Welcome

Thank you for your interest in the Lewis & Clark Viaduct Concept Study

Please use the arrows in the upper left hand corner to navigate through the presentation.

Use the envelope icon to ask a question or make a comment.

Use Adobe’s “zoom” feature to look at exhibits more closely.
Concept Study

**KDOT Goal:**
- Maintain infrastructure
- Manage investment effectively to make the most of tax-payer dollars

**Study Goal:**
- Develop a long-term plan that will prioritize repair and/or replacement for the nine bridges
- Identify other roadway improvement options for the Lewis and Clark Viaduct Study Area

*Note: Map showing Bridges included as part of Viaduct.*
• **Community Interviews**
  - Existing access is cumbersome and confusing
  - Sharp curves of existing highway infrastructure are a concern
  - Access to the river is important
  - Opportunities to enhance development in KCK are important
  - General communication throughout the process is important and communication about changes, detours and construction lanes is critical

• **Listening Session**
  - Quality of life — pedestrian access, river access, ability to access transit, impacts to property or historical concerns
  - Economic development
  - Safety concerns — driver and pedestrian safety
  - Access and mobility — modification of access, access to businesses, I-70 traffic flow, etc.

• **Online Survey**
  - 90 total respondents
  - 61.3 percent travel the interchange daily or weekly

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**What do you see as the biggest issue with this interchange area?**

- **#1 Issue**
  - Safety — sharp curves, traffic conflicts

- **#2 Issue**
  - Other — lack of shoulders, noise levels, pedestrian access and aesthetics

- **#3 Issue**
  - Directional signing — wayfinding and route labeling

- **#4 Issue**
  - Physical condition — bridge condition, constant repairs

- **#5 Issue**
  - Congestion — traffic back-ups during rush hours

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**Online Survey Results: Top Concerns Identified**

- Washington Boulevard
- Minnesota Avenue
- Armstrong Avenue
- St. James Parkway
Main concerns noted:

- Safety — improving the I-70 curves and making I-70 “easier to drive”
- Access to the river is desired
- Access to the Fairfax Industrial District for trucks
- Community impacts including noise and traffic to the Strawberry Hill area
- Bike and pedestrian access to trail system and parks as well as making KCK more accessible to other modes besides cars and trucks
- Cost of the options needs to be considered
- Roundabout options shown can be difficult for trucks to maneuver
- Should not disturb St. John’s Park

November 2011 public meeting — 96 people attended.

### Public Input

**Please identify what level of concern, if any, you have about each of the concepts by using colored dots.**

- **Green dot** — no concerns, I like the concept.
- **Yellow dot** — I have some concerns.
- **Red dot** — I have major concerns/reservations.

(Feel free to use the post it notes to elaborate on your concerns)

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<tr>
<th>Interchange Type</th>
<th>Dot</th>
<th>Additional Comments</th>
<th>Other</th>
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<td>Concept 1A — Baseline - All bridges replaced in kind</td>
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<td>Concept 1B — Baseline with I-70 improved</td>
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<td>Concept 2A — Box style local access with I-70 not improved</td>
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<td>Concept 2B — Box style local access with I-70 improved</td>
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<td>Concept 3B — One intersection with I-70 improved</td>
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<td>Concept 4B — New Fairfax Ramps with I-70 improved</td>
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- No bottle neck to downtown, Fairfax and I-70 access; improves safety on I-70 curves.
- Why change westbound I-70 access
- Improves the sharp I-70 curves, does not create a lot of changes for Fairfax district traffic.

- Concerned about noise with increased speed.
- Traffic signal at 5th and Washington has been removed and replaced with a 4-way stop.
- One of the positive things about living on Strawberry Hill is the view of the City across the river. We would like to keep the view when you are considering the height of the new ramps.

- Concern about roundabout hazard, more lights along the highway and the intersections below.

- Why change WB I-70 Access?  Can roads be heated with solar power?  Building bridges over Kaw Point Park and close to the confluence of the Kaw and MO River will detract from the views and quality of Kaw Point.
- Too much truck traffic and noise next to Strawberry Hill.
Feedback from Unified Government leadership during the November 2011 public meeting led to the Study Team further evaluating a proposed I-70 realignment identified in the KCK Downtown Master Plan.

Through a period of evaluation and collaborative discussion, the Study Team ultimately eliminated this concept. However, the Unified Government leadership felt strongly that in order for the study to be successful, the preferred concept needed to embody the vision and spirit of the Master Plan components.

Evaluation of the Master Plan concept for I-70 revealed the following:

**Pros:**
- Consistent with Master Plan goals
- Increases open space west of Fairfax/James Street Connection
- Improves existing weaving locations (5th Street/Pacific Avenue)
- Simplifies multi-modal connectivity (bike/ped)
- Improves access from Central Industrial District (CID) to westbound I-70

**Cons:**
- Requires reconstruction into Missouri
- Significant impact to existing development in the CID
- Impacts property west of the river
- Longer distance for Fairfax/CID to travel from westbound I-70
- Split access to Pacific Avenue Interchange
- Long bridges required over Union Pacific rail yard
- New retaining walls required
- Limited ability to phase construction
- Potential for greater environmental impacts
- Cost
Feasible Concepts Reviewed

Concept 1A — Baseline - All bridges replaced in kind

Legend

$  =  Approximately $150 - $174 million        $$  =  Approximately $175 - $199 million          $$$  =  Approximately $200 million and above

All cost estimates are in 2012 dollars.

Concept 1A—Replaces the infrastructure as it is today in the same location with no modifications to curves. Shoulders and lanes will be made wider where possible. There will be no change to the local street system. Concept 1A — $

Pros:

• Maintains similar access into and out of the area
• Improves safety by widening shoulders where possible
• Good flexibility for phased construction
• Minimizes right-of-way impacts
• Minimizes river crossing structures

Eliminated because:

• Does not address the tight I-70 curves and associated accident history
Feasible Concepts Reviewed

Concept 2A — Box style local access with I-70 not improved

Pros:

- Improves safety by widening shoulders where possible
- Minimizes river crossing structures
- Provides more “traditional” local street network
- Improves lane continuity by maintaining two lanes on eastbound I-70

Eliminated because:

- Does not address the tight I-70 curves and associated accident history
- Eliminates redundant access to/from I-70 and Fairfax Industrial District
- Eliminates direct access for trucks into Fairfax Industrial District and requires the traffic to negotiate multiple closely spaced intersections
- Slight impact to potential development properties west of the river

Legend

$ = Approximately $150 - $174 million
$ $ = Approximately $175 - $199 million
$ $$ = Approximately $200 million and above

All cost estimates are in 2012 dollars.
Feasible Concepts Reviewed

Concept 2B — Box style local access with I-70 improved

Concept 2B—I-70 curves are improved and made two-lanes in each direction. The Fairfax ramps are removed and local access is provided through a more central box style intersection that modifies local access. Concept 2B — $$

Pros:

- Improves safety by flattening I-70 curves and widening shoulders where possible
- Minimizes river crossing structures
- Provides more “traditional” local street network
- Improves lane continuity by maintaining two lanes on eastbound I-70

Eliminated because:

- Eliminates redundant access to/from I-70 and Fairfax Industrial District
- Eliminates direct access for trucks into Fairfax Industrial District and requires the traffic to negotiate multiple closely spaced intersections
- Slight impact to potential development properties west of the river
Concept 3B — One intersection with I-70 improved

Pros:
• Improves safety by flattening I-70 curves and widening shoulders where possible
• Simplifies wayfinding by consolidating traffic to a single intersection
• Minimizes river crossing structures
• Provides a more “open” and less “industrial” look to the area west of the river
• Simplifies multimodal connectivity (bike/ped)
• Improves lane continuity by maintaining two lanes on eastbound I-70

Eliminated because:
• Eliminates redundant access to/from I-70 and Fairfax Industrial District
• Eliminates direct access for trucks into Fairfax Industrial District and requires the traffic to negotiate a central signalized intersection or roundabout
• Forces all traffic movements through a central intersection, which results in mixing of passenger car and heavy truck traffic to a greater extent than direct ramps or separated intersections
• Property impact to St. John’s Park
• Impacts potential development properties west of the river
Concept 4B — New Fairfax ramps with I-70 improved

Pros:
- Improves safety by flattening I-70 and Fairfax curves and widening shoulders where possible
- Provides more “traditional” local street network
- Provides a more “open” and less “industrial” look to the area west of the river
- Improves lane continuity by maintaining two lanes on eastbound I-70

Eliminated because:
- Little flexibility to phase construction over time and address the highest priority segments first without significant use of temporary “throw-away” bridge connections
- Additional river hydraulic impacts due to more Kansas River bridge crossings
- Additional railroad conflicts
- Long inbound grade to Fairfax Industrial District in advance of a large intersection on bridge structure
- Significant impact to Kaw Point Riverfront Park
- More right of way impacts east of the Kansas River
Concept 1B — Baseline with I-70 Improved

Upon completion of extensive stakeholder and public engagement activities, the concepts were evaluated. The evaluation concluded that Concept 1B best meets the overall study goals and project purpose with the following:

- Good engineering, such as flattened curves
- Better operational qualities, such as maintenance of two lanes of traffic in each direction on I-70
- Better safety features, such as wider shoulders
- Greater flexibility for phased construction
- Similar access into and out of the area
- Opportunities for increased park/recreational areas overlooking the Kansas River
- Support as the more desirable concept by local stakeholders and the public

Legend

$ = Approximately $150 - $174 million
$$ = Approximately $175 - $199 million
$$$ = Approximately $200 million and above

All cost estimates are in 2012 dollars.
The cost of the overall reconstruction of the Lewis and Clark Viaduct is substantial. The study team developed a phased replacement plan.

The three highlighted phases address the top bridge replacement priorities and improve the I-70 curves while providing lane continuity on I-70.

The remaining area, identified as “Additional Phases” will largely be reconstructed in the existing location. The structures can be replaced at any time, either alone or in combination with other construction projects throughout the overall replacement time frame.
The highest priority bridge replacements and/or rehabilitations impacted the concepts considered since they affect the flexibility to sequence and phase the project construction. Priorities 1 and 3 are being addressed in the first construction project.

The westbound bridge from the State Line to the end of the truss span west of the river has been selected for replacement. Construction is anticipated to begin in late 2016.
The current traffic and safety issues identified with the existing roadway are:

- Higher number of crashes than the statewide average.
- One eastbound interstate freeway lane.
- Tight curves and low posted speed (35 mph).

The preferred concept addresses the traffic and safety issues:

- Fewer crashes projected due to flattened curves and wider shoulders.
- Improved travel due to two lanes in each direction and higher posted speed.
- Improved service with two direct lanes from I-70 into Kansas City, Kansas.
Pedestrians/Bicyclists

Future expansions/connections to existing pedestrian/bicycle pathways are in various stages of development. Relocation of the pedestrian/bicyclist pathway, currently present on the bottom deck of the existing eastbound river truss, will be required at the time of, or prior to, replacement of this truss.

Potential design solutions for the relocation of this pathway as part of future final design process include:

• A trail suspended beneath the replacement eastbound river crossing
• A separate pedestrian/bicyclist structure across the river
• Potential use of the existing James Street bridge for the addition of a pedestrian/bicycle path
• Potential use of the abandoned Kansas City Southern railroad truss just south of the James Street crossing for a pedestrian/bicyclist trail crossing
Aesthetics

In support of the spirit and vision of the KCK Downtown Master Plan, an aesthetics plan will be developed as projects proceed into their preliminary design phase. KDOT will work closely with the Unified Government leaders to develop the aesthetic plan that enhances the area. A goal of the aesthetic plan will be to provide first-class aesthetics that compliment the history of the area and provide enhanced views from multiple locations.

Aesthetic elements could include:

- Gateway elements
- Landscaping
- Preservation of green space
- Aesthetic lighting
- Concrete enhancements (color, texture, patterns, etc.)

Example photos, actual aesthetic elements still to be determined.
Thank you for your interest in the Lewis & Clark Viaduct Concept Study

Use the envelope icon above to ask a question or make a comment, or contact:

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