

Project Goal:

Improving the Flow of Traffic & Public Safety in the Region



Lead Agency
Kane County
Division of Transportation



Engineer
Burns & McDonnell
Downers Grove

Intersection Background

- Burlington Road
 - is a County Highway
- Illinois Route 47
 - is under the jurisdiction of the State
- High-speed rural intersection

Intersection History

- Pre-1990s:
 - Stop signs for Burlington Road only
- **2000-2001:**
 - Accidents prompted IDOT to add stop signs on Illinois Route 47
 - Intersection became a four-way stop
 - Flashing overhead beacon installed for added safety
- Present Day:
 - Accidents reduced, but with significant congestion, especially during rush hour
 - Growth continues in Kane County

Project Begins

- Study the Intersection and Propose Improvements to Enhance the Flow of Traffic
- Kane County awarded a federal grant to pay for construction
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- Kane County retains the engineering services of Burns & McDonnell

Intersection Study Findings

- Existing four-way stop has improved safety but is insufficient to meet traffic demand
- The need for a traffic signal is clear
- Turn lanes are required to improve flow through the intersection

Original Recommendations

- Add a traffic signal
- Add left- and right-turn lanes from each direction
- Relocate utility poles and drainage ditches to widen road
- Acquire new right-of-way to accommodate improvements

Design Issues

Additions after Project Review:



- Longer turn lanes
 - Additional pavement costs
- More Pavement = Larger Ditches
 - Right-of-way needs increase
- Traffic signal timing changes
 - Increased delay

After Design was revised...

Project Costs <u>Exceeded</u> Available Funding

Design Solution?

Install a roundabout instead of a traditional intersection



- One-half the amount of pavement
- One-third less required right-of-way
- No need to maintain and power a traffic signal

Estimated Cost Savings:

\$1,000,000

Benefits of Roundabouts

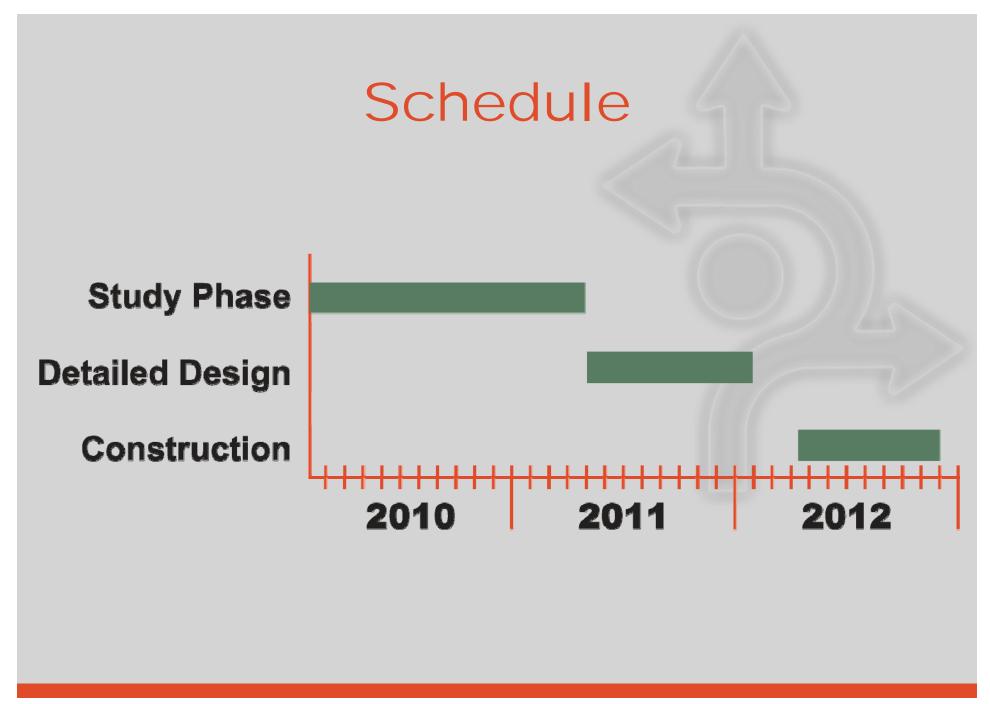
- Safer than other types of intersections
 - Eliminate right-angle and head-on collisions
 - Reduces intersection entry speed
- Reduces congestion by decreasing waiting times
 - Drivers can enter roundabout without stopping

New Findings

- A roundabout will serve this intersection better than a traffic signal
- A roundabout can be built at this intersection using existing grant
- Kane County sees the roundabout concept as an opportunity for innovation
- Illinois Department of Transportation agrees with roundabout concept and encourages County to proceed

Next Steps

- Seek input from County residents and the travelling public
 - Verbal and written comments will allow the County to consider all relevant perspectives
- Use comments to refine the design
- Seek final approval from Illinois
 Department of Transportation
- Design It and Build It!



Thank You for Attending!

 County Officials and Project Representatives are Available to Answer Your Questions

