



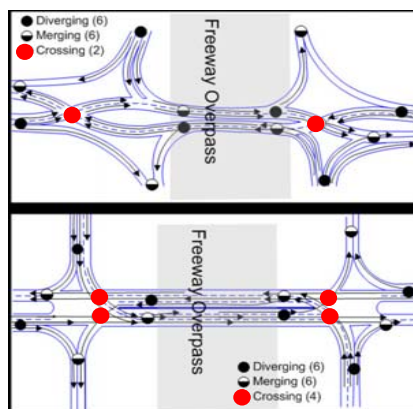
# Why a DCD at US 60?



## A Safer Interchange Design

The DCD reduces conflict points, which reduce crash rates. With a 25 MPH design speed, the DCD also calms traffic.

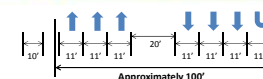
Crossing conflict points, where the most severe crash types occur, are reduced from **four** in a conventional diamond interchange to **two** for a DCD interchange.



## Less Expensive and Faster to Build

Using existing infrastructure reduces costs.

The project will include six lanes beneath I-24 and a shared use path will be provided along the north side for pedestrians and bicyclists. The existing bridge does not have to be replaced, saving both money and time.



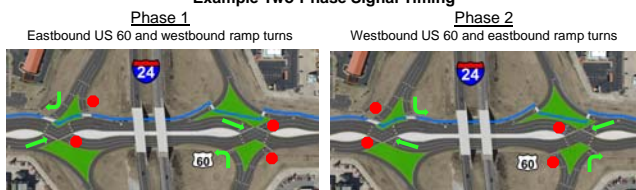
## Reduces Traffic Congestion

Congestion will be reduced on both US 60 and the I-24 ramps.

- Provides an additional eastbound through lane beneath I-24
- More efficient two-phase traffic signals
- Free-flowing left turns for entrance ramps
- Improved exit ramps



Example Two-Phase Signal Timing



## Current Project Funding

Phase	Year*	Cost
Right-of-Way	2016	\$210,000
Utilities	2016	\$320,000
Construction	2017	\$3,790,000
<b>TOTAL</b>		<b>\$4,320,000</b>

\*Source: Kentucky 2014 Highway Plan



# US 68 (Harrodsburg Rd.) at KY 4 (New Circle Rd.)



## Kentucky's First DCD Interchange



### Background

In 2007, a project was initiated to increase capacity on Harrodsburg Road and to improve the safety of this interchange. Stantec worked with the KYTC to seek improvement options, but a lack of funding stalled the project. In 2010, the Project Team decided the DCD was the best solution. Construction began in June 2011 and the project was complete by November 2011.



### Project Issues

- Existing interchange had a high crash rate with 80% rear end crashes
- Congestion was a significant issue (39,000 vehicles per day)
- Funding was limited

### Quick facts

- Opened to traffic on 8/14/11
- Cost: \$6.1M (DCD was about \$3.0M)
- Construction took about 5 months
- **Crashes have decreased by 47%** compared to three prior years

### Before & After



### Survey Results

The Kentucky Transportation Research Center at UK conducted a survey a few months after the project was complete. Over 1,400 responses were received, and here are the results:

- 62% thought the project made the roadway **safer**
- 64% said it was **more convenient**
- 62% said it was **less congested**
- 64% said it was **easier to drive**
- 72% said it was a **good solution**
- 72% said a DCD **should be considered elsewhere**

### Fall 2011 Actual Photos



### Public Meeting Graphics

