



Innovative Facility and Infrastructure Design™

DEL-71-7.91

Stakeholder Meeting

LJB INC. | October 12, 2011

OVERVIEW



- Welcome and introduction 2:00 pm
- Project Background 2:05 pm
- Study approach 2:10 pm
- Alternative evaluation 2:15 pm
- Findings 2:45 pm
- Next Steps 2:50 pm

BACKGROUND



- Two conclusions were consistent from the previous studies completed between 2000 and 2010
 - > Lack of existing and future capacity on US36/SR37
 - > Recommendations did not solve design year deficiencies on the existing transportation network

EXISTING AND FUTURE CONDITIONS



- Traffic volumes
 - > Peak volumes to/from the south
 - > Traffic increases 160% by 2032
- Operations
 - > US36/SR37 corridor expected to operate at LOS F in the design year without additional improvements
- Safety issues
 - > Lack of capacity
 - > Lack of access management
 - > Insufficient traffic signal spacing

PURPOSE AND NEED



- Purpose & Need
 - > Reduce congestion and safety issues on I-71
 - > Improve operations of US 36/SR 37
 - > Support growth consistent with area land use and economic development plans
- Stakeholder goals and objectives
 - > Accommodate multi-modal alternatives
 - > Identify an interchange alternative on a timeline that meets public/private sector development needs

PHASED PDP



ODOT's Project Development Process (PDP) – Phased Approach



SAMPLE DECISION TREE



DECISION CRITERIA



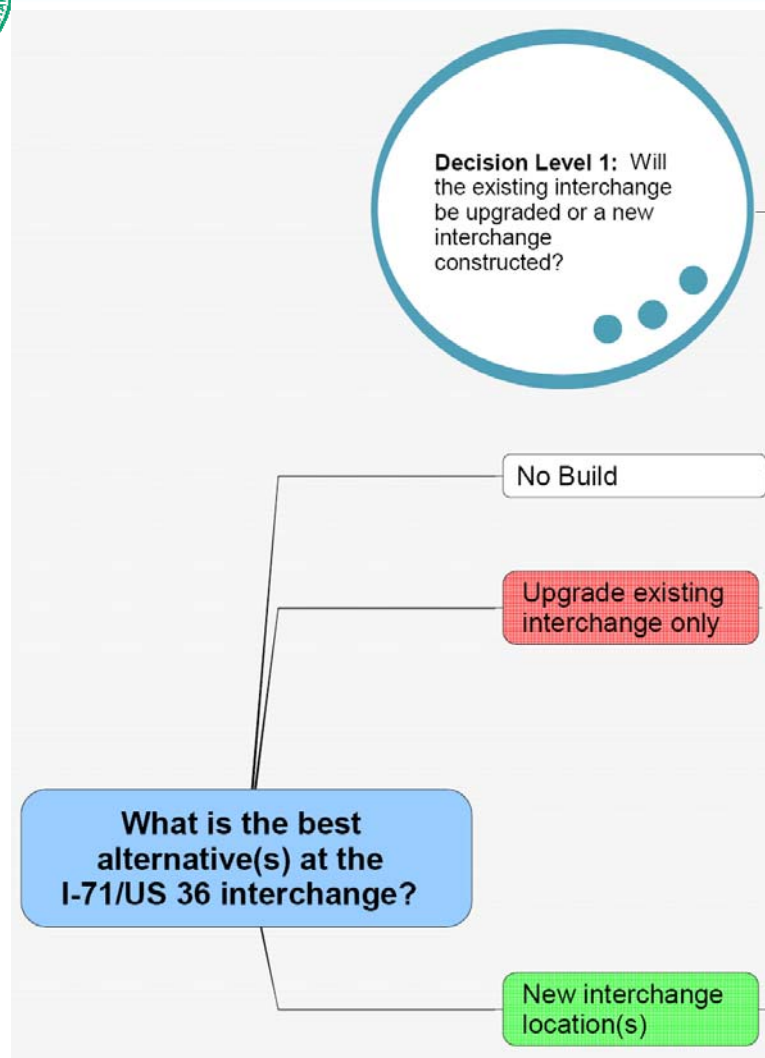
- **Protect I-71**
 - > Preserve capacity & improve safety
- **Improve US 36/SR 37**
 - > Increase throughput, operations and safety within the study area
- **Support planned development**
 - > Encourage economic development
- **Support existing development on US 36/SR 37**
 - > Maximize direct access to existing business
 - > Reduce congestion and improves safety

DECISION CRITERIA



- **Constructability**
 - > Reduces contractor issues relating to construction (MOT, utility relocation, geotechnical and terrain constraints)
- **Construction cost**
- **Funding and/or phasing**
 - > Increases opportunities to secure project funds (PPP, property donation, etc)
 - > Maximizes potential for phased construction
- **Environmental resources**
 - > Reduces extent and significance of affected enviro resources including air
- **Ability to expedite**
 - > Meets necessary timeline of public and private sectors

LEVEL 1 DECISION TREE



- > Level 1 Decision
 - > Will the existing interchange be upgraded or a new interchange constructed?

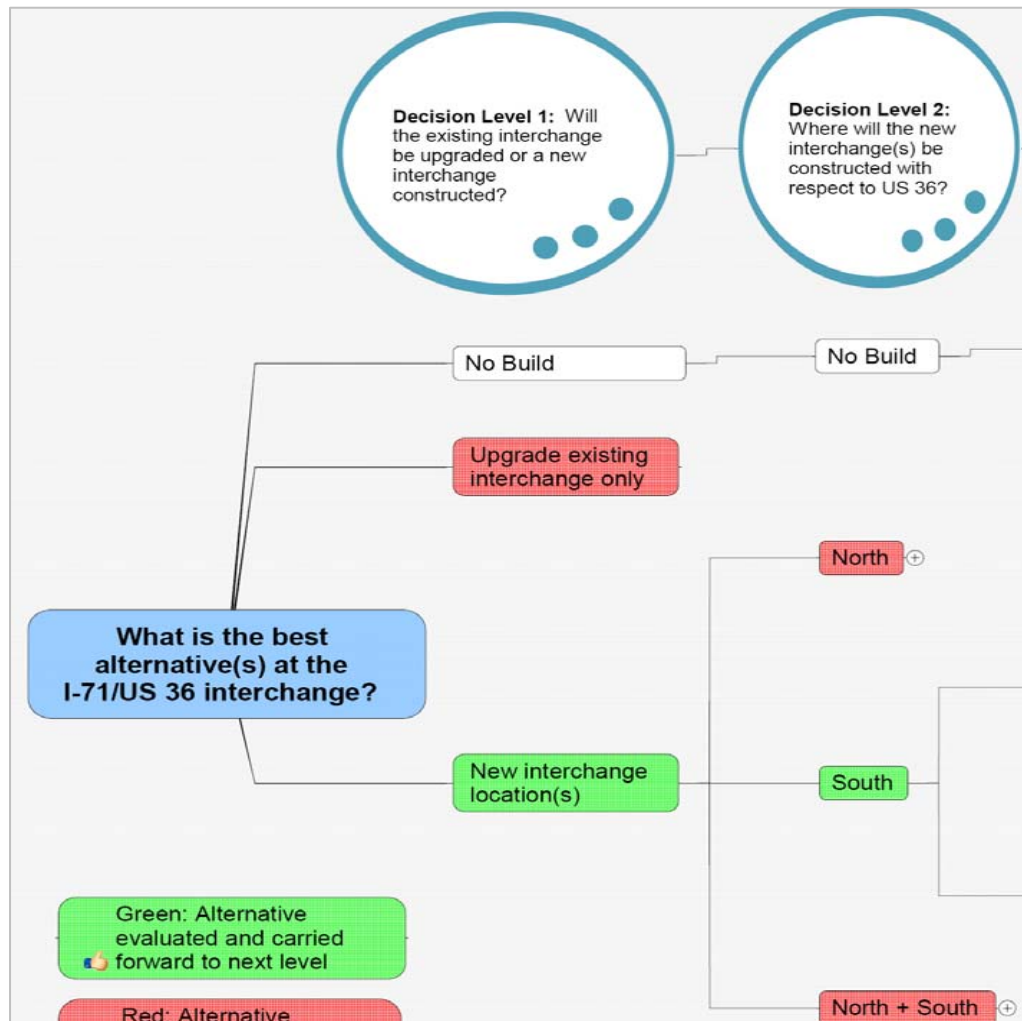
- > Key Factors
 - > I-71 capacity/operations
 - > Ability to support existing business and future growth

DECISION LEVEL 1 SUMMARY



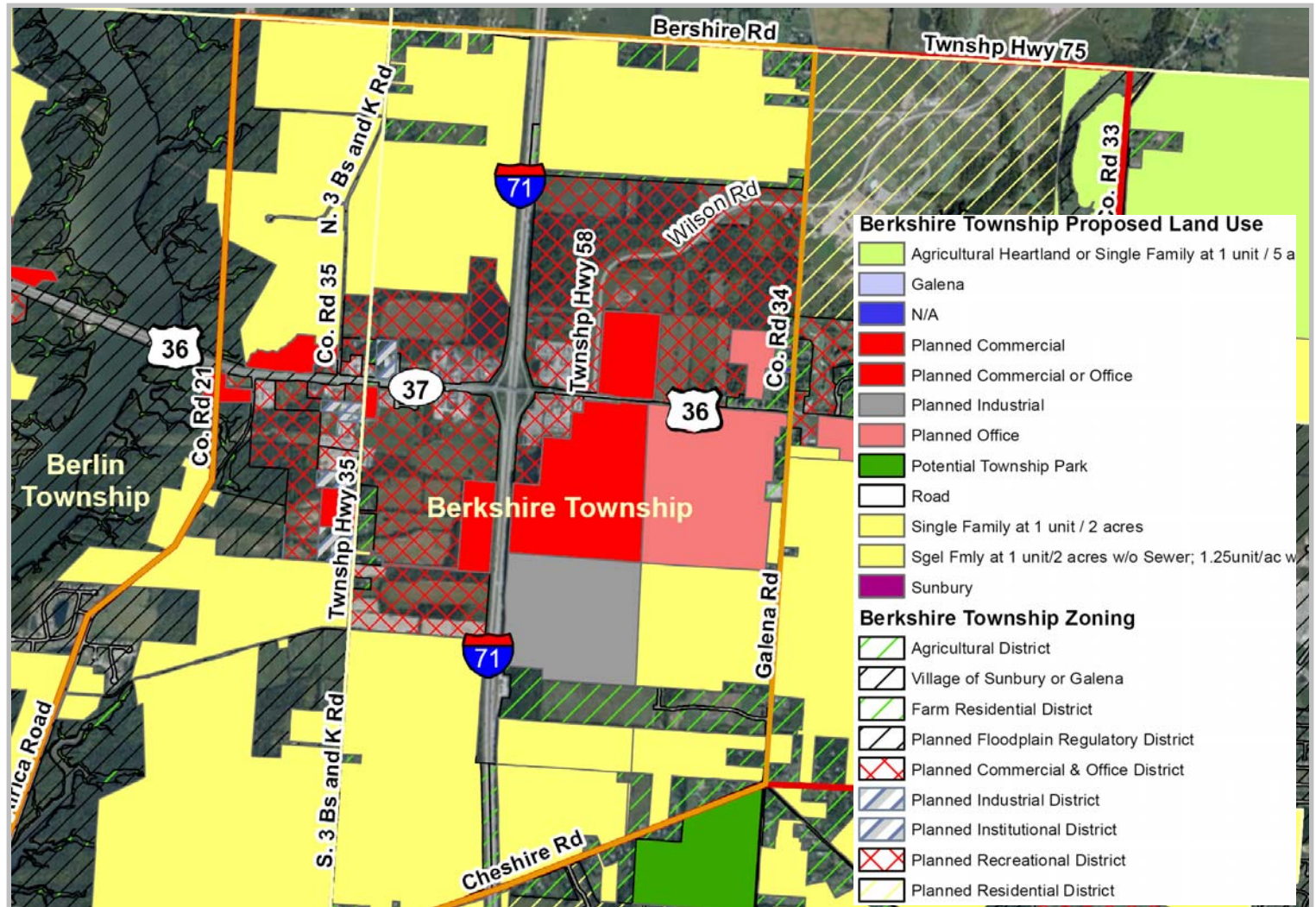
	No Build	Upgrade Existing Interchange	New Interchange Location(s)
Protects I-71 capacity	<ul style="list-style-type: none"> • LOS F at ramp terminal intersections in design year 	<ul style="list-style-type: none"> • Ability to protect I-71 capacity not known 	<ul style="list-style-type: none"> • Assumes protection of I-71 capacity
Improves US 36 operations	<ul style="list-style-type: none"> • Does not improve US 36 operations (LOS F) 	<ul style="list-style-type: none"> • Acceptable design year LOS not achieved with standard designs 	<ul style="list-style-type: none"> • Preferred design criteria can be met along new alignment
Accommodates existing development	<ul style="list-style-type: none"> • Excessive congestion on US 36 impacts existing business 	<ul style="list-style-type: none"> • Access and signal spacing changes may impact existing business 	<ul style="list-style-type: none"> • Access to existing business will be more circuitous if existing ramps are removed
Supports planned development	<ul style="list-style-type: none"> • Future growth potential limited by congestion at the US 36 interchange 	<ul style="list-style-type: none"> • Interchange configuration to support new development may impact existing business 	<ul style="list-style-type: none"> • Interchange type not constrained by existing development

DECISION LEVEL 2

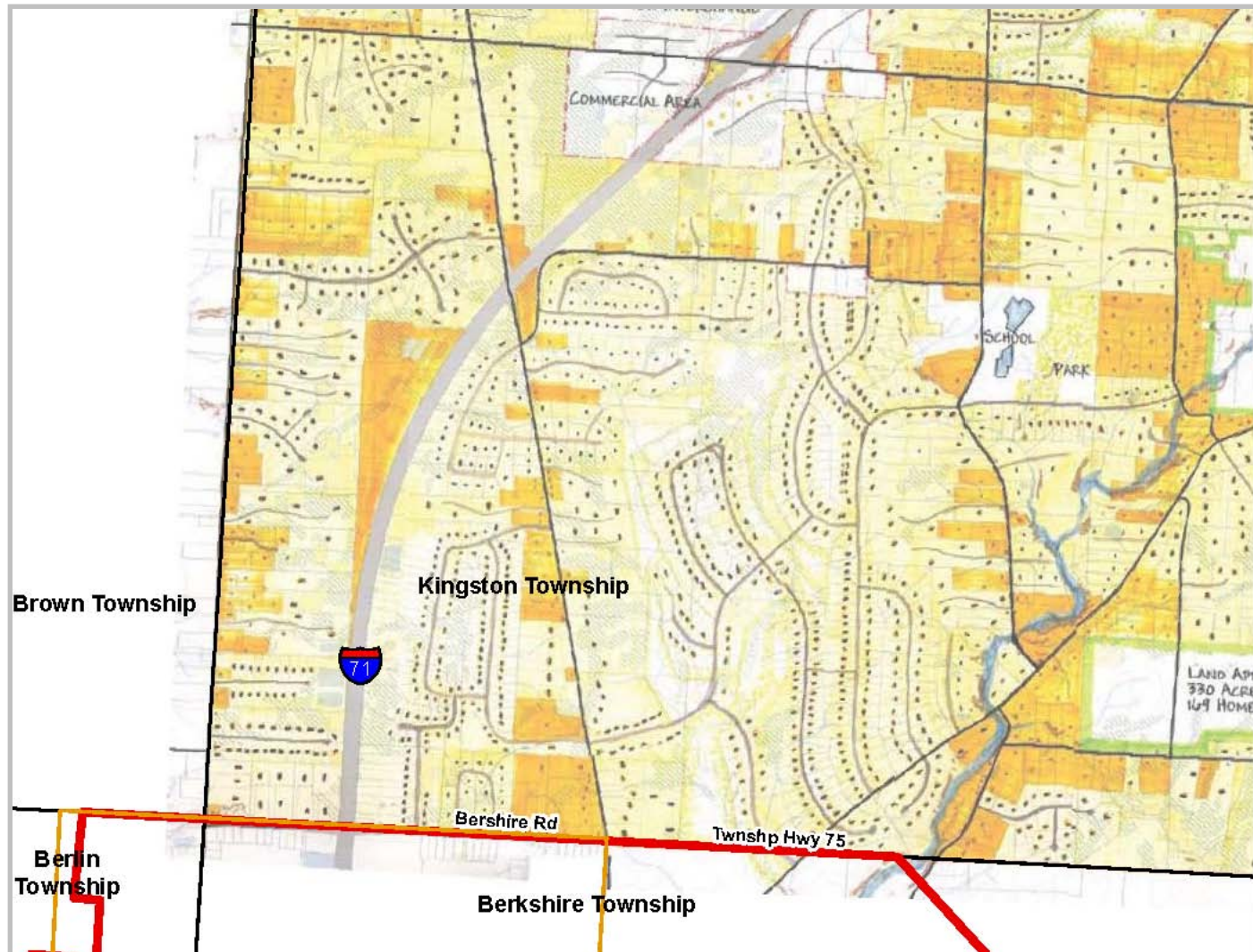


- > Level 2 Decision
 - > Where will the new interchange(s) be constructed with respect to US 36?
- > Key Factors
 - > Regional trips
 - > Trip length
 - > Land use
 - > Environmental impacts

BERKSHIRE TWP LAND USE



KINGSTON TWP LAND USE



DECISION LEVEL 2 SUMMARY



	North of US-36	South of US-36	North & South of US-36
Improves US 36 operations	<ul style="list-style-type: none"> Limited ability to divert traffic from US 36 due to increased trip lengths 	<ul style="list-style-type: none"> Able to divert traffic from existing US 36 due to equal or lower trip lengths 	<ul style="list-style-type: none"> New South interchange expected to carry 85% of total traffic
Supports planned/existing development	<ul style="list-style-type: none"> Concerns expressed by Kingston Twp of their ability to manage traffic impacts 	<ul style="list-style-type: none"> Interchange location further from planned residential uses to the north 	<ul style="list-style-type: none"> Favors developable land either to the north or south -- existing development may be impacted
Environmental Resources	<ul style="list-style-type: none"> Higher potential for environmental impacts 	<ul style="list-style-type: none"> Potential for environmental conflicts 	<ul style="list-style-type: none"> Largest footprint would impact the greatest number of resources

DECISION LEVEL 3

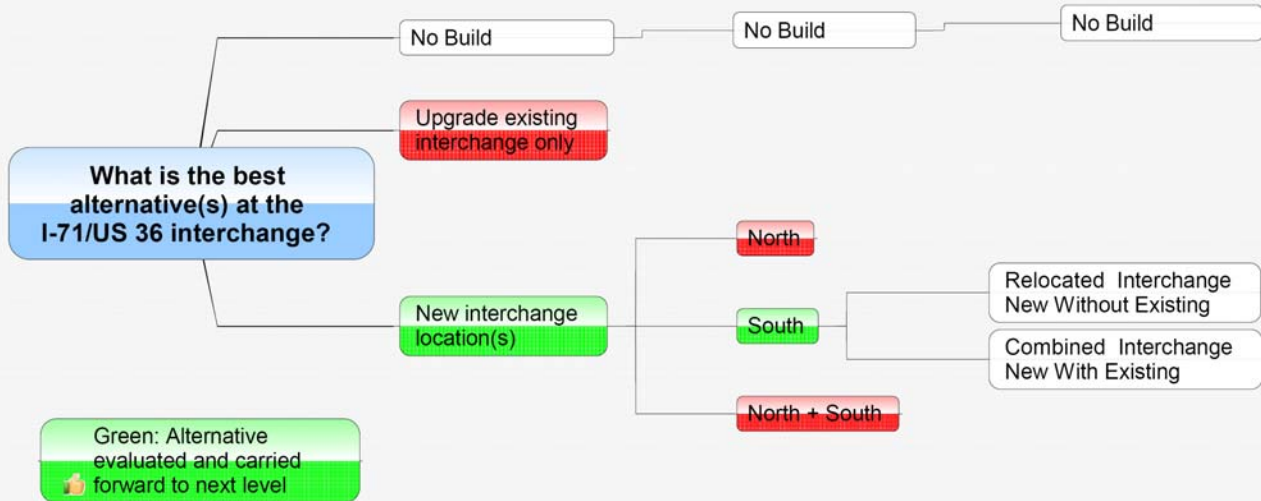


Level 3 Decision

- > Will the new interchange be a relocated or combined interchange?

Key Factors

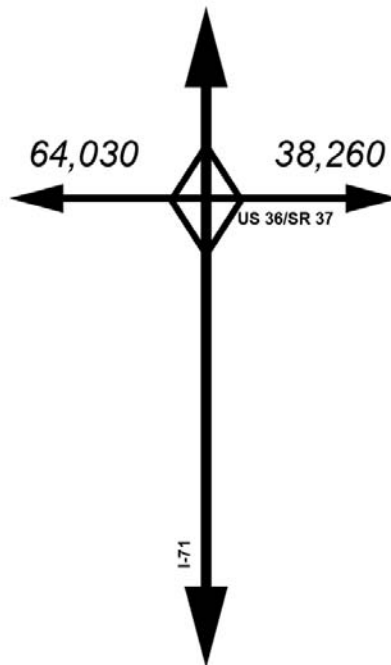
- > Traffic diversion
- > Local access



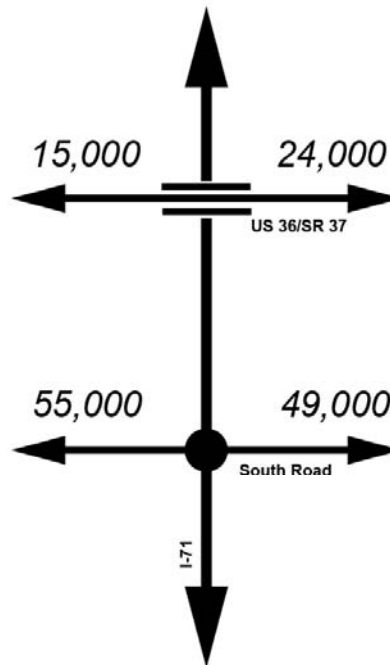
TRAFFIC PROJECTIONS



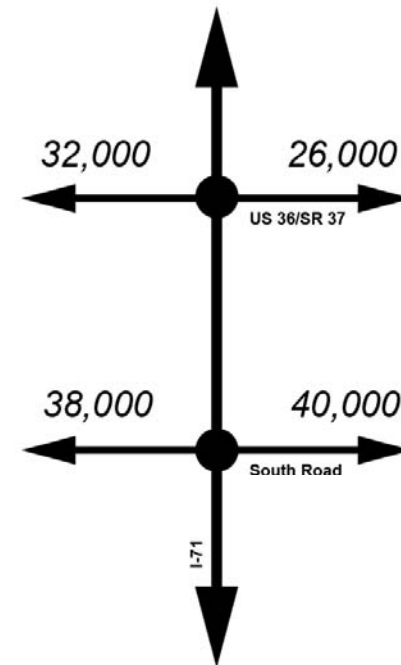
NO BUILD



RELOCATED



COMBINED



xxx - Design Year Volumes

DECISION LEVEL 3 SUMMARY



	New Relocated Interchange (Existing ramps removed, Existing bridge remains)	New Combined Interchanges (Existing interchange integrated with new)
Protects I-71 capacity	<ul style="list-style-type: none"> • Easier to establish control with new construction 	<ul style="list-style-type: none"> • More difficult for driver navigation
Improves US 36 operations	<ul style="list-style-type: none"> • Reduces traffic on US 36 west of I-71 by 76% • Reduces traffic on US 36 east of I-71 by 38% 	<ul style="list-style-type: none"> • Reduces traffic on US 36 west of I-71 by 50% • Reduces traffic on US 36 east of I-71 by 30%
Accommodates existing development	<ul style="list-style-type: none"> • No modifications to LA R/W limits on US 36 • Removes direct access 	<ul style="list-style-type: none"> • Modifications to LA R/W will impact some business access to US 36
Supports planned development	<ul style="list-style-type: none"> • Supports development potential within the interchange influence area 	<ul style="list-style-type: none"> • Supports more development potential within the interchange influence area

FINDINGS



- Only upgrading existing interchange not acceptable to meet future traffic demand
- New roadway alignment/interchange -- south location more effective to divert traffic from existing US36/SR37 interchange
- Access management on new and/or existing corridors
- Improvements to 2-lane section of US36/SR37 east of I-71
- Tie-in points of new/existing corridors to be finalized with the interchange option
- Confirm traffic does not exceed capacity of I-71

WHAT'S NEXT



- Study is Concluded
- ODOT will implement the Safety Project
- ODOT is Open to Public Private Partnership