Illinois 83/137 Study

WELCOME!

Community Advisory Group (CAG)

Meeting #3

November 7, 2012

Village of Libertyville Town Hall

Illinois Department of Transportation

Introductions

Illinois Department of Transportation

VOLKERT

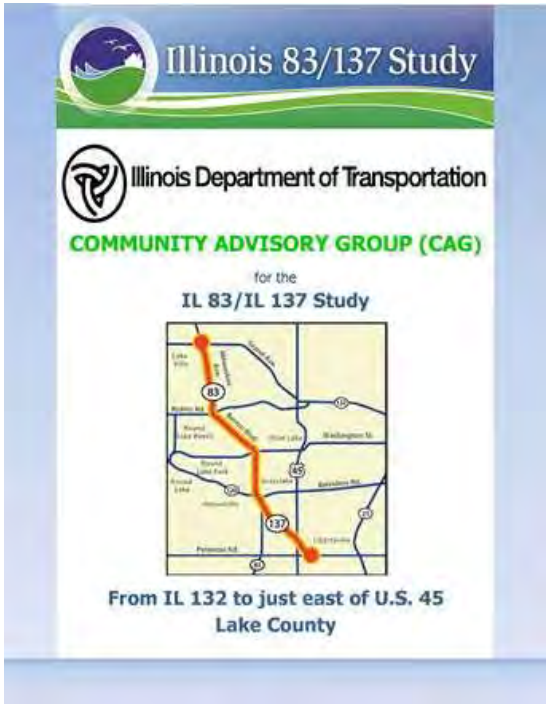
PLANNING COMMUNITIES

Illinois 83/137 Study

CAG MEMBERS

Binder *

- Presentation
- Agenda
- Meeting Minutes – CAG #2
- Engineering Toolbox Explanation
- Roadway Toolbox
- Bicycle & Pedestrian Toolbox



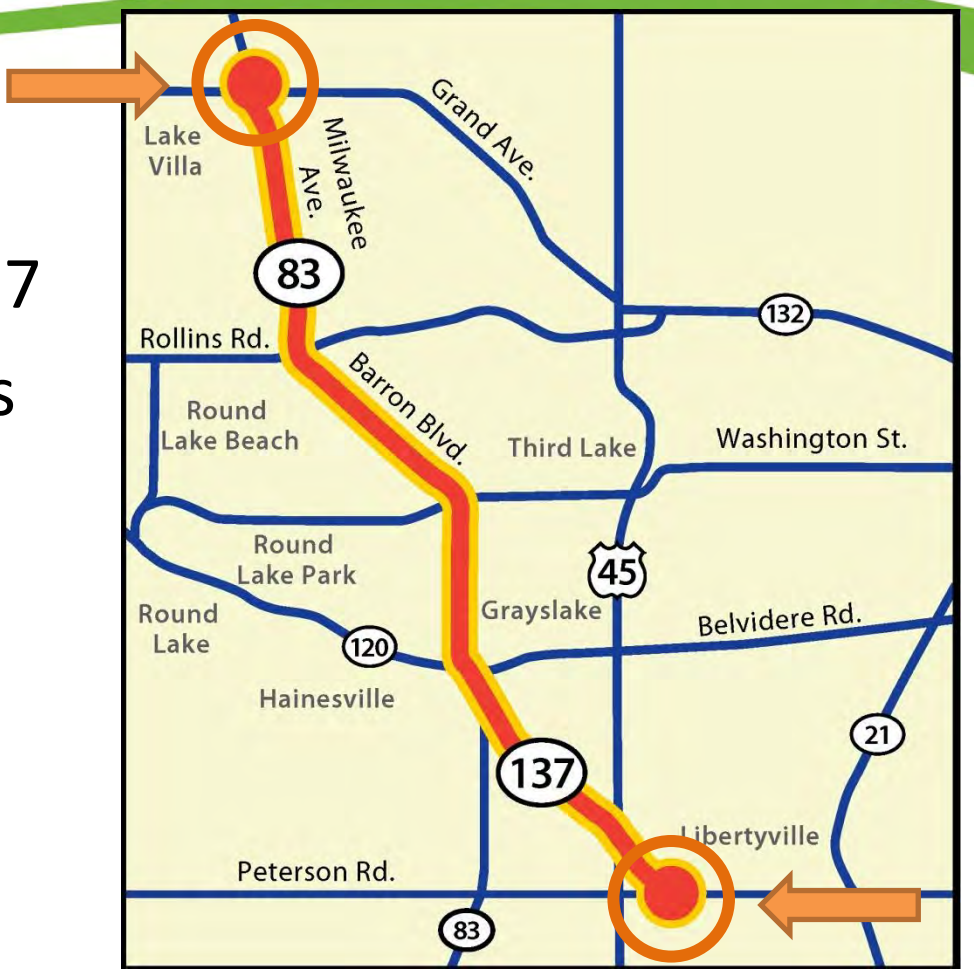
**Please bring to each meeting*

Meeting Purpose

- Present Draft Concepts of the Purpose and Need Statement
- Review Alternative Development Process
- Introduce Engineering Toolbox
- Conduct Alternatives Development Workshop

Illinois Route 83/137 Study

Along Illinois Route 83/IL 137 in Lake County from Illinois Route 132 to just east of U.S. 45



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CAG Meeting # 1 Overview

Identified key issues/concerns

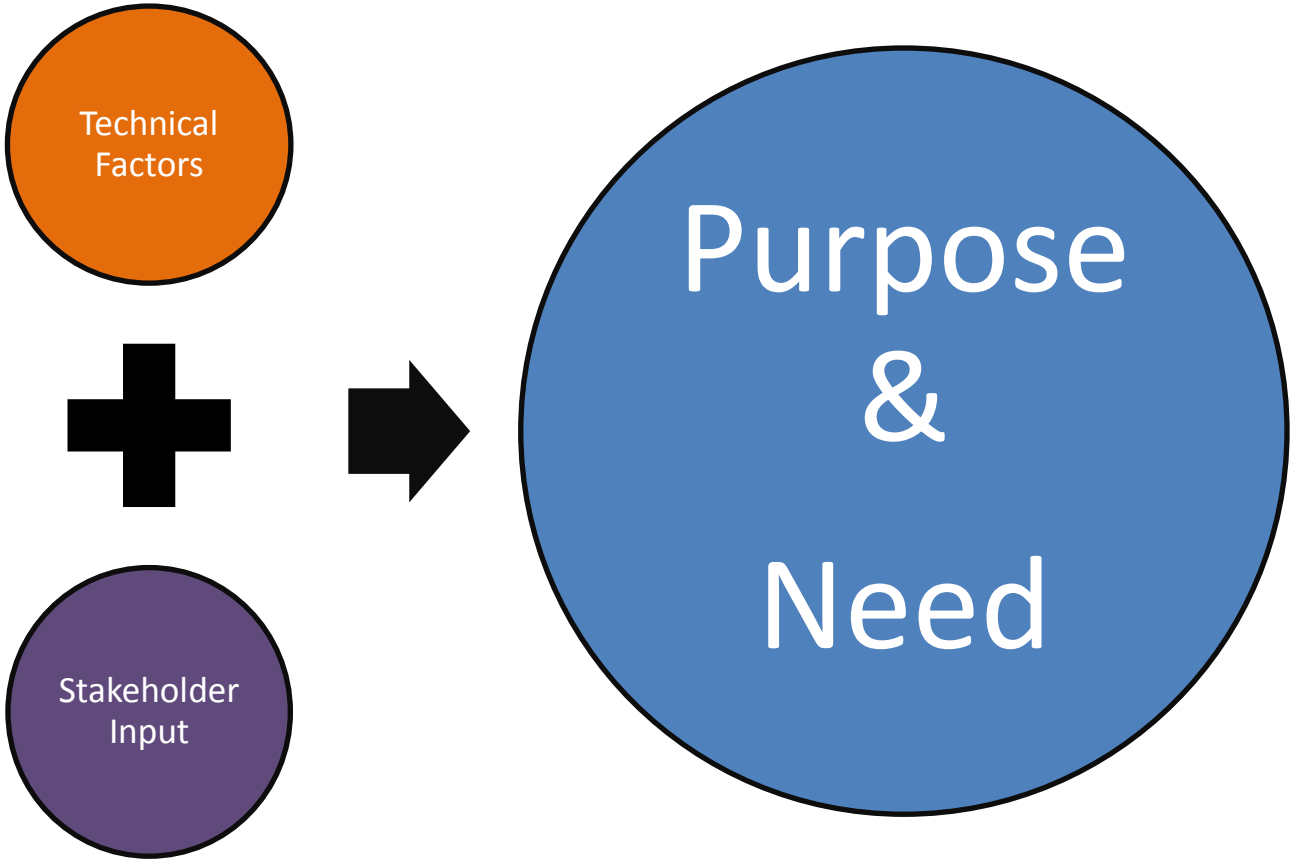
- Multimodal transportation (pedestrian/bicycle paths)
- Safety
- Aesthetics
- Access
- Mobility
- Environmental Impacts
- Schools
- Economic Impacts

Project Problem Statement

"The environment surrounding IL 83 and IL 137 from IL 132 to U.S. 45 in Lake County is encompassed by homes, numerous schools, businesses, parks and open lands that have shaped the surrounding communities character and values. The restricted flow of traffic and lack of connectivity to these important resources creates an impediment to mobility and access for vehicles, pedestrians, and bicyclists. It is essential that the IL 83/IL 137 project preserve these community characteristics while improving the overall safety, identifying multi-modal opportunities, and reducing congestion."

Purpose and Need Statement

What goes into the Purpose & Need?

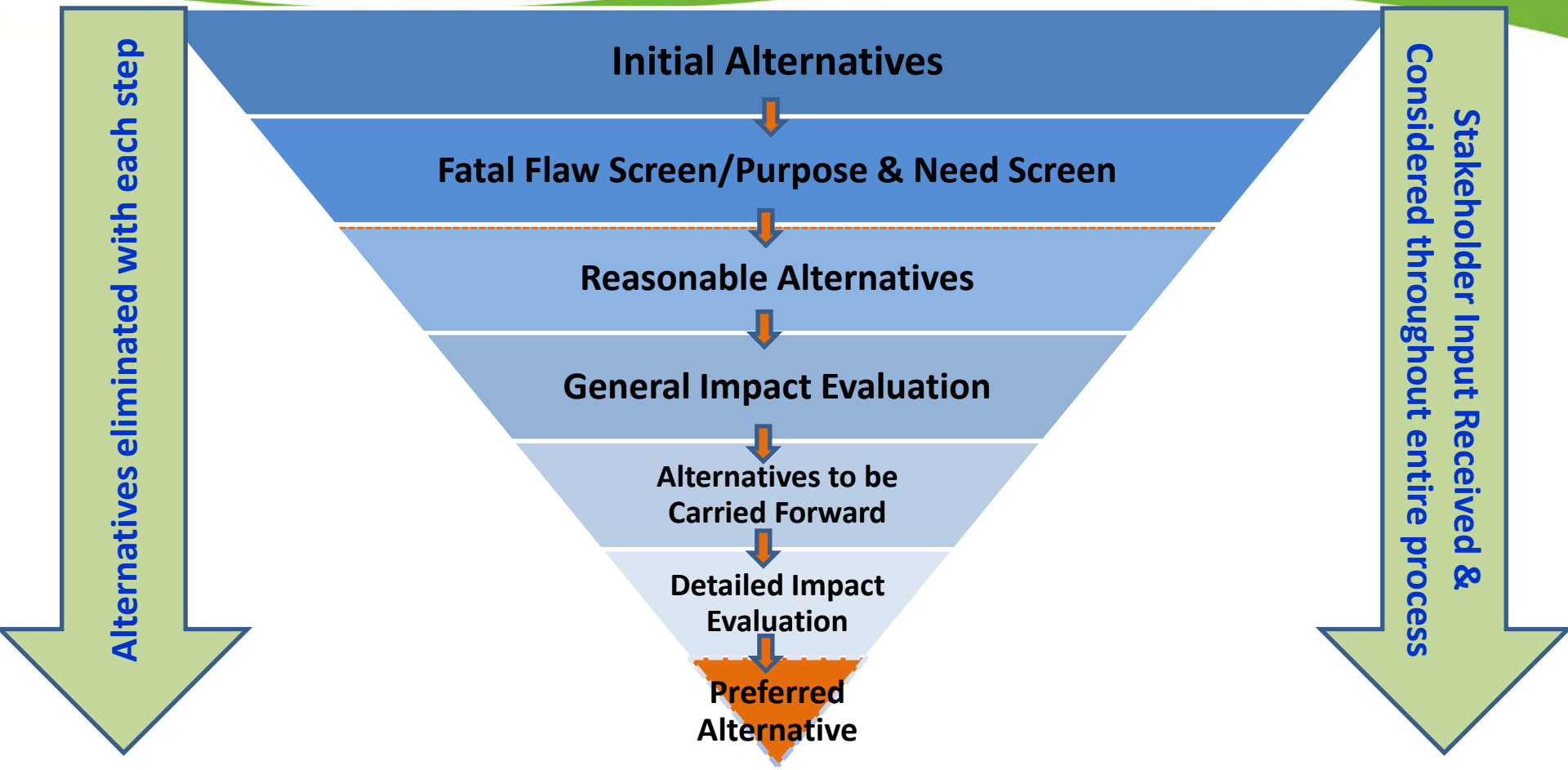


Purpose and Need Statement

The proposed project is needed to

- Improve safety
- Address traffic congestion
- Increase multimodal opportunities

Alternative Development Process



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Detailed Impact Evaluation

EXAMPLE

Evaluation Criteria	Unit of Measure	Alternatives	
		1	2
Wetlands	Acres		
Threatened & Endangered Species	Number		
Streams Crossings	Number		
Floodplain Encroachments	Linear Feet		
Parks Impacted	Number		
Special Waste Sites	Number		
Relocations (Business)	Number		
Relocations (Residential)	Number		
Total Length	Lane Miles		
Total Area Converted to ROW	Acres		
Preliminary Costs	Million $		

National Environmental Policy Act (NEPA)

- IDOT is required to assess environmental impacts for federally funded projects by the **National Environmental Policy Act (NEPA)**
- The purpose of the NEPA is to ensure that environmental factors are weighted equally when compared to other factors in the decision making process.
- Not only is IDOT responsible for adhering to NEPA, but also to environmental specific regulations, such as, the Clean Water Act, Endangered Species Act, etc.

NEPA (continued)

So how does IDOT accomplish this?

- Prepare an environmental inventory
- Avoid sensitive resources, if possible
- Minimize the impacts to resources if they cannot be avoided
- Mitigate the impacted resource as necessary

- *Accomplishes CAG goal of protecting the environment*

CAG Meeting # 2 Overview

Identified project goals

- Provide safe connections and easy access between all modes of transportation
- Increase students walking and biking to schools
- Decrease traffic congestion
- Integrate Village Comprehensive Land Use Plans
- Provide and preserve community aesthetics
- Protect natural resources

Engineering Toolbox

Roadway and Pedestrian Tools

- A collection of design “tools”
- Used to improve safety and mobility along the highway system.
- These tools are intended as a starting point for the discussion of improvements to the Illinois Route 83/137 roadway.
  - The appropriate application of a specific tool does depend upon location conditions.
  - Information from the traffic and crash analysis can be used to determine if the amount of traffic, i.e. volume and turn movements, or the types of crashes occurring make the application of a specific tool more or less appropriate.*

*Source: Willow Road Study

Engineering Toolbox

Roadway and Pedestrian Tools

- The broad range of tools available will contribute to solutions that are safe for pedestrians (especially school children) and motorists, preserve the character of the community, and are cost effective.*
- These tools will play a role throughout the alternative development and evaluation:
  - The application of a specific tool will be dependent upon the local conditions.
  - The tool application must meet the needs of a project.
  - The impacts of a tool will also be taken into consideration.

*Source: Willow Road Study

Engineering Toolbox:

Pedestrian Tools

Pedestrian crossing tools:

- High visibility crosswalks
- Pedestrian countdown signals
- Pedestrian pushbutton treatments
- High intensity activated crosswalk
- Grade-separated crossing
- In-roadway warning lights at crosswalks
- Passive pedestrian sensor
- Pedestrian refuge/Pork chop island

Pedestrian Bicycle Information Center

Pedestrian Bicycle Information Center

Engineering Toolbox:

Pedestrian Tools

School route improvements:

- Sidewalks and walkways

Bicycle improvements:

- Bicycle paths/shared use paths

Pedestrian Bicycle Information Center

Pedestrian Bicycle Information Center

Engineering Toolbox:

Pedestrian Tools

Signage:

- Signs to prompt motorists
- Double-sided pedestrian crossing signs
- Signs to prompt pedestrians

Pedestrian Bicycle Information Center

Pedestrian Bicycle Information Center

Engineering Toolbox:

Pedestrian Tools

ADA Improvements:

- Detectable warning tiles
- Wheelchair ramps
- Accessible pedestrian signals

Pedestrian Bicycle Information Center

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Engineering Toolbox:

Pedestrian Tools

Roadway treatments:

- Driveway improvements
- Reduced crossing widths

Engineering Toolbox:

Pedestrian Tools

Beyond the roadway:

- Eliminate screening
- Transit stop treatments
- Bollards and protective barriers

Traffic control:

- Turn restrictions

Pedestrian Bicycle Information Center

Pedestrian Bicycle Information Center

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Engineering Toolbox:

Pedestrian Tools

Pavement markings:

- Pavement legend for pedestrians

Pedestrian Bicycle Information Center

Education, Engineering, Enforcement, Emergency Response:

- Education, outreach, and training
- Enforcement campaigns


Pedestrian Bicycle Information Center

Engineering Toolbox:

Roadway Tools

Roadway safety improvements:

- Raised median
- Two-way left-turn lane
- Driveway improvements
- Access management
- Improved sight distance
- Horizontal curve realignment

Pedestrian Bicycle Information Center

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Engineering Toolbox:

Roadway Tools

Intersection safety improvements:

- Left-turn lanes
- Traffic signals
- Traffic signal modernization
- Roundabout
- Roadway lighting

Pedestrian Bicycle Information Center

Pedestrian Bicycle Information Center

Engineering Toolbox:

Roadway Tools

Roundabouts: A type of circular intersection in which road traffic is slowed and flows almost continuously in one direction around a central island to several exits onto the various intersecting roads.

ADVANTAGES

- Continuous flow of traffic
- Reduces accident rates and severity
- Reduces vehicle delay
- No equipment maintenance or electricity costs
- Provides a pedestrian crossing opportunity.
- Speed reduction

DISADVANATAGES

- Requires a large amount of right-of-way
- Some drivers may not understand how to proceed through a roundabout
- If a roundabout is placed in close proximity to a signalized intersection where queues may spill back into the roundabout.

Discussion with CAG

Alternatives Development Workshop

BREAK

Alternatives Development Workshop

- What will be accomplished during this workshop?
  - Identify key community sites
  - Identify pedestrian improvement areas
  - Identify roadway alternative concepts
- What will the Project Team do with this information?
  - Develop initial alternatives
  - Run through the alternative development process

Alternatives Development Workshop

- Divide into three groups based on interest area/representation:
  - **Northern:** Lake Villa and Round Lake Beach
  - **Central:** Grayslake
  - **Southern:** Libertyville

Alternatives Development Workshop

What you will be provided

- Aerial maps
- Typical Section Options Sheets
- Stickers
- Post-it Notes/Comment Sheets

Alternatives Development Workshop

Pedestrian Options

School Crossing

Pedestrian

Bicycle

Multi-Use

Alternatives Development Workshop

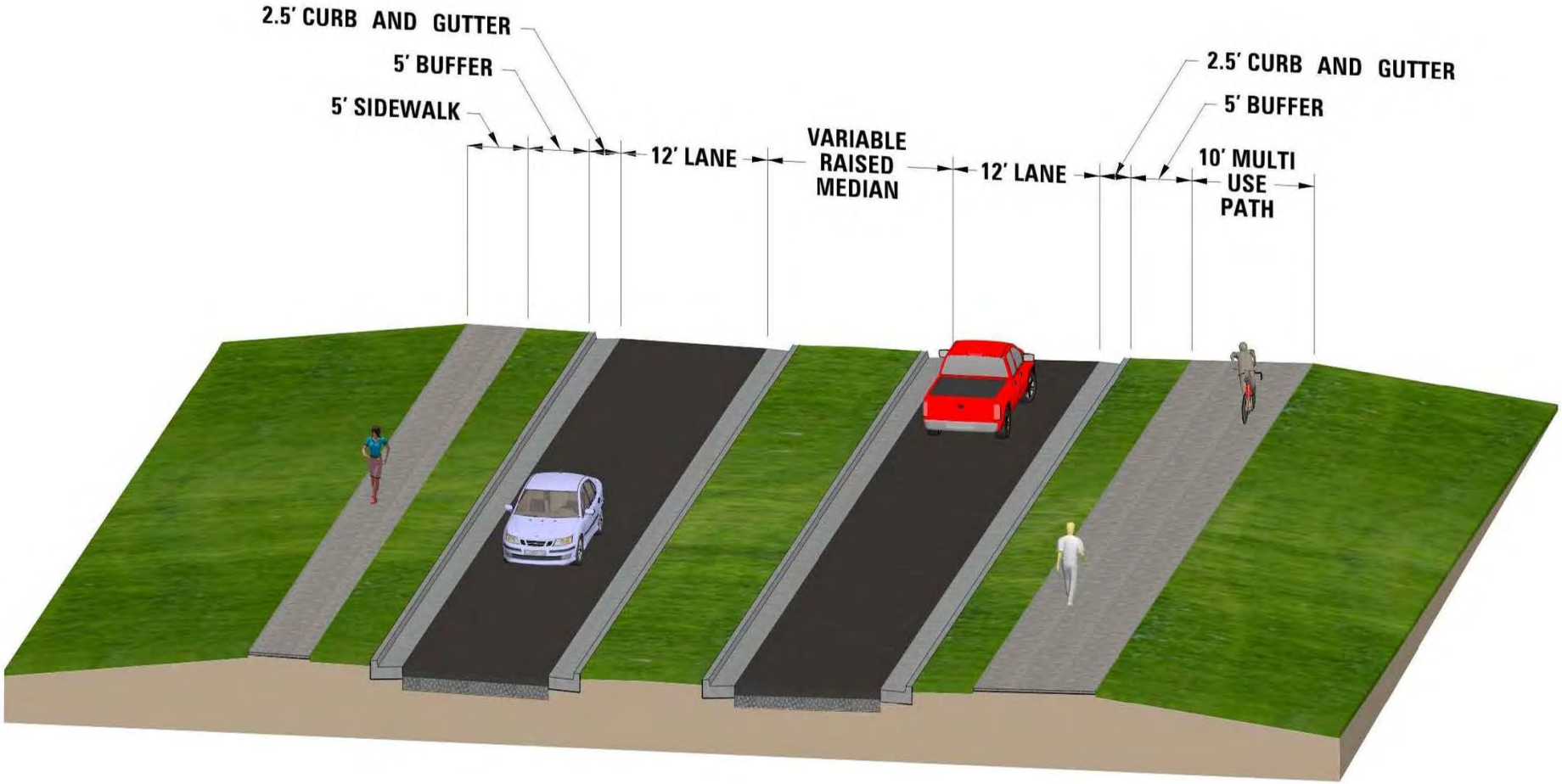
Typical Section Options

- Option A: 2-lane with raised median
- Option B: 3-lane (2-lane with center turn lane)
- Option C: 4-lane with raised median
- Option D: 5-lane (4-lane with center turn lanes)

All typical sections include a 5’ sidewalk and a 10’ multiuse path

Alternatives Development Workshop

Typical Section: Option A



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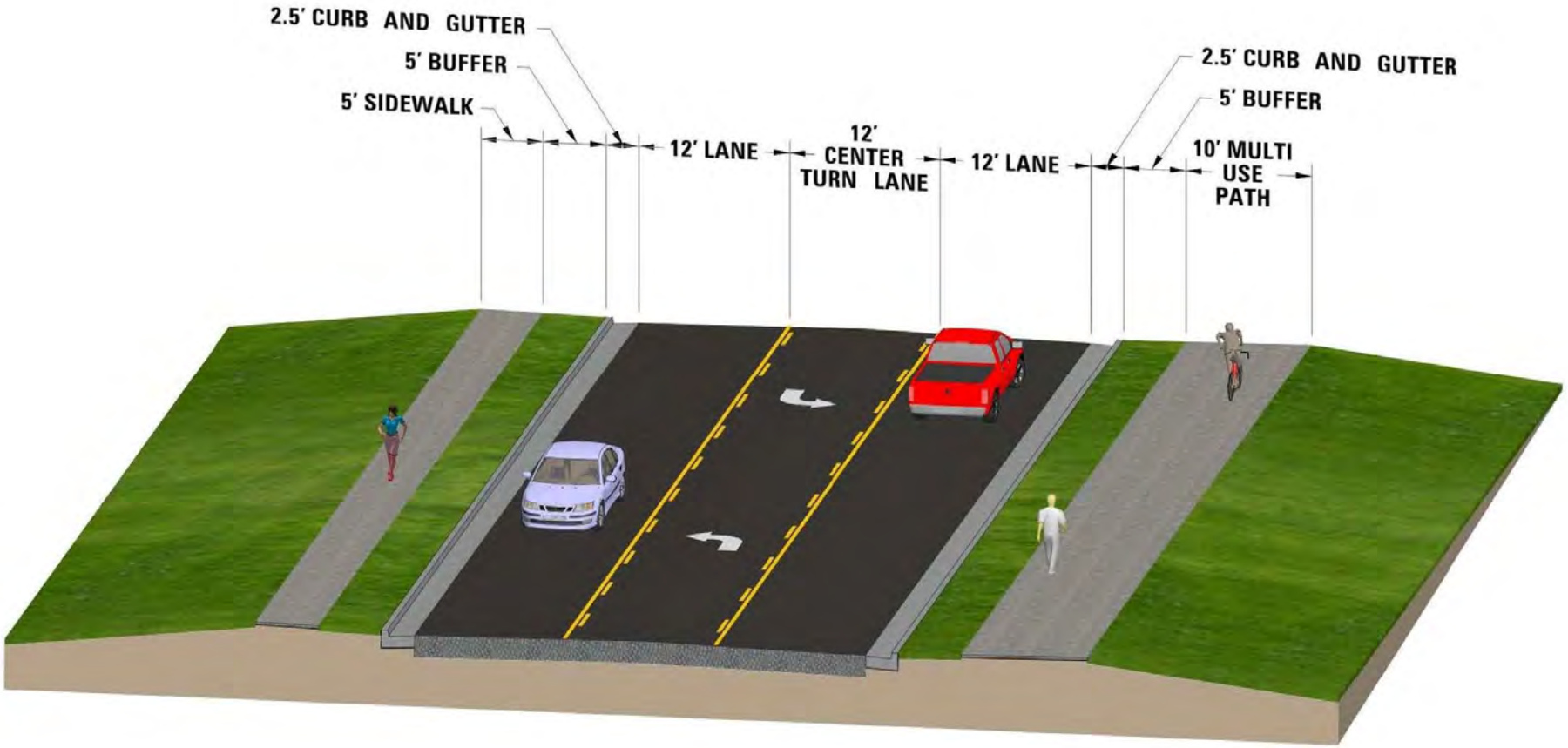
Alternatives Development Workshop

Typical Section: Option B



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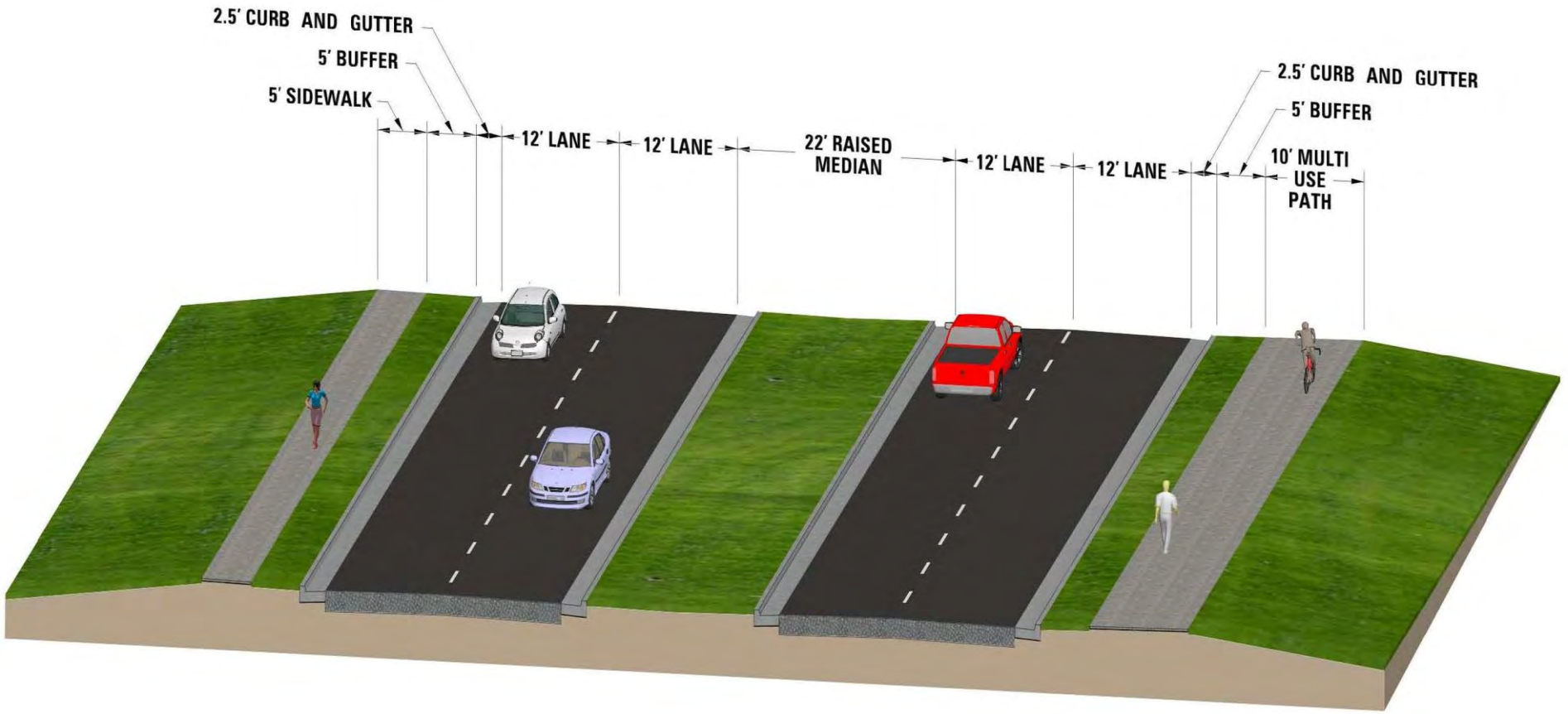
Alternatives Development Workshop

Typical Section: Option C



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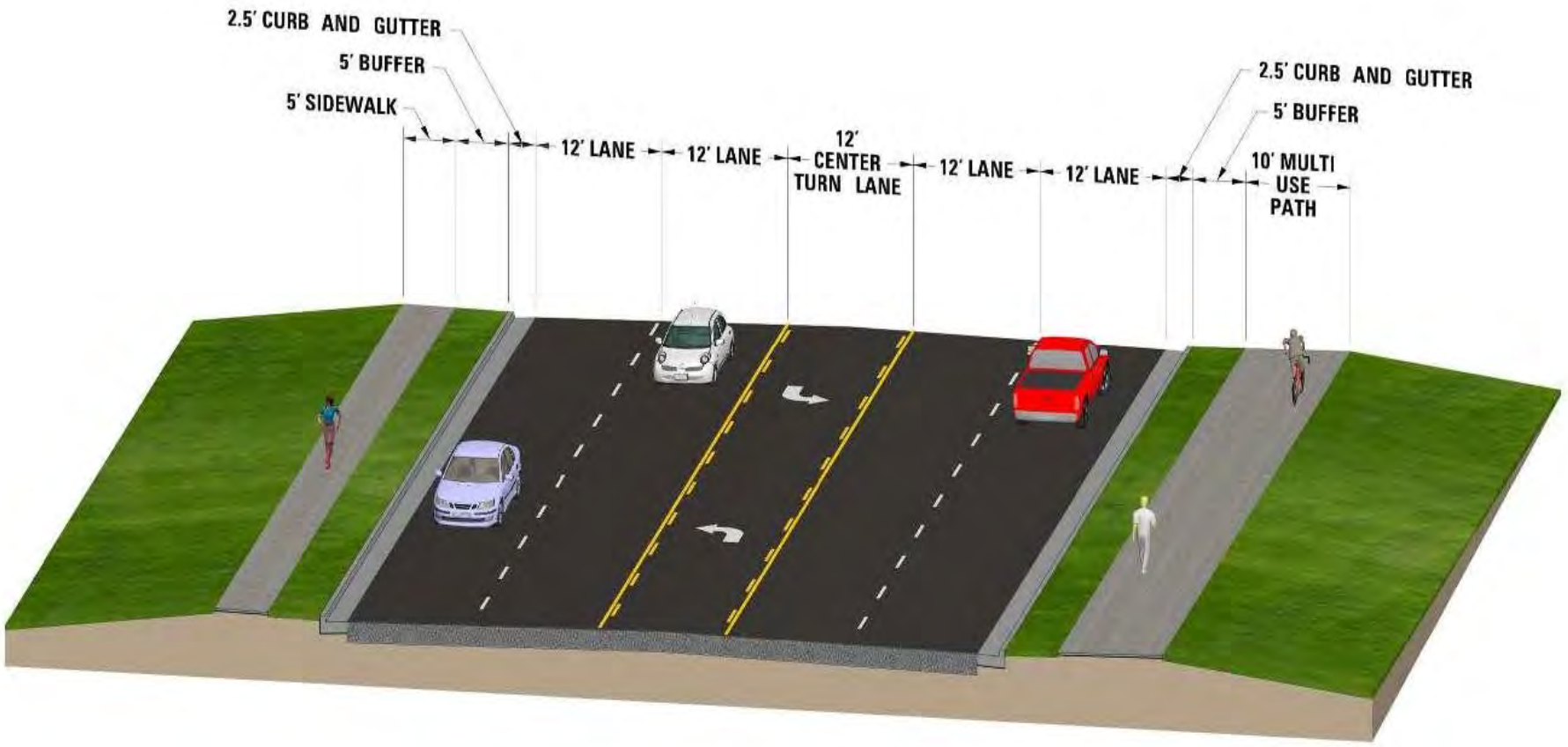
Alternatives Development Workshop

Typical Section: Option D



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Alternatives Development Workshop

Stickers

PEDESTRIAN

School Crossing:

Pedestrian:

Bicycle:

Multi-Use:

TYPICAL SECTION

A 2-lane raised median

B 3-lane (2-lane with center turn lane)

C 4-lane raised median

D 5-lane (4-lane with center turn lane)

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Alternatives Development Workshop

Steps to take during the workshop

1. First, discuss pedestrian improvements.
2. Place stickers on the map where you have identified as an area that needs a pedestrian improvement.
3. Second, discuss the typical sections options (roadway type) where you feel a particular option would work.
4. Place stickers on the map where you have identified what you feel is an appropriate typical section (roadway type).

You may indicate a specific "tool" from the roadway or bicycle/pedestrian toolbox, but this is not necessary.

Principal goal is identifying the typical section and areas that need pedestrian improvements.

Alternatives Development Workshop

- 45 minutes: Each group works on core area
- Rotate to the other two sections

  for 20 minutes each
- Return to core group and report out

Alternatives Development Workshop

Remember….

Remember to ask yourself if the improvements you recommend are addressing the needs of the project.

*Improve the safety of the roadway

*Address traffic congestion

*Increase multimodal opportunities

Remember there is a No-Build Alternative

Next Steps

- Begin developing initial alternatives
- Run through the Alternative Development Process:
  - Fatal Flaw Screen
  - Purpose & Need Screen
  - Identify Reasonable Alternatives
  - General Impact Evaluation

Next CAG Meeting

- Spring 2013
  - Review of approved Purpose & Need Statement
  - Review of Initial Alternatives
  - Presentation of Alternative Development Process Results
  - Workshop: Alternatives to Be Carried Forward

Thank You!

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