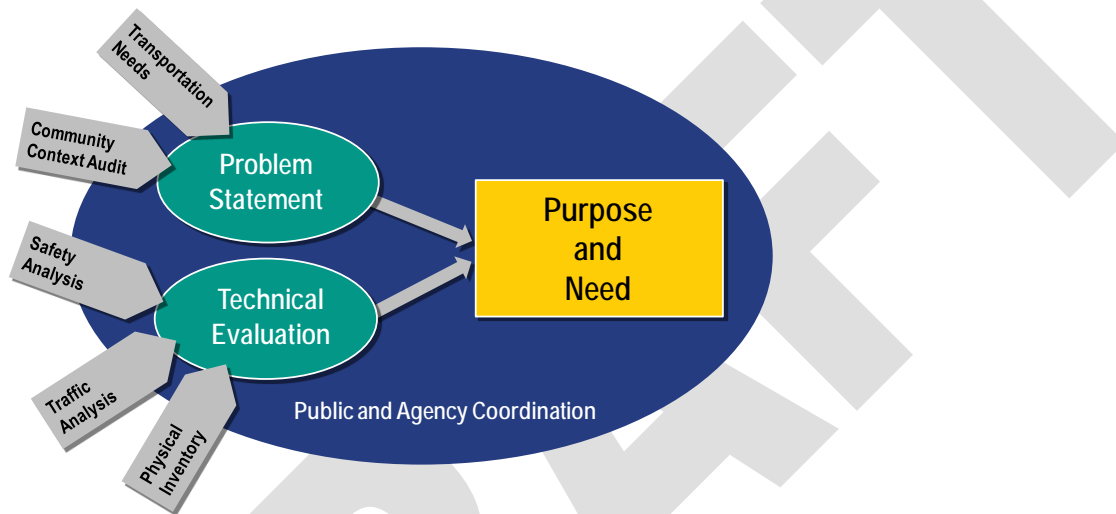


## DRAFT Purpose and Need Statement Outline

### INTRODUCTION

The Purpose and Need Statement is a summary of the transportation needs that are to be addressed as part of the Willow Road Phase I study. As stated earlier, this document is being prepared by IDOT, beginning in an outline format that will later be expanded to a full version. This Statement considers the data collected, overall stakeholder input, and technical analyses of existing conditions conducted for this project, and is being introduced to the CAG for their review and further discussion at the next CAG meeting in November.



The Purpose and Need Statement serves as the initial basis for developing and evaluating alternatives for the Willow Road project. Each of the alternatives developed for this project will be tested to determine how effective they are at addressing the transportation needs. A range of other evaluation criteria will also be developed in consultation with the CAG to establish the complete alternatives evaluation process.

A Purpose and Need Statement is a fundamental requirement of the National Environmental Policy Act (NEPA) and becomes part of the environmental documentation for the study. There is supporting reference material available on the internet regarding this topic if you would like additional information. Several useful documents (links) are:

- 1) The Center for Environmental Excellence by the American Association of State Highway and Transportation Officials (AASHTO) Document: *Defining the Purpose and Need and Determining the Range of Alternatives for Transportation Projects*, August 2007. <http://environment.transportation.org/pdf/programs/PG07.pdf>
- 2) FHWA Environmental Review Toolkit/Project Development: NEPA Implementation – *Guidance for Preparing and Processing Environmental and Section 4(f) Documents*, FHWA Technical Advisory T6640.8A, October 30, 1987. <http://www.environment.fhwa.dot.gov/projdev/imp6640.asp>
- 3) Illinois Department of Transportation, Bureau of Design and Environment Manual: Section 22-6.01 *Purpose and Need*. <http://www.dot.il.gov/desenv/BDE%20Manual/BDE/pdf/chap22.pdf>

## PURPOSE

To address existing and 2030 transportation needs along Willow Road, from Illinois Route 43 (Waukegan Road) to Interstate 94 (Edens Expressway), through either local or regional improvements, or a combination of improvements.

### Transportation Needs

The transportation needs were identified from three sources: the Technical Analysis, the Problem Statement and Stakeholder Input.

Technical Analysis	Problem Statement	Stakeholder Input
<ul style="list-style-type: none"> <li>▪ Traffic Analysis</li> <li>▪ Crash Analysis</li> <li>▪ Physical Inventory</li> </ul>	<ul style="list-style-type: none"> <li>▪ Problem Statement text</li> </ul>	<ul style="list-style-type: none"> <li>▪ Transportation Needs</li> <li>▪ Community Context Audit</li> <li>▪ CAG and Public Input</li> </ul>

Based on these assessments, the transportation needs have been summarized into three categories:

- ❖ Improve or enhance safety for all users,
- ❖ Improve mobility, and
- ❖ Improve facility condition and design.

The input gathered for each category is summarized in the following tables:

#### ❖ **Improve or enhance safety for all users**

Technical Analysis	Problem Statement	Stakeholder Input
<ul style="list-style-type: none"> <li>▪ Pedestrian and bicycle facilities not complete</li> <li>▪ 115 injury crashes</li> <li>▪ Approximately 3 injury crashes per month</li> <li>▪ Rear end crashes predominant</li> <li>▪ Rear end/sideswipe injury crashes 3 times greater than statewide average</li> <li>▪ Observed crashes higher than calculated in 3 locations</li> </ul>	<ul style="list-style-type: none"> <li>▪ Address pedestrian safety, especially school children</li> <li>▪ Address motorist safety</li> </ul>	<ul style="list-style-type: none"> <li>▪ Pedestrian crossing for children need improvement</li> <li>▪ Bicycle facilities need improvement</li> <li>▪ Pedestrian signal needs improvement</li> <li>▪ Turning lanes need improvement</li> <li>▪ Driveway and roadway access needs improvement</li> <li>▪ Roadway design needs improvement</li> </ul>

❖ **Improve mobility**

Technical Analysis	Problem Statement	Stakeholder Input
<p><b>Existing Conditions</b></p> <ul style="list-style-type: none"> <li>▪ Failing level of service at 4 of 6 intersections</li> <li>▪ Failing level of service for over half of roadway segments</li> <li>▪ Long queues – back into adjacent intersections</li> <li>▪ Volume to capacity ratios exceed 1.0</li> </ul> <p><b>2030 Conditions</b> – levels of service, V/C ratios and queuing worsens</p>	<ul style="list-style-type: none"> <li>▪ Regional roadway network deficiencies causing local congestion</li> <li>▪ Lack of interchange access</li> </ul>	<ul style="list-style-type: none"> <li>▪ Signal timing needs improvement</li> <li>▪ Local access should be managed</li> <li>▪ Regional access needs improvement</li> <li>▪ Additional turn lanes needed</li> <li>▪ Vehicle congestion should be addressed</li> <li>▪ Bicycle and pedestrian mobility needs improvement</li> <li>▪ Improve connections to other modes</li> </ul>

❖ **Improve facility condition and design**

Technical Analysis	Problem Statement	Stakeholder Input
<ul style="list-style-type: none"> <li>▪ Portions of pavement constructed in 1940's, have exceeded design life</li> <li>▪ Chicago River Bridge constructed in 1941, has exceeded 50-year design life</li> <li>▪ Minor pavement flooding</li> <li>▪ Signals are 30 years old and warrant replacement</li> <li>▪ Roadway design is deficient (geometrics, tapers, storage, corner radii, ramps, ADA compliance)</li> </ul>	<ul style="list-style-type: none"> <li>▪ Unsustainable wear and tear on local streets</li> <li>▪ Provide cost effective improvements</li> </ul>	<ul style="list-style-type: none"> <li>▪ Design needs to be ADA compliant</li> <li>▪ Pedestrian crossings need improvement</li> <li>▪ Fill in sidewalk gaps</li> <li>▪ Visibility at I-94 ramps need improvement</li> <li>▪ Turn lanes need to be longer</li> </ul>