


Slide 1


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GREEN BAY ROAD PROJECT
RUSSELL ROAD TO SUNSET AVENUE

**Corridor Planning Group and
Technical Advisory Group Meeting #2**

October 19, 2009



October 19, 2009 | CPG & TAG Meeting #2



[Moderator]

Welcome to the second Corridor Planning Group and Technical Advisory Group Meeting. [Carrie Hansen introduction]

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Agenda

- **Introductions**
- **Summarize Goals & Objectives**
- **Obtain Consensus for Project Problem Statement**
- **Overview of Environmental Process**
- **Discuss Draft Purpose and Need and Roadway Deficiencies**
- **Workshop: Determine Project Elements**
- **Next Steps**

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[Moderator]
Read Slide

Note: Workshop will consist of 2 group exercises.

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Project Study Group (PSG)

Illinois Department of Transportation | U.S. Department of Transportation Federal Highway Administration

HNTB | **LIN ENGINEERING, LTD.** | **IMAGISINC** | **Regional Agencies**

Corridor Planning Group (CPG)

Technical Advisory Group (TAG)

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[Moderator]
Introductions

Explain who is in CPG and TAG.

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Goals & Objectives

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[Moderator]

Results of the group activity during CPG/TAG meeting 1 to determine goals & objectives.

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Goals & Objectives

- 1. Improve mobility (capacity and efficiency)**
- 2. Improve safety for motorists, bicyclists, and pedestrians**
- 3. Coordinate with planned land uses and area developments**
- 4. Facilitate economic growth along the route**
- 5. Minimize impacts to the surrounding environment**

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[Moderator]

These Goals & Objectives were derived from the responses during the workshop at the first CPG/TAG meeting. They are: [review items]. The Goals & Objectives have been used to develop the Project Problem Statement, and will become the basis for the Purpose & Need. The final item will be covered by the NEPA (environmental) process.

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Problem Statement

Regional growth and travel demand on Illinois Route 131 from Russell Road to Sunset Avenue are creating safety and operational deficiencies along the roadway and at its intersections. The insufficient capacity of the roadway to handle the demand creates congestion, hampers intersection operations, limits safe access of adjacent properties, and leads to safety issues for motorists, pedestrians, and bicyclists. Both pedestrian access to adjacent land uses and bicycle accessibility through and across the corridor are limited.

Solutions to these transportation deficiencies must be developed while minimizing impacts to the surrounding environment. The solutions should also consider the communities' efforts to coordinate land use and area developments, and facilitate economic growth along the route.

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[Moderator]

The Goals & Objectives were used to develop the Problem Statement. The Problem Statement is – [read]. Please review and discuss the Problem Statement. We would like to reconfirm that we have consensus on the Problem Statement.

*Will provide a printed copy in handout packets

bcc1

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Environmental Process

IDOT projects follow the National Environmental Policy Act (NEPA) Process.

This requires us to:

- ***Provide full and fair discussion of environmental impacts***
- ***Identify reasonable alternatives that will avoid or minimize adverse impacts***
- ***Account for the transportation needs of the public***

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[Engineer]

One of the Goals & Objectives from the first CPG/TAG workshop is to minimize environmental impacts along IL Rte. 131. All IDOT projects follow the National Environmental Policy Act (NEPA) process, which is an approach to balanced transportation decision making that takes into account the potential impacts on the human and natural environment and the public's need for safe and efficient transportation. The NEPA process is intended to help public officials make decisions that are based on understanding of environmental consequences, and take actions that protect, restore, and enhance the environment.

Following the NEPA process requires us to [read bullets]. This is accomplished by completing environmental studies; the Context Sensitive Solutions Process (CSS) Process for public involvement; and frequent collaboration between IDOT, surrounding communities, consultants, and pertinent agencies.

Note: Requirements from IDOT BDE Manual Chapter 22



The slide features a dark blue header with the IL 131 logo and the slogan "WORKING TOGETHER...Creating a Plan for Your Community" along with the website "www.IL131Project.com". A "T1" tab is visible in the top right. The main content is on a yellow background with a faint map of the project area. The title "Draft Purpose & Need" is in large red font. Below it, the "Project Purpose" is defined as improving safety and functionality along IL Rte. 131 from Russell Road to Sunset Avenue. The "Project Needs" are listed as improving safety, capacity, and operations and mobility. The footer includes the date "October 19, 2009", the meeting name "CPG & TAG Meeting #2", and logos for the Illinois Department of Transportation and HNTB.

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T1

Draft Purpose & Need

Project Purpose:
The purpose of the IL Rte. 131 engineering study is to improve safety and functionality along IL Rte. 131 from Russell Road to Sunset Avenue. Improvements to this route are necessary to address issues of roadway and intersection capacity and efficiency; enhance vehicular, pedestrian, and bicycle accommodation and safety; and bring the roadway into compliance with current IDOT standards.

Project Needs:

- *Improve Safety*
- *Improve Capacity*
- *Improve Operations and Mobility*

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[Engineer]

The Purpose & Need of the project is based on input from stakeholders, the Project Problem Statement, and gathered data. The Purpose & Need defines why the study is being done and what deficiencies must be resolved. It serves as a guide when evaluating potential alternatives for improvement. We will continually refer to the Purpose & Need and screening criteria as the alternatives are developed. A draft Purpose and Need has been submitted to IDOT and FHWA for review. The Purpose of this project is: [read purpose]. The identified Needs of this project are: [read needs].

The draft Purpose and Need will be presented at the second Public Meeting.

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Corridor Deficiencies

Capacity

- **Traffic Volumes**
 - Current: 23,100 vehicles per day
 - Projected (2030 volumes): 35,000 vehicles per day
 - Capacity of a Two-lane Roadway: 14,000 to 18,000 vehicles per day
- **Intersection capacity is measured using Level of Service (LOS)**
 - Ratings A – F : “A” represents very low delay and “F” very high
 - Sunset and Wadsworth - LOS “E” rating
 - Projected (2030 volumes): Russell Road, IL Rte. 173, Wadsworth Road, Yorkhouse Road, and Sunset Avenue- LOS “F” rating

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[Engineer]

The Purpose & Need will serve as a guide when developing alternatives to address the corridor deficiencies. With respect to the capacity of the roadway, there are several deficiencies that will need to be addressed. IL Rte. 131 serves as an important north-south link between Northern Illinois and Wisconsin, and it is designated as a Strategic Regional Arterial which means it is part of a roadway network designed to serve relatively high-capacity, long-distance transportation needs. Current data shows that the average daily traffic along the project corridor is 23,100 vehicles per day, and this volume is expected to increase to 35,000 vehicles per day by 2030. The maximum capacity of a two-lane roadway with similar characteristics to IL Rte. 131 is in the range of 14,000 to 18,000 vehicles per day. As you can see, traffic volumes on many sections of IL Rte. 131 are already in or above this range.

To measure intersection capacity, we use the Level of Service (LOS) ratings. A LOS A represents an intersection with very low delays, around 10 seconds per vehicle. The ratings continue alphabetically through LOS F, which represents an intersection with extremely high delays of 80 seconds or more per vehicle. For a SRA route, IDOT targets a LOS D for overall intersection capacity. Analysis shows that under current conditions, both Sunset Avenue and Wadsworth Road operate at a LOS E during the PM peak hour. When subjected to 2030 volumes, many intersections will operate at a LOS F, including: Russell Road, IL Rte. 173, Wadsworth Road, Yorkhouse Road, and Sunset Avenue.

Note: Capacity information from the Highway Capacity Manual, 2000 Edition.

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Corridor Deficiencies

Operations / Mobility

- Skewed angle of Kenosha Road intersection
- Vertical alignment north of IL Rte. 173
- Lack of signalization
- Lack of signal coordination
- Insufficient turn lane lengths
- Lack of separate left turn lanes
- Conflicts at unsignalized intersections and driveways
- Deteriorating pavement & shoulders
- Drainage issues

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[Engineer]

In addition to capacity deficiencies, the corridor also presents several deficiencies in operations and mobility. The skewed angle of Kenosha Road presents visibility issues for drivers approaching the intersection. The frequently alternating uphill and downhill grades from IL Rte. 173 north to Russell Road are deficient for a roadway with a speed limit of 55mph. At the intersection of Kenosha Road and IL Rte. 131, analysis shows that a traffic signal is warranted under existing conditions, and the intersections at 29th Street and 33rd Street will warrant signals based on the projected 2030 volumes. The existing signalized intersections within the project corridor are not coordinated, meaning traffic flow is interrupted. Where turn lanes do exist along IL Rte. 131 they are often of insufficient length to accommodate the volume of traffic, and turn lanes are not consistently provided at all intersections within the project corridor. Vehicles attempting to enter or exit driveways or other unsignalized intersections often experience difficulty. IL Rte. 131 has not been comprehensively rebuilt for over 50 years, which has resulted in areas of deteriorating pavement and shoulder. Lastly, several areas have drainage issues which impede traffic with water on the roadway.

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Corridor Deficiencies

Safety

- 803 crashes along IL Rte. 131 from 2004 – 2007 (LCDOT data)
- 108 injuries (LCDOT data)
- 3 fatalities (Yorkhouse, 33rd Street, and IL Rte. 173)
- Types of Crashes:
 - Rear End: 42% of total
 - Turning Crash: 24% of total
 - Angle Crash: 11% of total
- Deficient pedestrian/bicycle accommodations
- Short stretch of IL Rte. 131 just north of 9th Street is listed as a 5% location

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[Engineer]

There are several safety deficiencies along IL Rte. 131. Crash data within the project corridor has been collected from the Lake County DOT database for the years 2004 thru 2007, which is the most current data available. This data shows that 803 crashes occurred along the corridor within the years reviewed. 3 fatalities occurred as a result of crashes, one at Yorkhouse Road, one at 33rd Street, and one at IL Rte. 173. The predominant type of crash along IL Rte. 131 are rear end crashes, which account for 42% of the total crashes. Other types of crashes which account for a significant percent of the total were Turning crashes with 24% of the total crashes, and Angle Crashes with 11% of the total. Absent from the crash data was crashes between vehicles and pedestrians or vehicles and bicycles. Instead of implying a safe area for pedestrians and bicyclists, observation of the corridor indicates that as a result of no pedestrian or bike accommodations, these users would be likely to choose a different transportation option or a different route.

Lastly, IDOT has identified the quarter-mile stretch of IL Rte. 131 just north of 9th Street as a “5% Location.” This means that it is an area in the top five percent of highway locations exhibiting the most pressing safety needs in the state of Illinois.

The slide features a dark blue header with the IL 131 logo and the text 'GREEN BAY ROAD PROJECT' and 'WORKING TOGETHER...Creating a Plan for Your Community www.IL131Project.com'. The main content is on a yellow background with a map of the area. It lists deficiencies and countermeasures in two columns. At the bottom right, it includes the date 'October 19, 2009 | CPG & TAG Meeting #2' and logos for the Illinois Department of Transportation and HNTB.

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Potential Countermeasures

<u>DEFICIENCIES:</u>	<u>COUNTERMEASURES:</u>
Long Delays at Intersections	Increase capacity, add through and turn lanes, re-time and coordinate signals
Rear End Crashes	Increase capacity, add through and turn lanes
Turning Crashes	Add turn lanes, construct median, improve sight distance
Conflicts at Unsignalized Intersections/Driveways	Add turn lanes, construct median

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[Engineer]

For each identified deficiency, these are some examples of improvements that may help to fix the problem. [read slide]

Note: Describe sight distance and how wider medians and offset or dedicated turn lanes can help.

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Workshop

Group Exercise:
Part 1 –
Identify Project Elements
Part 2 –
Solicit Alternatives

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[Engineer]

Now we would like to get your input on Project Elements that will address the needs of the project. This information will be used to begin to develop alternatives for the improvement.

Part 1 – Identify Project Elements

Part 2 – Solicit Alternatives

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Workshop

Project Elements:

- Number of Lanes
- Median Treatment
- Edge Treatment
- Bicycle & Pedestrian Accommodations

Please rate each Project Element on its ability to address the project needs.

Does Not Meet Project Needs ← 1 2 3 4 5 → Completely Meets Project Needs

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[Moderator & Engineer]

The Project Elements that will be addressed today are: Number of Lanes, Median Treatment, Edge Treatment, and Accommodations for Bicycles and Pedestrians. These elements provide a basis to develop possible project alternatives. You will be presented with several options for each project element. Using the provided worksheets, please rate the each option from 1 – 5, where 1 = the option does not meet the project needs, and 5 = the option completely meets project needs.

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Workshop

Number of Lanes

			
<u>Two lanes</u> <ul style="list-style-type: none">• One lane in each direction	<u>Three Lanes</u> <ul style="list-style-type: none">• One lane in each direction• Two-way left turn lane	<u>Four Lanes - Divided</u> <ul style="list-style-type: none">• Two lanes in each direction• Median with space for turn lanes	<u>Four Lanes - Flush</u> <ul style="list-style-type: none">• Two lanes in each direction• Painted median with space for turn lanes

1 = Does Not Meet Needs
to
5 = Completely Meets Needs

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[Moderator & Engineer]

First we will consider options for the number of lanes. The first option is two lanes, providing one lane in each direction and no turn lanes. The second option is three lanes, which includes one lane in each direction with a two-way left-turn lane. The third option is to have four lanes with a dividing median. This option provides two lanes in each direction plus space for left-turn lanes. The final option is four lanes with a flush painted median. This option would also allow for two lanes in each direction plus space for left-turn lanes. Also keep in mind the capacity and operation deficiencies discussed previously when evaluating these options. Please mark your rankings on the worksheets provided to you.

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Workshop

Median Treatment



No Median Flush Two-way Left Turn Lane Raised Barrier Curb Median Wide Grass Median

1 = Does Not Meet Needs
to
5 = Completely Meets Needs

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[Moderator & Engineer]

Next we will consider Median Treatment. The first option is to have no median. The second option is to provide a flush two-way left-turn lane. The next option is to provide a raised barrier curb median. The final option is a wide grass median. When evaluating these alternatives, keep in mind that they will require different amounts of Right-of-Way to accommodate the median width.

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Workshop

Edge Treatment



Aggregate Shoulder Paved Shoulder Curb and Gutter Paved Shoulder with Curb and Gutter

1 = Does Not Meet Needs
to
5 = Completely Meets Needs

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[Moderator & Engineer]

Next we will consider Edge Treatment. The first option is an aggregate shoulder. The second option is a paved shoulder. The third option is to provide curb and gutter. The final option is to provide both a paved shoulder and curb and gutter. When evaluating these options, keep in mind that edge treatment impacts drainage of the roadway. Shoulder sections will allow runoff to flow directly into ditches, while curb and gutter sections will direct runoff either to ditches and culverts or potentially to a storm sewer system.

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Workshop

Pedestrian/Bicycle Accommodation



Sidewalk Shared Use Path Paved Shoulder Bicycle lane

1 = Does Not Meet Needs
to
5 = Completely Meets Needs

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[Moderator & Engineer]

Lastly we will address options for accommodation of bicycles and pedestrians. The first option is to provide a sidewalk adjacent to the roadway. This option is intended primarily for pedestrian use. The second option is to provide a shared use path adjacent to the roadway. This option will accommodate both bicycles and pedestrians within the same area. The third option is to provide a paved shoulder wide enough to accommodate bicycles and pedestrians. The fourth option is to provide a dedicated bicycle lane on the roadway. Some of these options will require more right of way than other options.

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Workshop

Group Exercise:
Part 1 –
Identify Project Elements
Part 2 –
Solicit Alternatives

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[Moderator]
Part 2.



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Summary of Results

	Number of Lanes (consensus rating)	Median Treatment (consensus rating)	Edge Treatment (consensus rating)	Pedestrian/Bicycle Accommodations (consensus rating)
Need #1: Improve Safety				
Vehicle	<u>Four Lanes - Divided</u>	<u>Wide Grass Median</u>	<u>Paved Shoulder with Curb & Gutter</u>	<u>Shared Use Path</u>
Pedestrian	<u>Four Lanes - Divided</u>	<u>Raised Barrier</u>	<u>Paved Shoulder with Curb & Gutter</u>	<u>Sidewalk</u>
Bicycle	<u>Four Lanes - Divided</u>	<u>Raised Barrier</u>	<u>Paved Shoulder with Curb & Gutter</u>	<u>Shared Use Path</u>
Need #2: Improve Capacity				
Vehicle	<u>Four Lanes - Divided</u>	<u>Wide Grass Median</u>	<u>Paved Shoulder with Curb & Gutter</u>	<u>Sidewalk</u>
Pedestrian	<u>Four Lanes - Divided</u>	<u>Raised Barrier</u>	<u>Paved Shoulder with Curb & Gutter</u>	<u>Sidewalk</u>
Bicycle	<u>Four Lanes - Divided</u>	<u>Wide Grass Median</u>	<u>Paved Shoulder with Curb & Gutter</u>	<u>Shared Use Path</u>
Need #3: Improve Operations/Mobility				
Vehicle	<u>Four Lanes - Flush</u>	<u>Wide Grass Median</u>	<u>Paved Shoulder with Curb & Gutter</u>	<u>Sidewalk/Shared Use Path</u>
Pedestrian	<u>Four Lanes - Flush</u>	<u>Wide Grass Median</u>	<u>Paved Shoulder with Curb & Gutter</u>	<u>Sidewalk</u>
Bicycle	<u>Four Lanes - Flush</u>	<u>Wide Grass Median</u>	<u>Paved Shoulder with Curb & Gutter</u>	<u>Shared Use Path</u>
Overall Preference	<u>Four Lanes - Divided</u>	<u>Wide Grass Median</u>	<u>Paved Shoulder with Curb & Gutter</u>	<u>Sidewalk or Shared Use Path</u>

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[Moderator & Engineer]

We have totaled all the worksheets that you completed during the workshop, and the results are shown on the screen. [Briefly discuss which alternatives received the highest rankings]

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Next Steps

Public Meeting #2 – December 2, 2009

- Present Draft Purpose and Need
- Solicit input on Project Alternatives
- Exhibits / PowerPoint

CPG/TAG Meeting #3- Spring 2010

Public Meeting #3 – Spring 2010

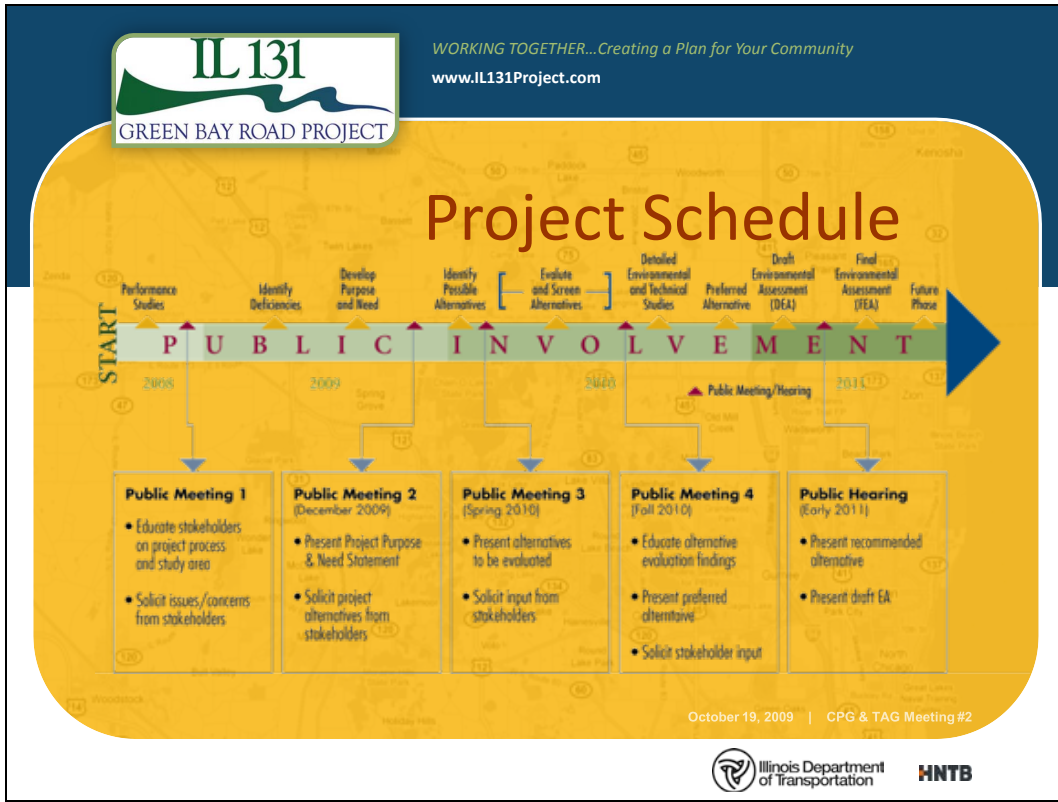
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[Moderator]

The Project Study Group will use the information gathered today to begin developing conceptual alternatives. The alternatives will develop preliminary geometrics and analyze any impacts including environmental.

The draft Purpose & Need will be presented at Public Meeting #2, which will be held on Wednesday, December 2nd, 2009 at Beach Park Middle School. Exhibits will be on display including traffic and crash data and environmental information along with a powerpoint presentation. The public will be asked for input on project alternatives and their ability to meet the stated needs of the project. After that, a third CPG/TAG meeting will be held to discuss project alternatives and begin to define the preferred alternative. The alternatives to be evaluated will then be presented at the third Public Meeting, tentatively scheduled for Spring 2010.



[Moderator]


The project schedule is also available on the project website, www.IL131Project.com

*We will provide a copy in the meeting materials packet




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Thank you!
Questions?



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