

# 119<sup>th</sup> Street and I-35 Interchange Reconfiguration Project

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# Agenda

- 119<sup>th</sup> and I-35 Project Delivery Overview
  - Comparable DDI Projects and Takeaways
  - Impact Reduction Strategy
  - Construction Phasing Alternatives and Selected Alternative
  - Leveraging A+B Procurement

Figure 1: Project Scope



# Comparable DDI Projects and Takeaways

- Roe Avenue / I-435 (Overland Park) – 2014
- 95<sup>th</sup> Street / I-35 (Lenexa) – 2016
- Turner Diagonal / I-70 (UG/KCK) - 2020

## Takeaways

- For interchange type conversions to DDI = Value in Closure
- Value in having proposers compete on schedule
- For 119<sup>th</sup> and I-35 – scope is favorable to competition

# 119<sup>th</sup> and I-35 Impact Reduction Strategy

- **Goal:** Minimize the overall impact to the community and find the right balance between cost, closures, and speed of construction while maintaining safety
- Impact Reduction Strategy
  - Planning
  - Design
  - **Construction**
    - **Schedule/Time**
    - **Traffic**
  - Public Outreach



# 119<sup>th</sup> Street and I-35 Construction Phasing



# 119<sup>th</sup> Street and I-35 Construction Phasing

- Alternative A - Closure with Rights On/Off I-35 Only
  - Time
    - Estimated 13 month construction schedule, up to 3 months for time critical work
  - Traffic
    - Reduce lanes on 119<sup>th</sup> Street and/or ramps to assist in prep work before closure
    - Time critical = Full closure of 119<sup>th</sup> Street bridges over I-35 with Rights On/Off I-35 Only
- Alternative B - Maintain Traffic With Reduced Lanes
  - Time
    - Estimated 24 month construction schedule, minimum 8 months for time critical work
  - Traffic
    - Time critical = 119<sup>th</sup> Street reduced to one through lane in each direction
    - I-35 ramps lanes reduced to one left-turn and one right-turn lane



# 119<sup>th</sup> Street and I-35 Construction Phasing

## Alternative A – Closure with Rights On/Off I-35 Only



### PROS

- Shorter construction time
- Closure will allow contractor better access to critical construction area
- Less traffic control pattern changes
- Less temporary construction

### CONS

- No through traffic on 119<sup>th</sup> Street during closure



# 119<sup>th</sup> Street and I-35 Construction Phasing

## Alternative B - Maintain Traffic With Reduced Lanes



### PROS

- 119th Street open to through traffic
- The interchange ramps are open

### CONS

- Longer construction time – 2x as long
- More temporary construction
- Numerous traffic pattern changes
- Excessive backups



# 119<sup>th</sup> Street and I-35 Construction Phasing

## Alternative B - Maintain Traffic With Reduced Lanes



# 119<sup>th</sup> Street and I-35 Construction Phasing

## Selected Alternative – Closure with Rights On/Off I-35 Only

- Stakeholder Input
  - Public Survey collected over 1,000 responses
  - 88% prefer Alternative A with a shorter construction schedule
  - Businesses/Organizations in the corridor prefer Alternative A
    - Including: Olathe School District, Olathe Dodge, Target, Main Event, Bass Pro, Home Depot
- Alternative A is the shortest construction duration
- Minimizes the overall impact - balance between cost, lane reductions, closures, and speed of construction
- Fewer traffic pattern changes

# Leveraging Price + Time (A + B) Procurement

- How does using a Price + Time (A + B) procurement model help the City achieve their objectives?

- Traditional Procurement

$$\text{Price (A)} = \text{Score}$$

- A + B Procurement

$$\text{Price (A)} + \text{Time (B)} = \text{Score}$$

*(Days x Road User Costs)*

- The A + B procurement method rewards bidders for pledging to accelerate completion of the project, or portion thereof
  - The best-value bid is determined based on a combination of Price and Schedule



# A+B Procurement Scoring Example

Bidder	Price (A)	Time (B)			A + B Proposal Score
	Contract Bid Price	# Closure Days	Road User Costs	Time (B) Subtotal	
#1	\$34,800,000	150	\$15,000	2,250,000	37,050,000
#2	\$36,000,000	90	\$15,000	1,350,000	37,350,000
#3	\$35,400,000	105	\$15,000	1,575,000	36,975,000

# EXAMPLE: A+B Procurement Scoring

Bidder	Price (A)	Time (B)			A + B Proposal Score
	Contract Bid Price	# Bridge Closure Days	Road User Costs	Time (B) Subtotal	
#1	\$34,800,000	150	\$15,000	2,250,000	37,050,000
#2	\$36,000,000	90	\$15,000	1,350,000	37,350,000
#3	\$35,400,000	( 95	X \$15,000 )	= 1,425,000	36,825,000

$\uparrow$  A    +    B     $\uparrow$  = SCORE     $\uparrow$

# Summary

- 119<sup>th</sup> Street and I-35 Phasing Alternative A leveraged closure is overall least impactful way to deliver the project
- Schedule
  - Land Acquisition – Spring 2020
  - Utility Relocation Agreements – Spring 2020
  - City/State Agreement with KDOT – Summer 2020
  - BUILD Grant Agreement – Summer 2020
  - Bid Award – Fall/Winter 2020
  - Ground Breaking – Fall/Winter 2020