Appendix D:
Maps, Design Plans, and Photos
Truck Trip Distances within 12 hours of Crossing Rocheport Bridge

Source: American Transportation Research Institute (ATRI)
Truck Trip Distances within 24 hours of Crossing Rocheport Bridge

Source: American Transportation Research Institute (ATRI)
Truck Trip Distances within 36 hours of Crossing Rocheport Bridge

Source: American Transportation Research Institute (ATRI)
Truck Trip Distances within 60 hours of Crossing Rocheport Bridge

Source: American Transportation Research Institute (ATRI)
Truck Trip Distances within 72 hours of Crossing Rocheport Bridge

Source: American Transportation Research Institute (ATRI)
2011 Transearch Value of Goods Shipped

Legend
2011 Transearch Network
(Value of Goods Shipped $M)
- 0 - 7,400
- 7,400 - 26,000
- 26,000 - 57,000
- 57,000 - 88,000
- 88,000 - 168,000

Relative Activity of Major Corridors in Missouri (2011)

- Traveling Via I-70
- Traveling Via I-44
- All Freight

- Outbound
- Inbound
- Internal
- Through
2011 Transearch Volumes of Goods Shipped

Relative Activity of Major Corridors in Missouri (2011, Thousands of Tons)

Legend
2011 Transearch Network
('000s of Tons)
- 0 - 4,500
- 4,500 - 15,200
- 15,200 - 30,800
- 30,800 - 42,500
- 42,500 - 67,100

Legend
Outbound
Inbound
Internal
Through
Pictures of Rocheport Bridge's Condition, illustrating need for replacement.

Source: MoDOT.
Additional pictures of Rocheport Bridge's Condition, illustrating need for replacement.

Source: MoDOT
Conceptual design plan for the I-70 Missouri River Bridge at Rocheport.

After a thorough analysis and evaluation (including NEPA), the new 3,000-foot fracture critical bridge will be constructed adjacent to the existing bridge. See next page.

Source: I-70 Second Tier Environmental Assessment
Conceptual design plan for the I-70 Missouri River Bridge at Rocheport.

After a thorough analysis and evaluation (including NEPA), the new 3,000-foot fracture critical bridge will be constructed adjacent to the existing bridge.

Source: I-70 Second Tier Environmental Assessment
Map of detour routes and smart work zone/maintenance of traffic devices that would need to be deployed if an I-70 Rocheport Bridge rehabilitation was undertaken.

Source: HDR
Real-Life Example

Routine Oversize Overweight Permit
(Not a Superload)

Entering from IL at I-270/Exiting into KS at I-435
Preferred Route

271 Miles Total
Actual Route

413 Miles Total

52% Increase!
Simulation of Rocheport Bridge rehabilitation (if INFRA funding is not awarded for new construction).

Traffic would be diverted to one side of the bridge to enable complete rehabilitation on the opposite side. Transportation modeling predicts the rehabilitation will close lanes for seven to nine months with three- to nine-hour backups.

Video link to congestion simulation: https://blaisassoc.egnyte.com/dl/775rQq8M47
Truck Climbing Lanes near Mineola on I-70

Top: Westbound climbing lane will be constructed between mile markers 167.6 and 166.4, ~1.2 miles

Bottom: Eastbound climbing lanes will be constructed between mile markers 168.4 and 170.2, ~2.8 miles
Mineola Hill – proposed truck climbing lane location.

Phot source: MoDOT D5741-CM-R2-142
Mineola Hill – proposed truck climbing lane location.

Photo source: MoDOT D5741-CM-R2-247
Cross Section for Truck Climbing Lanes

Source: MoDOT
I-70 westbound climbing lane will be constructed between mile markers 167.6 and 166.4.

Climbing lanes will be constructed within existing MoDOT right-of-way.

Westbound climbing lane starts here and continues west for approximately 1.2 miles.

Westbound climbing Lane end here.
I-70 eastbound climbing lanes will be constructed between mile markers 168.4 and 170.2.

Climbing lanes will be constructed within existing MoDOT right-of-way.

Eastbound climbing lane starts here and continues east towards St. Louis for approximately 2.8 miles.

Eastbound climbing lane ends here.
Transportation Systems Management and Operations

Spans Entire Length of I-70 from Exit 21 (Adams Dairy Parkway; near Kansas City) to Exit 210 (Wentzville; near St. Louis).
Example of the freight traffic, traffic volume, and congestion on I-70. The TSMO strategies will vastly improve information sharing and notification about accidents and traffic delays.

Photo source: MoDOT D5956-CM-284