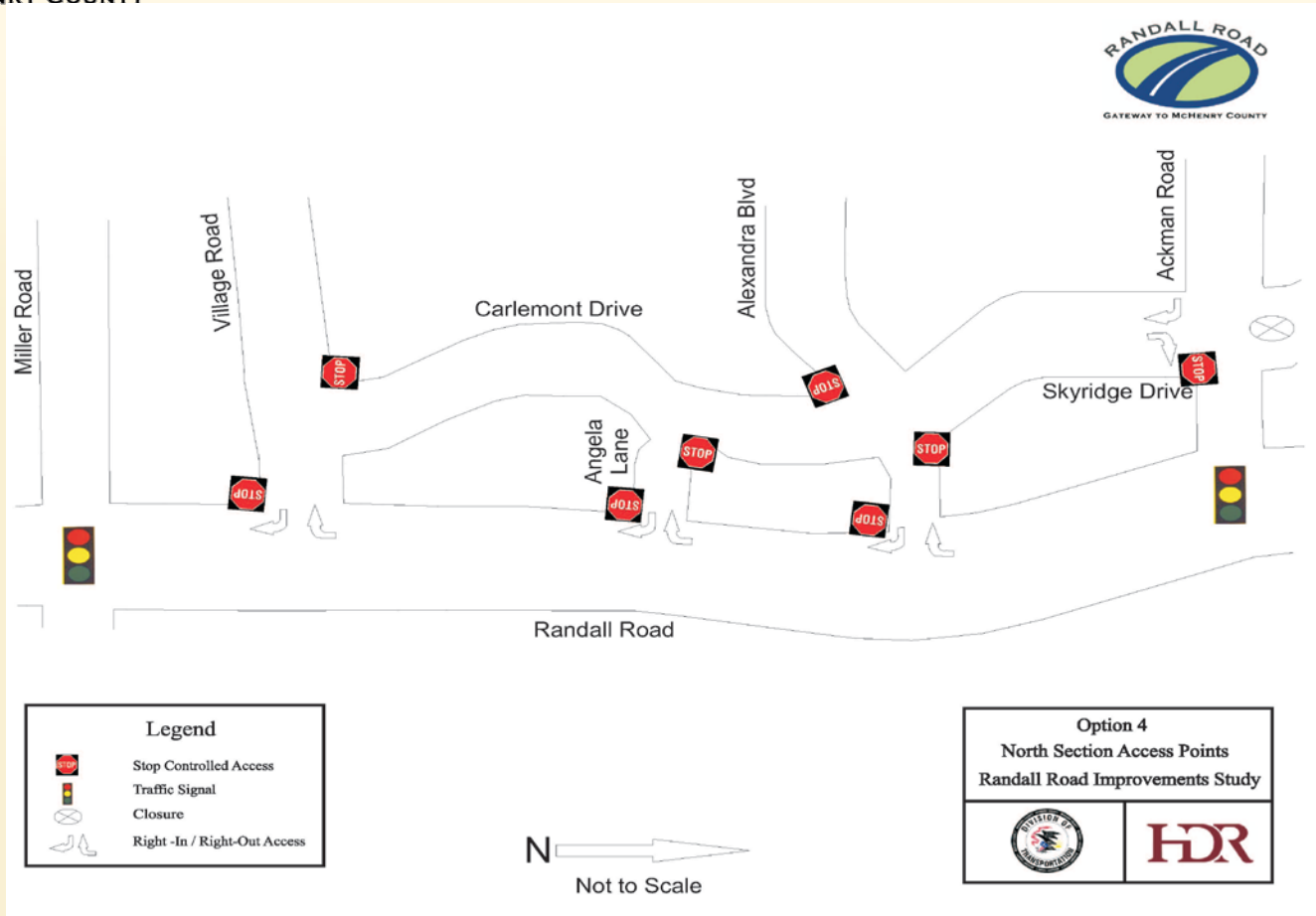
Option 3  
North Section Access Points  
Randall Road Improvements Study




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# North Section – Option 4

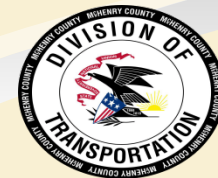




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# Next Steps

- Present Preferred Alternative to Boards of Lake in the Hills and Algonquin
- Develop Preferred Alternative
- Conduct Detailed Environmental Analysis/Identify Mitigation Measures
- Develop Project Development Report
- Conduct Public Hearing



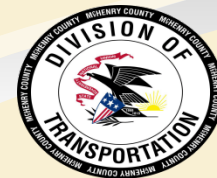
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# Schedule

- Develop Preferred Alternative/Identify Impacts – Spring and Summer of 2009
- Public Hearing – Summer/Fall 2009
- Submit Phase I Report to IDOT/FHWA- Fall 2009
- Receive Design Approval – Spring 2010



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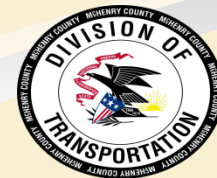
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# Questions or Comments?

## Visit

[www.RandallRoad.info](http://www.RandallRoad.info)

## for more information



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