Williams Blvd & Dean Rd SW
Neighborhood Meeting

February 28, 2019
Intersection Safety Improvements
Welcome & Staff Introductions

- City of Cedar Rapids
- HR Green
- Iowa DOT/Linn County

Agenda

- Presentation
  
  *please hold questions for table discussion*
- Table discussion with staff
How We Got Here

- History of crashes
- Resident concerns
- Traffic Engineering Analysis
Crash Analysis

• Average speeds: 60 mph
• Average traffic volumes: 18,000 vehicles per day
• 24 crashes in the last 5 years:
  • 1 Fatal
  • 12 Injury
  • 11 Property Damage

Considerations

• Speed
• Type of crashes
• Severity
• Rush hour traffic volumes
• Engineering options
Finding the Best Solution

Benefits of Roundabouts

- Eliminates most severe crash types
- Physical design slows vehicles down
- Can handle high volumes of traffic

Challenges of Traffic Signals

- Signals do not eliminate severe head-on/right-angle crashes
- Signals can still result in serious injury on high-speed roadways
- Signal back-ups can occur during peak travel times
Example:
Crash diagram of signalized intersection
Williams Blvd and Stoney Pt Road

Average = 6 crashes per year
Roundabouts Maximize Safety

- More than 90% reduction in fatalities
- 76% reduction in injuries
- 35% reduction in all crashes
- Eliminates head-on and right-angle crashes
- Reduces speeds

*U.S. Department of Transportation Federal Highway Administration*
Reduce Conflict Points

Vehicle Conflict Point Comparison

- Diverging
- Merging
- Crossing

Source: NCHRP Report 672 Exhibit 5-2
Driving a Roundabout

- **Approach**: Slow down. Yield to pedestrians.
- **Enter**: Yield to vehicles in the roundabout. Wait for a gap in traffic, and merge into traffic in a counterclockwise direction.
- **Proceed**: Continue through the roundabout until you reach your street. Never stop in the roundabout.
- **Exit**: Exit the roundabout to your right. Yield to pedestrians in the crosswalk.
Benefits to this Neighborhood

- Eliminates most severe crash types
- Forces vehicles to slow down
- No signal delays; better traffic operations
- Can handle high traffic volumes during rush hour
- Can accommodate trucks
- No neighborhood assessments
Similar Success Stories
State Highway 282 & Black Hawk
County Road V49
Timeline

• Preliminary concept completed
• Final design underway
• Public outreach underway
• Complete design summer 2019
• Construction: spring/summer 2020 (UPDATED)
• Completed in one construction season
Construction Process

• US 151 Bridge and Culvert improvements already scheduled for construction next year
• Planned detour diverts through traffic east to I-380
• Makes construction staging much simpler
• Dean Rd will be closed
• Maintain access for local traffic
Next Steps

- Stay Informed
  - Please provide your email address on sign-in sheet
  - Periodic electronic updates will be sent
- City to mail additional information prior to construction starting
Table Activity

- Review material at table
- Staff available for questions