

# College Community School District Safety & Traffic Improvements



December 2016



# Welcome and Introductions

## **City of Cedar Rapids**

- John Witt, P.E., PTOE  
Traffic Engineering
- Matt Myers, P.E., PTOE  
Traffic Engineering
- Kevin Vrchoticky P.E.,  
Engineering
- Emily Muhlbach,  
Communications

## **Bolton & Menk Design Consultant**

- Adrian Holmes, P.E., CFM
- Casey Byers, P.L.A.
- Chris Chromy, P.E., PTOE

## Meeting Purpose & Format

### **WHY**

are improvements needed?

### **WHAT**

projects are underway to improve safety?

### **HOW**

will these improvements be implemented?

### **SCHEDULE**

6:00 p.m. Presentation

6:30 – 7:30 Open House

### **FORMAT**

Presentation

Discuss at Tables

Tables Report out to Group

Open House / Mingle

# Focus on Safety and Efficiency



# Improving Traffic Flow

## Challenges Today

- Routine backups
- High crash risk area
- Current traffic control non-sustainable
- Projected growth on the horizon



# Introduction to Roundabouts

Un-signalized, circular intersection engineered to  
**maximize safety and minimize delays.**

Fundamental characteristics of roundabouts:

- **Counterclockwise Flow.** Traffic travels counterclockwise around a center island.
- **Entry Yield Control.** Vehicles entering the roundabout yield to traffic already circulating.
- **Low Speed.** Curvature that results in lower vehicle speeds, generally 15-25 MPH.



# Benefits of Roundabouts

## **SAFETY**

- Eliminates head-on crashes and right-angle crashes
- Decreases severity of crashes
- Reduces speeds

## **TRAFFIC FLOW**

- Can move more traffic during peak hours
- Reduces stops
- Reduces delays
- Reduces congestion

## **ENVIRONMENT & LIVABILITY**

- Reduced emissions
- Reduced fuel waste
- Fewer hard stops
- Landscaping and beautification

## **ECONOMICAL**

- Longer service life
- No signal maintenance
- Better long-term economic value

## Key Feature: Safety

only

8

conflict\*  
points

vs.

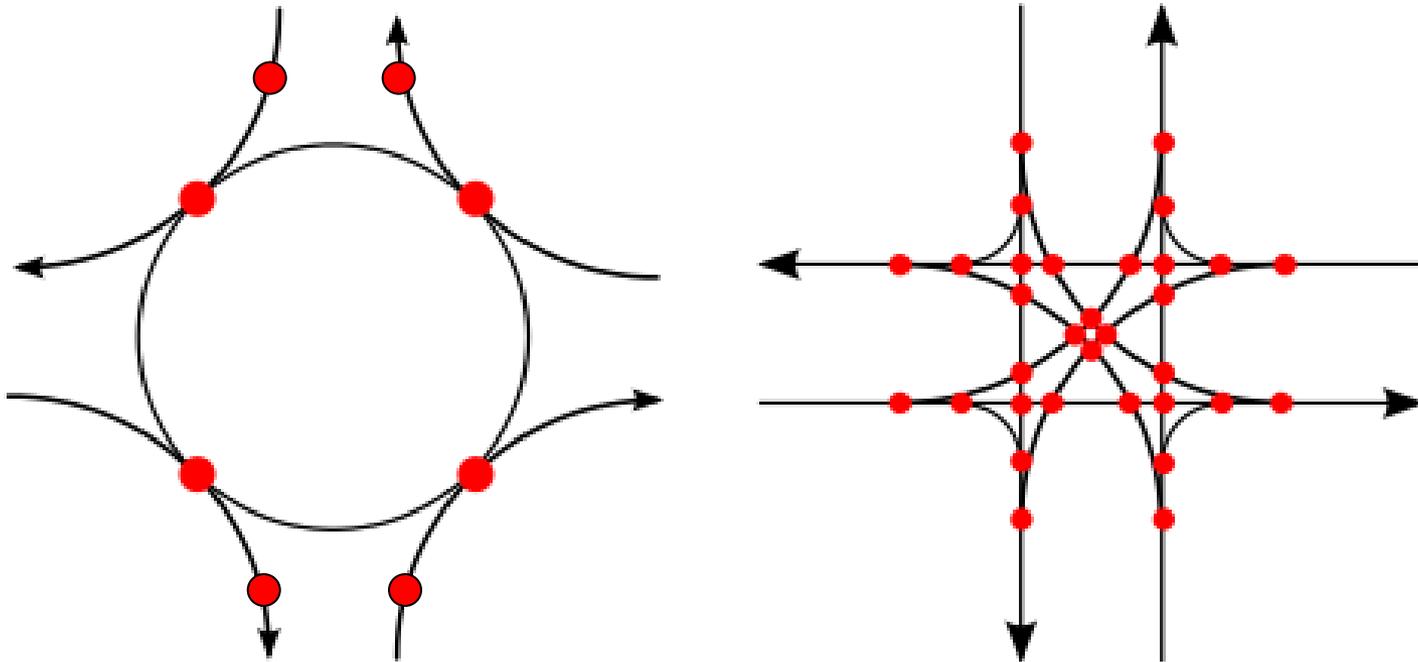
32



conflict points in a  
traditional intersection

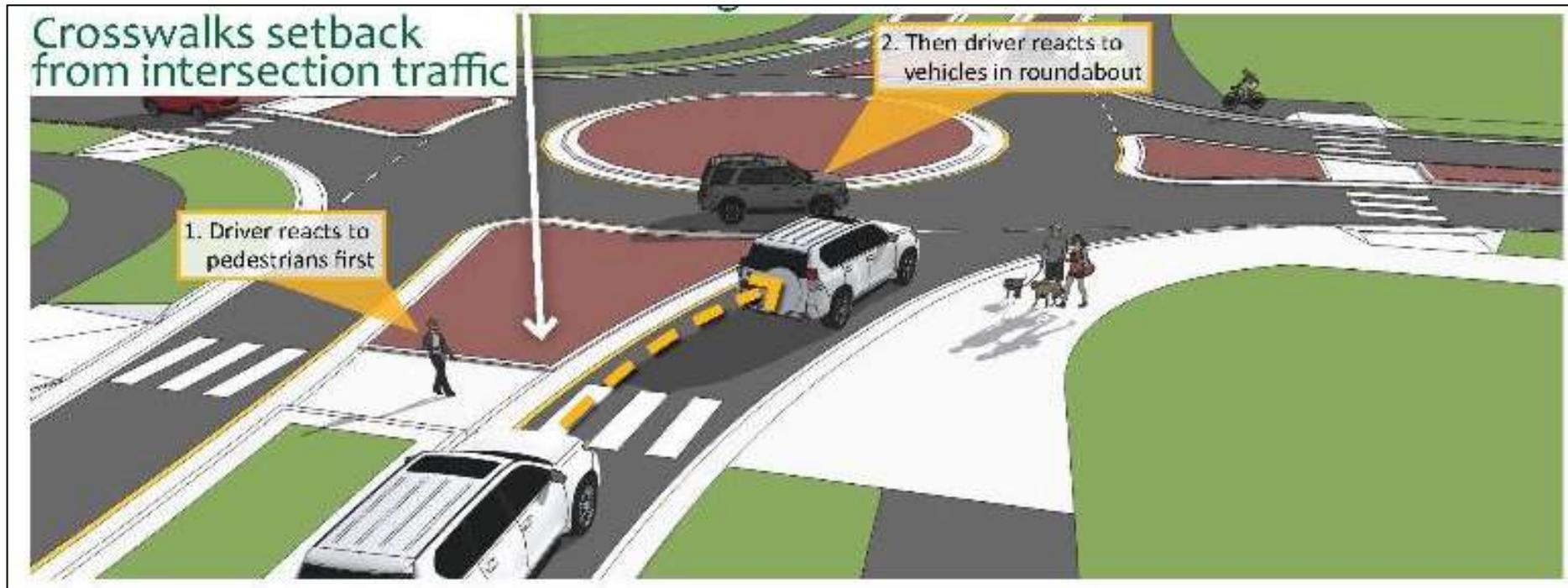
\* A conflict point is any location vehicles interact with another vehicle, pedestrian or bicycle.

## Reducing Conflict Points



Only 8 conflict points in a roundabout, versus up to 32 at a traditional intersection.

## Safer for Pedestrians



# Supports All Traffic Types



Original source photo by Lee Rodegerdts.

# Roundabout Summary



<https://www.youtube.com/watch?v=1DJDjaa25Co&feature=youtu.be>

## Timeline & Next Steps

- Information Meeting with College Community.....December 2016
- City and design consultants integrate feedback.....now – Spring 2017
- Project is Bid.....Spring 2017
- Follow-up Information Meeting .....Spring 2017
- Construction Starts.....After school year ends
- Project Completed.....Before school begins 2017

***Information will continue to be made available to the  
College Community School District***





## Discussion and Wrap-Up

- Staff available at each table for questions
- Comment forms available – please complete
- Staff will help summarize table comments for the benefit of all

**Open house format for questions and answers until 7:30 p.m.**

**Project Website: [www.cityofcr.com/roundabouts](http://www.cityofcr.com/roundabouts)**

John Witt | 319-286-5800 | [j.witt@cedar-rapids.org](mailto:j.witt@cedar-rapids.org)

Kevin Vrchoticky | 319-286-5896 | [k.Vrchoticky@cedar-rapids.org](mailto:k.Vrchoticky@cedar-rapids.org)

Adrian Holmes | (319) 594-5775 | [adrianho@bolton-menk.com](mailto:adrianho@bolton-menk.com)