MEETING OBJECTIVES

 Update project status

 Review Community Advisory Group Meeting #1

 Present Draft Purpose and Need Report
PROJECT STATUS

CAG MEETING #1

- Reviewed the public involvement process
  - Context Sensitive Solutions (CSS) review
  - Ground rules
  - Role of the Community Advisory Group (CAG)

- Discussed the initial findings of the project team
  - Regional and future growth
  - Traffic and crash data
  - Context Survey results

- Defined the transportation problem from a user’s perspective
Focus Question: What are the transportation problems at the I-55 at Weber Road interchange?

<table>
<thead>
<tr>
<th>Turn Movements</th>
<th>Signal Delay</th>
<th>Alternative Transportation</th>
<th>Signage</th>
<th>Ramps</th>
<th>Mobility &amp; Capacity</th>
<th>Weber Intersections</th>
<th>Business Access</th>
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<tbody>
<tr>
<td>Lack of Exclusive Turn Lanes</td>
<td>Signals (Number and Timing)</td>
<td>Bike Path Continuity</td>
<td>Lane Markings (Double Lefts)</td>
<td>Ramp Storage &amp; Visibility</td>
<td>Heavy Tractor Trailer Usage</td>
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<td>Improve Pedestrian Access</td>
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<td>Narrow Exit Ramps</td>
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Other ideas from the workshop included:

- Intersections along Weber should be included in the project study in addition to the interchange because there are also traffic problems there.
- Travel pattern information would be helpful to know how trucks and cars use Weber Road and the interchange.
- Weber Road cannot be widened only over the interchange; it would just push back congestion north and south of the interchange.
CAG MEETING #1

Other ideas from the workshop included:

- The traffic counts should consider that all of the warehouses and distribution centers near the interchange are not full.
- Limit truck traffic to specific times
- Consider future development so that access to new sites could be accommodated.

PROJECT STATUS

Identify Context

Define Problem

Evaluation Criteria

Define and Evaluate Alternatives

Preferred Alternative

Considerations

- Stakeholder Considerations / Community Assets
- Environmental Considerations / Compatibility with the Environment
- Engineering Considerations / Transportation Needs
WHAT IS THE PROBLEM STATEMENT?

- Concise, but broadly written description of the transportation problem(s) associated with the project
- Defines current conditions in addition to conditions for the forecast year (2040)
- Incorporates larger community issues such as economic development, visual identity, community character and livability
- Does not describe specific solutions

DRAFT PROBLEM STATEMENT

*Development and forecasted growth in the communities around the I-55 at Weber Road interchange present a need for improved transportation. The transportation problems associated with the interchange include operational issues, inadequate capacity, unsafe travel conditions, and the lack of alternative transportation.*
The operational issues at the I-55 ramps, Weber Road mainline, and Weber Road intersections include high-volume turn movements, inadequate lane marking and merging issues, poor signage, and traffic signal delays.

The high volume of truck traffic from warehouses and distribution centers, a lack of alternative north-south routes, and inadequate access to I-55 contribute to significant congestion around the interchange.
The congestion around the interchange area results in motorist delays, prevents efficient access to local businesses, and contributes to elevated crash potential on I-55 near the interchange and at intersections along Weber Road.

There is no public transportation, bike path continuity, or pedestrian facilities near the interchange and Weber Road does not promote using alternative modes of transportation.
POURPOSE AND NEED DEVELOPMENT

**PROBLEM STATEMENT**
- CAG WORKSHOP
- COMMUNITY CONTEXT SURVEY

**ENGINEERING ANALYSIS**
- CRASH DATA ANALYSIS
- TRAFFIC DATA ANALYSIS

PURPOSE AND NEED REPORT

PUBLIC AND AGENCY COORDINATION

WHAT IS THE PURPOSE AND NEED?

**Need** is a tangible fact based problem; i.e. a transportation deficiency

**Purpose** is an overarching statement of why you are pursuing the project; objectives that will be met to address the transportation deficiency
WHY IS PURPOSE AND NEED IMPORTANT?

- Required by Federal law
- 1st chapter of Environmental Assessment
- Explains the “why” of the project
- Drives the analysis process
- First standard to measure the solution

PURPOSE AND NEED DEVELOPMENT

**PROBLEM STATEMENT**

- CAG WORKSHOP
- COMMUNITY CONTEXT SURVEY

**ENGINEERING ANALYSIS**

- CRASH DATA ANALYSIS
- TRAFFIC DATA ANALYSIS

PURPOSE AND NEED REPORT

PUBLIC AND AGENCY COORDINATION
WHY ANALYZE THE CRASH HISTORY?

- Objective assessment of existing conditions
- Reveals more information about crashes
- Identify and incorporate potential countermeasures

HOW ARE CRASHES ANALYZED?
CRASH RESULTS – WEBER ROAD

- Rear End: 19%
- Turning: 6%
- Sideswipe: 8%
- Other: 67%

CRASH RESULTS – WEBER ROAD

- AM Peak Period:
  - 1:00 AM: 21
  - 2:00 AM: 21
  - 3:00 AM: 14
  - 4:00 AM: 8
  - 5:00 AM: 17
  - 6:00 AM: 59
  - 7:00 AM: 88
  - 8:00 AM: 104
  - 9:00 AM: 112
  - 10:00 AM: 81
  - 11:00 AM: 79
  - 12:00 PM: 80

- PM Peak Period:
  - 1:00 PM: 101
  - 2:00 PM: 136
  - 3:00 PM: 155
  - 4:00 PM: 147
  - 5:00 PM: 152
  - 6:00 PM: 98
  - 7:00 PM: 87
  - 8:00 PM: 52
  - 9:00 PM: 54
  - 10:00 PM: 42
  - 11:00 PM: 29

20% 32%
CRASH RESULTS – INTERSTATE 55

- **58%** Rear End
- **24%** Sideswipe
- **10%** Fixed Object
- **9%** Other

**Peak Period**

- AM: 23, 17, 24, 21, 12, 12, 11, 15, 15, 25, 50, 54
- PM: 50, 54, 40, 32, 21, 11, 17, 11, 8

**19%** PM

**37%** AM
Observations:

- Three fatalities; all involved alcohol/drug impaired drivers and occurred on I-55
- Rear-end and same directions sideswipe collisions were predominant
- Most crashes occurred during peak hours, in daylight and under dry pavement conditions
PURPOSE AND NEED DEVELOPMENT

PROBLEM STATEMENT
- CAG WORKSHOP
- COMMUNITY CONTEXT SURVEY

ENGINEERING ANALYSIS
- CRASH DATA ANALYSIS
- TRAFFIC DATA ANALYSIS

PURPOSE AND NEED REPORT

PUBLIC AND AGENCY COORDINATION

HOW IS TRAFFIC DATA COLLECTED?

[Image of traffic计数器 and street layout diagram]
HOW IS TRAFFIC DATA COLLECTED?

Chicago Metropolitan Agency for Planning (CMAP)

AVERAGE DAILY TRAFFIC (ADT)

2010 ADT
(Existing)

2040 ADT
(No Build)
HOW IS TRAFFIC EVALUATED?

Assessment of Operating Conditions

- Capacity Analysis
- Simulation Models
- Standard of Measurement: Level of Service (LOS)

TRAFFIC ANALYSIS METHODOLOGY

LOS A
TRAFFIC ANALYSIS METHODOLOGY

LOS B

TRAFFIC ANALYSIS METHODOLOGY

LOS C
PURPOSE AND NEED DEVELOPMENT

PROBLEM STATEMENT
- CAG WORKSHOP
- COMMUNITY CONTEXT SURVEY

ENGINEERING ANALYSIS
- CRASH DATA ANALYSIS
- TRAFFIC DATA ANALYSIS

PURPOSE AND NEED REPORT

PUBLIC AND AGENCY COORDINATION

PROJECT PURPOSE

The purpose of the proposed action is to identify transportation solutions that will address congestion and mobility problems in the Weber Road corridor identified in the study area, improve community connectivity, and improve access for commercial and residential users of I-55 and Weber Road.
PROJECT NEEDS

- Address operational deficiencies
- Improve capacity
- Improve safety
- Increase access to alternative transportation

PURPOSE AND NEED REPORT

Need: Address Operational Deficiencies

Technical Analysis
- Traffic signal delay
- Unacceptable level of service on Weber Road and I-55 ramps

Problem Statement
- High volume turn movements
- Inadequate lane marking
- Merging issues
- Poor signage
- Traffic signal delay

Stakeholder Input
- Signals (traffic/pedestrian)
- Street lighting/pedestrian lighting
- Roadways compatible to existing businesses
- Roadways compatible to existing commuting patterns
**PURPOSE AND NEED REPORT**

### Need: Improve Capacity

**Technical Analysis**
- Projected increase in traffic volumes
- Substandard geometrics (travel lanes, intersections)

**Problem Statement**
- High volume of trucks
- No alternate north-south routes
- Inadequate access to I-55
- Congestion

**Stakeholder Input**
- Industrial centers and commercial areas
- Commuter corridor
- Congestion and delay

### Need: Improve Safety

**Technical Analysis**
- High number of crashes
- Multi-modal conflicts
- High number of rear-end and sideswipe collisions
- Crashes data consistent with congestion

**Problem Statement**
- Motorist delay
- Prevents efficient access
- Congestion

**Stakeholder Input**
- Traffic Safety
- Congestion and delay
 PURPOSE AND NEED REPORT

Need: Increase Access to Alternative Transportation

Technical Analysis
- Lack of transit options
- Bicycle/pedestrian access is limited

Problem Statement
- Lack of pedestrian, ADA, and bike facilities
- Limited alternative transportation choices
- Improve pedestrian access and bike path continuity

Stakeholder Input
- Handicap accessibility
- Sidewalks and pedestrian crossings
- Bike lanes/recreation facilities

HOMEWORK

Please read and review the draft Purpose and Need Report
MEETING TIMETABLE

THANK YOU!

Community Advisory Group Meeting #3  
*Purpose & Need/Evaluation Criteria*  
*November 30, 2010*