



OHIO DEPARTMENT OF
TRANSPORTATION

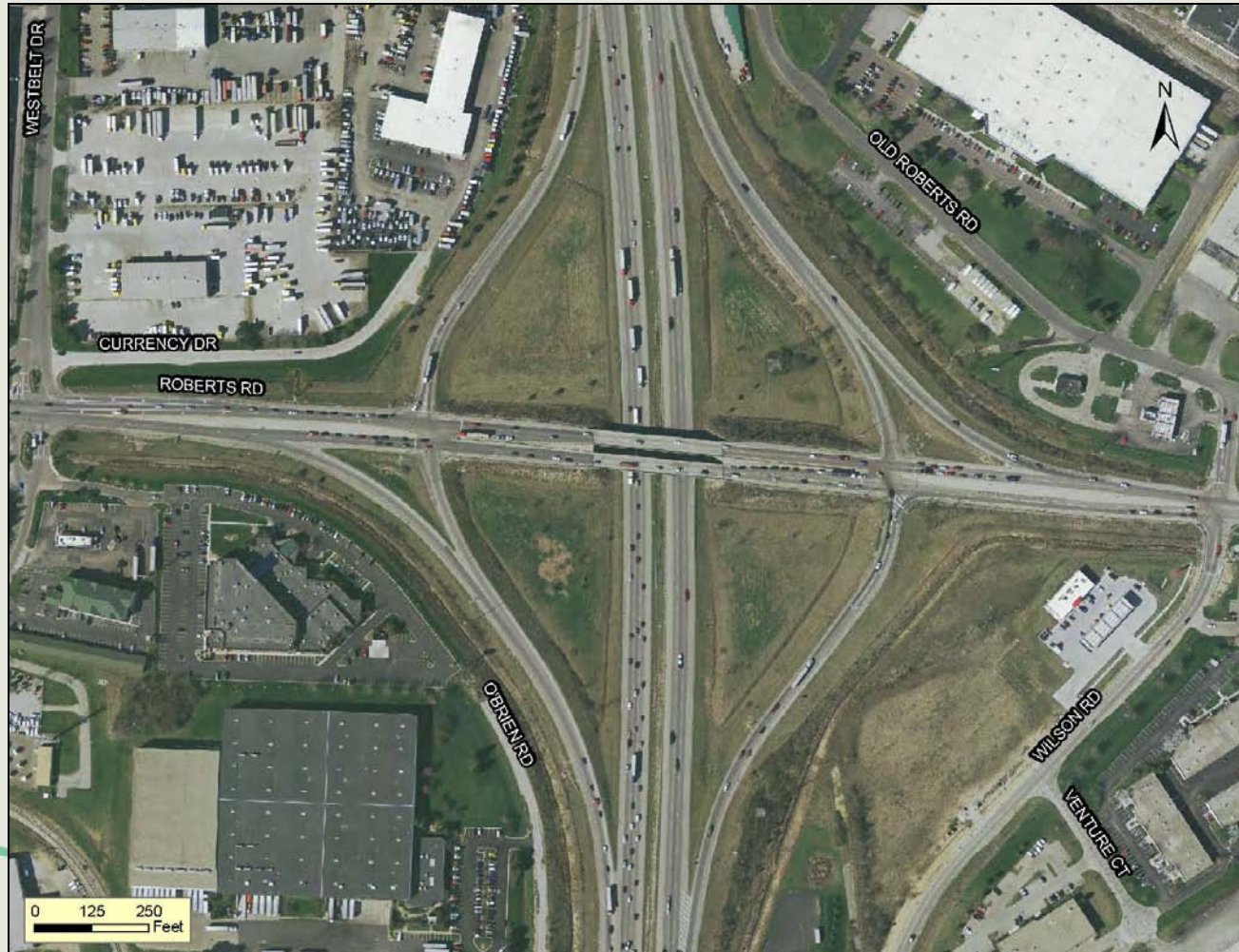
I-270 & Roberts Road Interchange Improvements

Stakeholder and Public Meetings
November 16, 2010

Meeting Agenda

- **Presentation**
- **Question and answer session**
- **Review exhibits / Open House**
- **Please fill out comment sheets**

Current Interchange



Purpose of this Project

- **Improve safety**
- **Reduce congestion**
- **Bridge improvements**

Project History

- Interchange identified as a “Hot Spot” location by the **Highway Safety Program**
- Bridge determined to need a new concrete deck and clearance to I-270 increased by the **District Preservation Program**
- Safety and bridge improvements were combined into one project to:
 - cost savings
 - minimize impacts to the traveling public

Corridor Study

2006 Northwest Freeway Study

- Identified long-term corridor needs
- Recommended major interchange improvements
- Recommended widening of I-270

Capacity

- **Traffic Volumes**
 - **2010 - 50,000 vehicles per day**
 - **In 2033 - 63,000 vehicles per day**
- **Current interchange does not have capacity to handle these volumes**

Crash Stats

- 76 total crashes 2007-2009
- Total injury crashes.....29
- Total property damage crashes.....47

Crash Stats (continued)

- Rear end crashes.....41
- Left turn crashes.....18
- Angle crashes.....10

Roberts Road Bridge over I-270

- Built in 1968
- Regular maintenance performed
- 11% of traffic is trucks

Bridge Needs

- Deteriorating concrete deck
- Substandard
 - Railing
 - Shoulder width
 - Clearance over I-270



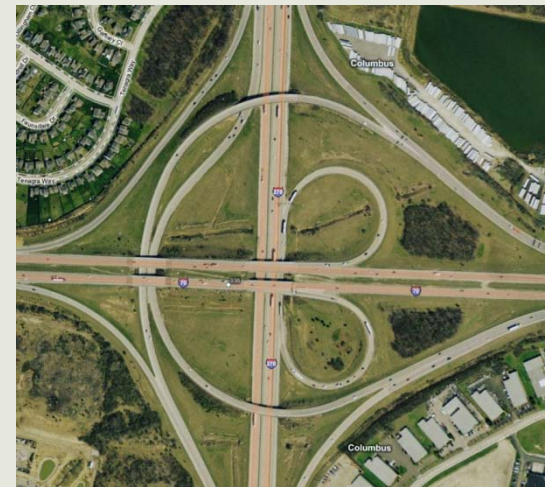
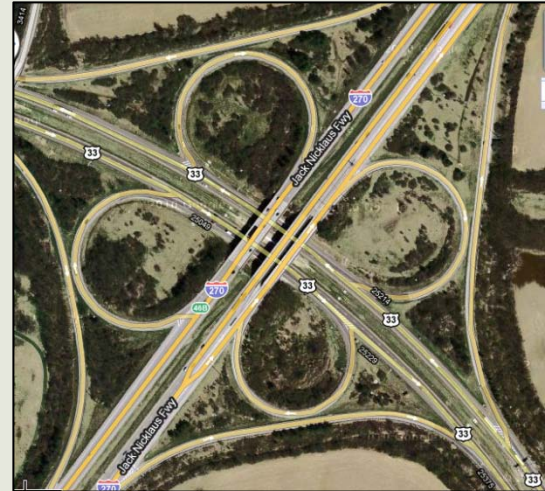
Project Solutions

- Reduce crashes
- Improve traffic flow
- Replace bridge deck
- Raise bridge
- On budget

Options – Not Advanced

- **Full clover-leaf**
 - I-270/US 33 (right)
 - Issues: Cost, environment and R/W impacts

- **Directional ramps (fly-over ramps)**
 - I-270 to I-70 (right)
 - Issues: Cost, environmental and R/W impacts



Options – Not Advanced

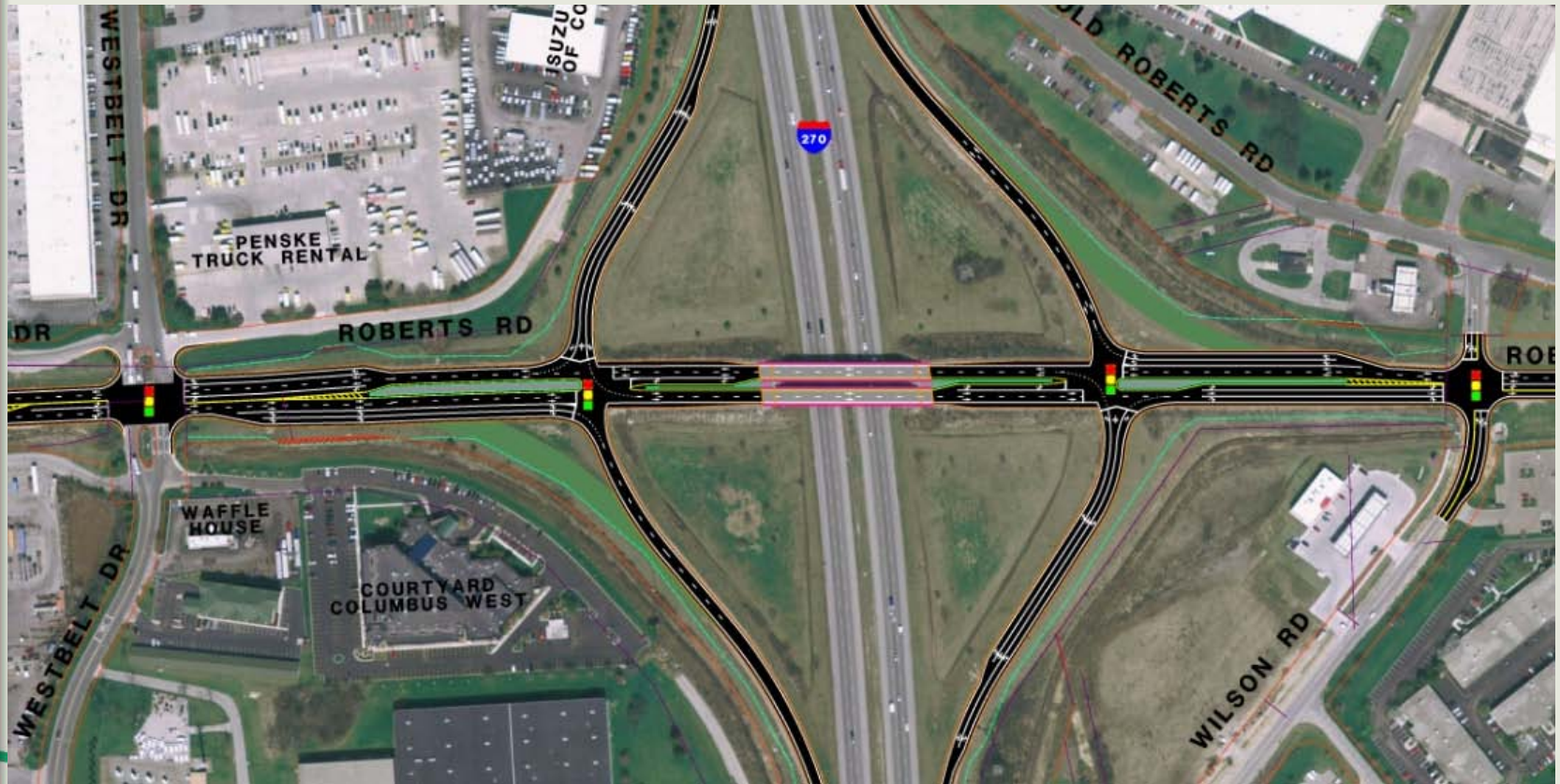
- **Single Point Urban Interchange (SPUI)**
 - I-270 and Sawmill Road (right)
 - Issues: Cost, utility impacts, major bridge work



Options Advanced

- Improved Diamond Interchange
- Diamond Interchange with Roundabouts
- Diverging Diamond Interchange

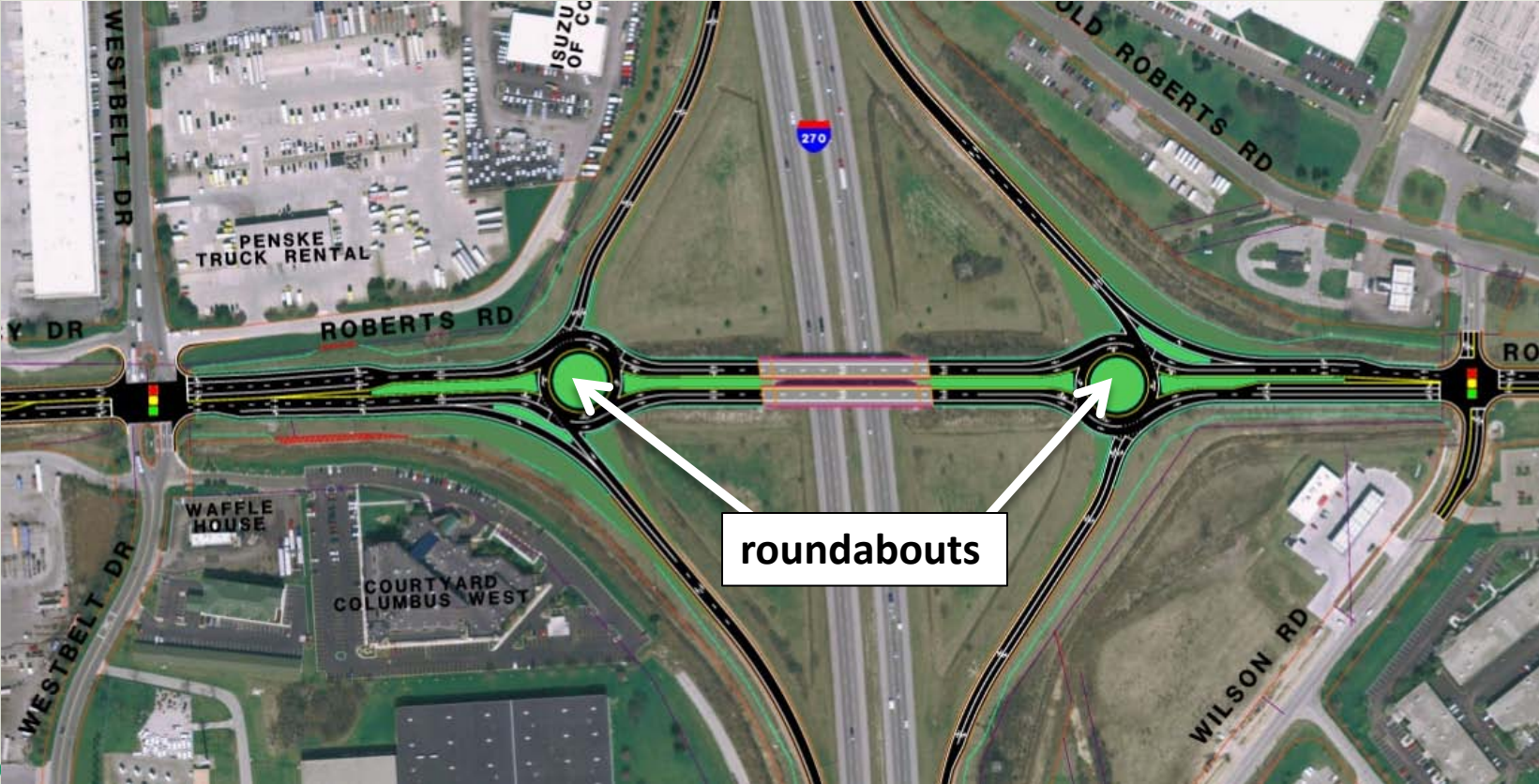
Improved Diamond Interchange



Improved Diamond Interchange

- **Advantages**
 - Reduces congestion
 - Minimal impacts (R/W, environmental)
- **Issues**
 - Congestion still persists

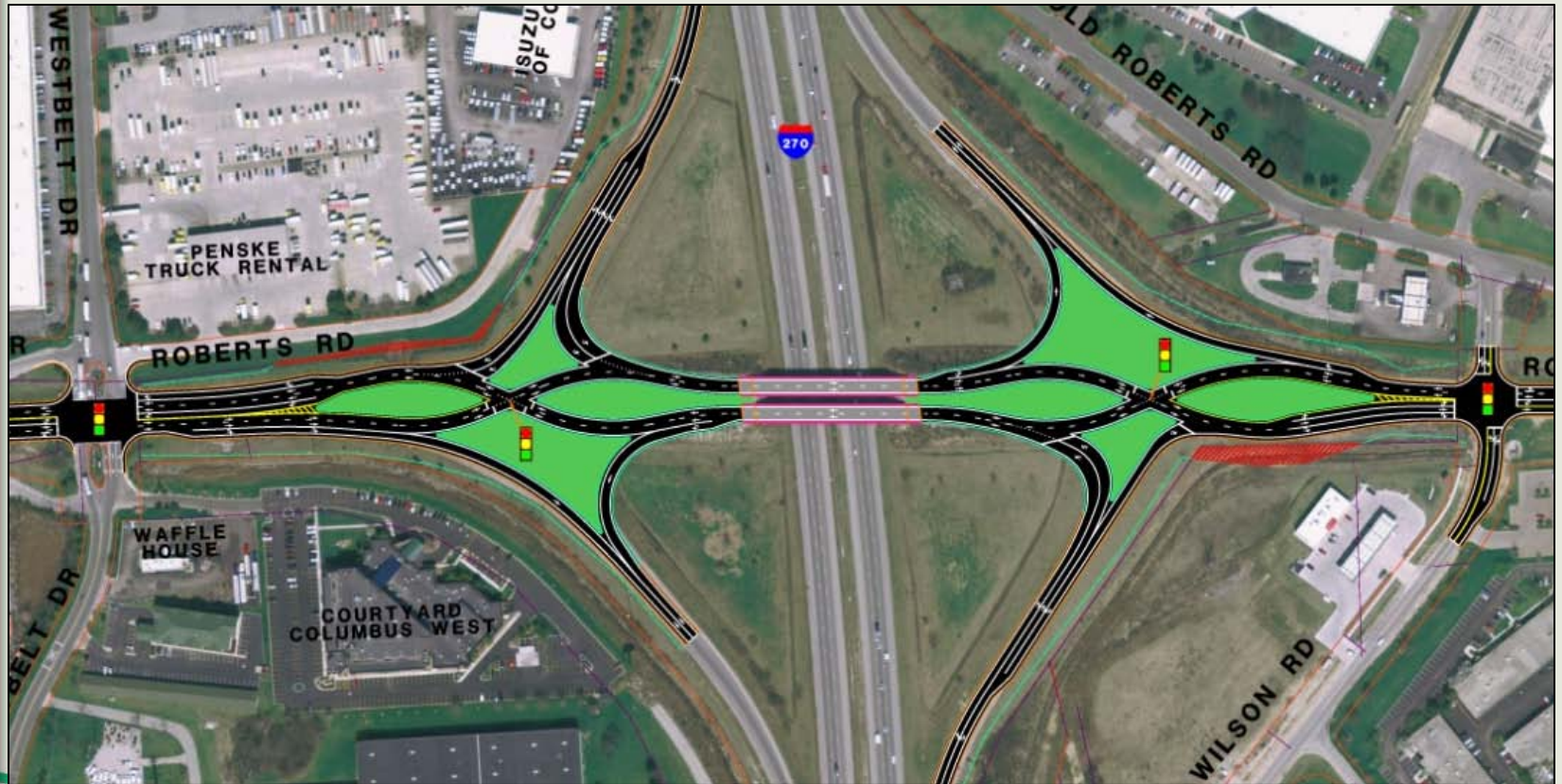
Diamond with Roundabouts



Diamond with Roundabouts

- **Advantages**
 - Reduced injury crashes (on Roberts Road)
 - Minimal impacts (R/W, environmental)
- **Issues**
 - Ramp traffic back-up onto interstate

Diverging Diamond Interchange (DDI)



[Web Video Link](#)

Diverging Diamond Interchange (DDI)






- **Advantages**
 - Eliminates congestion problem
 - Missouri DOT has seen crash reduction with DDI
 - Minimal impacts (R/W, environmental)
 - Better for trucks
- **Issues**
 - No straight thru movements on ramps

























Ramp Metering

- Ramp metering maintained at SB on-ramp
- Ramp metering added NB on-ramp



Summary

-  1. Excellent
-  2. Very Good
-  3. Good
-  4. Fair
-  5. Poor

	Expanded Diamond	Diamonds with Roundabouts	Diverging Diamond	No-build
Address Purpose and Need Elements				
Project reduces crashes				
Project improves capacity, reduces congestion, and minimizes backups				
Project improves bridge substandard elements				
Other Goals and Objectives				
Project minimizes environmental impacts				
Project minimizes potential right-of-way impacts				
Project minimizes cost				

Next Steps

- **Four-week comment period**
- **Review comments**
- **Select preferred alternative**
- **Notify stakeholders and public**
- **Begin detailed design**
- **Approximate start of construction: 2013**

Comments, Questions, Discussion

- Open forum
- Break-out / Open House
- Please fill out comment sheets
- Website:

www.dot.state.oh.us/districts/Do6/projects