INDUSTRY MEETING
PROJECT UPDATE

February 13, 2024, 10 AM – 12 PM
MoDOT Kansas City District Office, Lee’s Summit, MO
Welcome

- Housekeeping
- Safety Protocols
- Project Presentations
- Q/A
- DBE Networking Time
Agenda

- Project Overview
- Project Goals
- Update
- Schedule
- RFQ
- Draft ITP
- Safety Analysis Tool
Project Overview - Location

- Kansas City
- From The Paseo Blvd to US 40 / 31st St
- Approx. 5 miles in length
- Urbanized area
Project Overview

- 12 interchanges
- 29 mainline and overhead bridges
- 6 / 8 thru lanes of pavement
- 96,000 to 120,000 vpd
- 18% trucks
- Heavy AM and PM rush hour traffic
- Heavy pedestrian and transit traffic
1. Deliver the project within the programmed budget of $223M by December 31, 2028.
2. Implement innovative transportation solutions to improve safety and reliability along the corridor.
3. Provide durable and maintainable infrastructure that revives the corridor and aligns with regional development.
4. Improve accessibility for the local community and create opportunities to grow a diverse workforce.
5. Minimize overall traffic impact during construction in partnership with stakeholders.
• Second Tier EIS Re-Evaluation Approved
  • Approved AJR

• Right of Way Plans & A-Date Approved
  • Begun Early Acquisition of Key Parcels

• Early Release Information
  • Approved Second Tier EIS Re-evaluation
  • Approved Conceptual AJR and VISSIM data
  • Approved Right of Way Plans
  • Conceptual Design Information
  • Existing Information
<table>
<thead>
<tr>
<th>Item</th>
<th>Date</th>
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<tbody>
<tr>
<td>Industry Meeting #2</td>
<td>Feb 13, 2024</td>
</tr>
<tr>
<td>Issue RFQ</td>
<td>Feb 13, 2024</td>
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<tr>
<td>SOQs Due</td>
<td>Mar 15, 2024</td>
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<tr>
<td>Shortlisted Submitters Notified</td>
<td>Mar 26, 2024</td>
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<tr>
<td>Issue RFP</td>
<td>Apr 1, 2024</td>
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<tr>
<td>Final Proposal and Price Allocation Due</td>
<td>Jun 28, 2024</td>
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<tr>
<td>Selection of Apparent Best Value</td>
<td>Aug 7, 2024</td>
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SOQ Submittal Requirements / Evaluation Criteria

- Administrative Elements (Pass/Fail)
- Submitter Experience (50 Points)
- Key Personnel and Organization (25 Points)
- Quality and Safety Approach (15 Points)
- Community Involvement (10 Points)

Changes to the RFQ include:

- Budget - $13M in Additional Project Funds
- Stipend – Increased to $1M
Draft ITP Technical Elements

- Project Definition (60 Points)
  - Geometrics
  - Pavements
  - Structures
  - Reliability
- Safety (15 Points)
  - Quantitative Analysis
  - Qualitative Analysis
- Community Impacts (15 Points)
  - Public Information Plan
  - STEM and Construction Careers
  - Community Connectivity
- Maintenance of Traffic (MOT) and Schedule (10 Points)
  - MOT Plan
  - Schedule
Project Definition

• Geometrics – Describe the geometric features of the project.

• Pavements – Describe the elements for new, reconstructed, and rehabilitated pavements on the project.

• Bridge and Wall Structures – Describe the elements for new, reconstructed, and rehabilitated bridges and walls structures on the project.

• Reliability – Define improvements and strategies to maximize operations and increasing reliability for all users.
Community Impacts

- Public Information Plan – Provide plan for providing information to MoDOT for public and stakeholder interaction during design and construction.

- STEM and Construction Careers Plan – Develop plan that promotes workforce diversity in transportation fields.

- Community Connectivity – Commitments to connecting the community through improvements to bicycle, pedestrian, and local roads.
Maintenance of Traffic and Schedule

• Maintenance of Traffic - Approach to maintaining traffic during project construction
  • Maintenance of Traffic Plan
  • World Cup – Approach to coordination of construction activities and phasing to mitigate traffic impacts during the 2026 FIFA World Cup

• Schedule - Schedule for completing the Project including the duration of each construction phase and the overall completion date
Safety

• Qualitative Analysis – Provide commitments to improving safety along the corridor for all users.

• Quantitative Analysis – Predictive Safety Analysis tool to evaluate proposed safety benefits

• Safety Analysis Tool presentation to follow.
### Purpose
This spreadsheet contains templates to conduct predictive safety analysis for individual aspects of the I-70 design:
- Mainline lanes / shoulders / speed-change lanes / C-D roads
- Horizontal Curvature
- Ramps
- Ramp Spacing / Weaves
- Congestion-Induced Crashes

### General Notes
- In general, cells that the user may / must change use a black font. Formulas, which shouldn't typically be changed, use a green font.
- Detailed calculations are in hidden columns to the right on most sheets; the analyst may unhide these columns for understanding and verification of the mechanics.

### The spreadsheet includes the following tabs; more instructions can be found on each:
- **Results**
  - Summary of the predicted crash totals for each aspect of the design.
  - Required inputs: None. The tab will auto-populate based on the results of other tabs.

- **AIR Table**
  - Summary of the results in a format similar to the AIR predictive safety summary tables
  - Required inputs: None. The tab will auto-populate based on the results of other tabs.

- **Ext CMFs**
  - List of external CMFs
  - Required inputs: Calculated effective CMFs following the directions provided in the MoDOT CMF document.

- **Mainline_SC_CLD(Prop)**
  - Crash prediction analysis of the Contractor’s proposed mainline conditions, also including speed-change lanes and C-D roads.
  - Required inputs: Segment start/end station, segment type (freeway, speed change, etc.), number of lanes, average lane width, average inside/outside shoulder widths, AADT for 2026/2045, barrier start/end station, barrier type.

- **HoriClv(Prop)**
  - Crash prediction analysis of the mainline horizontal curvature proposed by the Contractor.
  - Required inputs: Curve start station, curve length, curve radius, number of lanes, AADT for 2026/2045, proportion of curve in the segment (for this spreadsheet, shape F).

### List of Abbreviations used in this spreadsheet:
- Prop: Proposed
- MPA: Modified Preferred Alternative
- NB: No Build
- NCHRP: National Cooperative Highway Research Program
- CMF: Crash Modification Factor
- FI: Fatal and Injury
- PDO: Property Damage Only
- EPDO: Equivalent Property Damage Only
- Dir: Direction of travel
- EB/WB: Eastbound/Westbound
- Frwy: Freeway
- SC_A: Speed-change lane (Acceleration)
- SC_D: Speed-change lane (Deceleration)
## I-70 Jackson County, Paseo to US-40

### Safety Analysis | Mainline, Speed-change Lanes, C-D Roads

**Proposed Design**

<table>
<thead>
<tr>
<th>Dir #</th>
<th>Start Station</th>
<th>End Station</th>
<th>Length (mi)</th>
<th>Seg Type</th>
<th>Lanes #</th>
<th>Lanes Width (ft)</th>
<th>Shoulder Width (ft)</th>
<th>AADT 2026</th>
<th>AADT 2045</th>
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<tr>
<td>EB 1</td>
<td>173+95</td>
<td>395+62</td>
<td>2045</td>
<td>SC_A</td>
<td>4</td>
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<td>12.0</td>
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<td>410+45</td>
<td>415+45</td>
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### Summary

**Freeways**

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<th>Condition</th>
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<th>P</th>
<th>O</th>
<th>D</th>
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<tbody>
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<td>Base</td>
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<td>579</td>
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<td>Base+Roadside Features</td>
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<td>519</td>
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<td>Total w/ adjustments</td>
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<td>519</td>
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**C-D Roads**

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<th>Condition</th>
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### Predicted Crashes

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<th>Conditions</th>
<th>No Build (NB)</th>
<th>Modified Preferred Alt (MPA)</th>
<th>Proposed (Prop)</th>
<th>Delta (Prop-NB)</th>
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<td>1,694</td>
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<td>VMS</td>
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### Delta

- Total FLPDO: 6/5/6°0
- Total FLPDO: 5/5/-6%
- Total FLPDO: 14%/12%-6%
- Total FLPDO: 2%/2%-6%
- Safety, Lost Time, or Injury
  - Total FLPDO: 60/80/6%
  - Total FLPDO: 50/50/-6%
  - Total FLPDO: 80%/80%-6%
  - Total FLPDO: 20%/20%-6%

### Safety Analysis Summary Calculations (Reference Only)

- Predicted crashes due to horizontal curvature only
- Inferred crashes due to ramp spacing
- Delta: Inferred crashes due to ramp spacing
• Presentation will be posted on the project webpage www.modot.org/improvei70kc
• Be sure you signed the meeting Sign-in Sheet
• Thank you for your interest
Questions?

Allan Ludiker, PE
MoDOT Project Director
Allan.Ludiker@modot.mo.gov
816-607-2267

www.modot.org/improvei70kc