

# I-229

MOVING FORWARD

# ALTERNATIVES NO LONGER CONSIDERED

Based on stakeholder feedback and the relative advantages and disadvantages as outlined in the matrix, the study team recommended these alternatives be eliminated from further consideration.

Address Bridge Condition	NO ACTION		REHAB EXIST.	REPURPOSE EXISTING	MAINTAIN INTERSTATE			MAIN/2ND STREET		PARKWAY/ BOULEVARD				ARTERIAL			LOCAL			KANSAS																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				
	No-Build		Rehab	RPE-03: Bridge Removal Between Downtown Ramps	RPE-14: 4-Lane Single Deck			IS-18: Interstate East of Tracks			IS-09: System to System - 1-Lane Ramps			IS-08: 4-Lane Diverging			NIS-13: Roundabouts			NIS-12: 3 or 4 Lane Option Down Main Street			NIS-11: 3 or 4 Lane Option down 2nd & Main Streets			NIS-19: McArthur Drive Extension			NIS-16: Parkway Option			NIS-15: Dewey Avenue Extension			NIS-21: Boulevard Partially East of Tracks			NIS-22: Boulevard East of Tracks			NIS-07: 4-Lane with Intersections at Edmond & Felix Streets			NIS-23: Riverfront with Interchange at US-59			NIS-01: Elevated T-Intersection			NIS-06: One-Way Pairs 3rd & 4th Streets, Michel and Franklin Streets			NIS-17: One Way Pairs 5th & 6th Streets			NIS-04: Arterials East			NIS-10 Kansas Side from 59			NIS-20: Kansas Side from Cook																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																										
	1	2	3	3	5	5	5	5	4	5	5	5	4	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5

Averages by Category		1.0	2.0	3.0	3.0	5.0	5.0	5.0	4.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	4.0	4.0	4.0	5.0
Address Bridge Condition		1.0	2.0	3.0	3.0	5.0	5.0	5.0	4.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	4.0	4.0	4.0	5.0
Connectivity		1.3	4.2	2.8	4.0	4.7	4.2	4.3	3.7	3.5	2.3	2.5	2.3	3.5	2.8	3.8	4.0	3.8	2.5	2.3	2.5	2.3	2.5	2.3
Compatible with Land Use		2.0	3.5	3.0	3.5	1.0	3.3	3.5	3.8	4.3	4.0	4.0	4.0	3.5	4.0	3.5	3.3	3.3	3.8	3.5	3.8	3.5	3.8	3.3
Engineering		5.0	3.0	2.0	1.3	2.3	2.3	2.0	3.0	3.0	4.3	4.0	4.0	2.7	3.3	2.3	3.0	3.0	4.7	4.7	5.0	1.7	1.7	1.7
Environmental		4.8	5.0	5.0	3.7	3.0	3.8	3.7	3.7	3.8	3.7	3.8	4.2	3.2	3.2	3.8	3.5	3.5	4.7	3.8	4.8	2.7	3.0	3.0
Overall Average		3.1	4.0	3.4	3.4	3.1	3.7	3.7	3.6	3.7	3.5	3.6	3.7	3.4	3.4	3.6	3.6	3.6	3.9	3.5	3.9	2.9	2.8	2.8
Average of the Averages		2.8	3.5	3.2	3.1	3.2	3.7	3.7	3.6	3.8	3.9	3.9	3.9	3.6	3.7	3.7	3.8	3.7	4.1	3.7	4.0	2.9	3.1	3.1

## RPE-03: Bridge Removal Between Downtown Ramps



This alternative would remove at least a portion of the Interstate classification between Hwy 36 and Hwy 59. I-229 would be decommissioned between the downtown ramps, the double-decker bridge removed, and traffic routed through downtown via reconnection at South 3rd Street. The double-decker bridge would remain south of the Charles Street/ Edmond Street ramps and would require rehabilitation/ maintenance. All of the downtown ramps would stay in their current location.

## RPE-14: 4-Lane Single Deck



This alternative would repurpose the existing double-decker bridge and maintain an interstate system through the corridor between the Burlington Northern Santa Fe Railroad and the Missouri River. The top deck of the existing double-decker bridge would be removed, and an additional bridge system would be constructed adjacent and level with the lower deck.

## IS-18: Interstate East of Tracks



This alternative would leave the Interstate classification through the project area. In this alternative, the double-decker bridge would be removed, and I-229 reconstructed on the east side of the tracks. The Interstate would be generally constructed at grade. A bridge would be required on the north end for a new interchange between Hwy 59 and I-229.



## IS-09: System to System - 1-Lane Ramps



This alternative would leave the Interstate classification through the entire corridor. In this alternative, the double-decker bridge would be removed, and I-229 reconstructed. The Interstate would be constructed with long, one-lane elevated ramps connecting Interstate stubs at both ends of the project.

## IS-08: 4-Lane Diverging



This alternative would leave the Interstate classification through the entire corridor. In this alternative, the double-decker bridge would be removed, and I-229 reconstructed. The Interstate would be constructed at grade (elevated as necessary for compliance with floodplain and stormwater drainage requirements).

## NIS-13: Roundabouts



In this Alternative, the double-decker bridge is removed, and a 2-lane arterial is constructed. The 2-lane arterial would be constructed at-grade (elevated as necessary for compliance with floodplain and stormwater drainage requirements) in the same location as the existing double-decker bridge between the Burlington Northern Railroad tracks and the Missouri River except for a section between Messanie Street and Francis Street. This Alternative would require partial or full de-designation of I-229 as interstate.



## NIS-12: 3 or 4 Lane Option Down Main Street



This alternative would remove the Interstate classification between Hwy 36 and Hwy 59. In this section, I-229 would be decommissioned, the double-decker bridge removed, and a three or four-lane principal arterial constructed. The principal arterial would be constructed at-grade (elevated as necessary for compliance with floodplain and stormwater drainage requirements) in the same location as the existing double-decker bridge between the Burlington Northern Santa Fe Railroad tracks and the Missouri River except for a section between Hwy 50 and Sylvanie Street.

## NIS-11: 3 or 4 Lane Option down 2nd & Main Streets



This alternative would remove the Interstate classification between Hwy 36 and Hwy 59. In this section, I-229 would be decommissioned, the double-decker bridge removed, and a three or four-lane arterial constructed. The arterial would be constructed at-grade (elevated as necessary for compliance with floodplain and stormwater drainage requirements) in the same location as the existing double-decker bridge between the Burlington Northern Santa Fe Railroad tracks and the Missouri River, except for the section between Hwy 50 and Messanie Street.

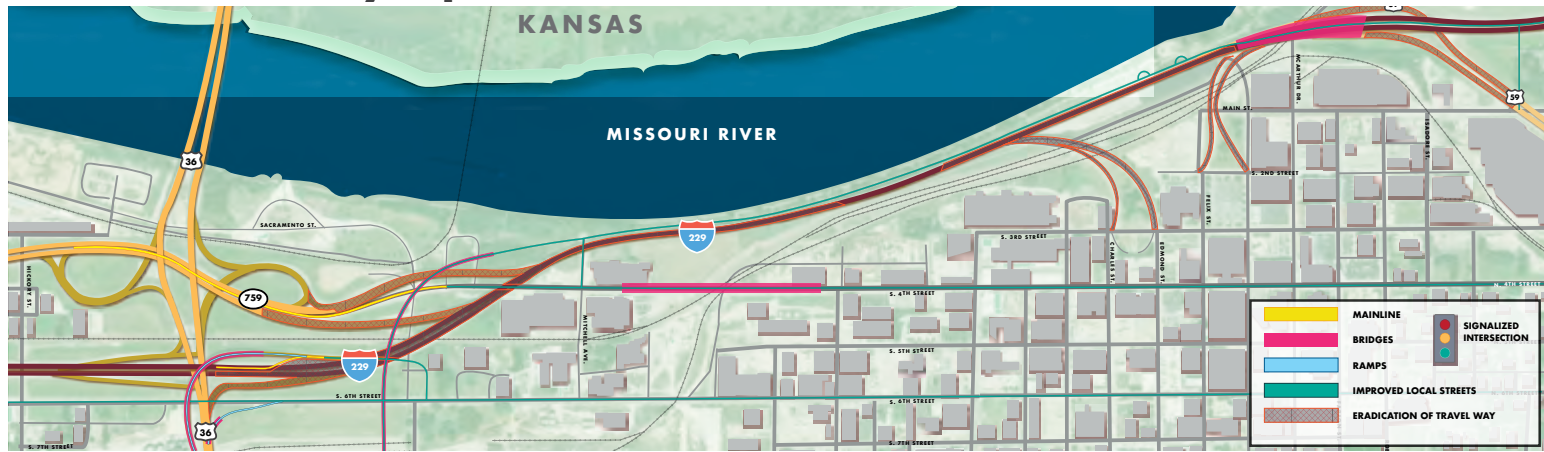
## NIS-19: McArthur Drive Extension



This alternative removes the Interstate classification between Highland Avenue and Hwy 36. In this section, I-229 is decommissioned, and the double-decker bridge is removed. A scenic 2-lane parkway/boulevard would be constructed from McArthur Drive on the north end of the project to a new roundabout at the south end of the project. The 2-lane parkway/boulevard would be constructed at grade (must comply with floodplain and stormwater drainage requirements) in generally the exact location as the existing double-decker bridge between the BNSF Railroad and the Missouri River.

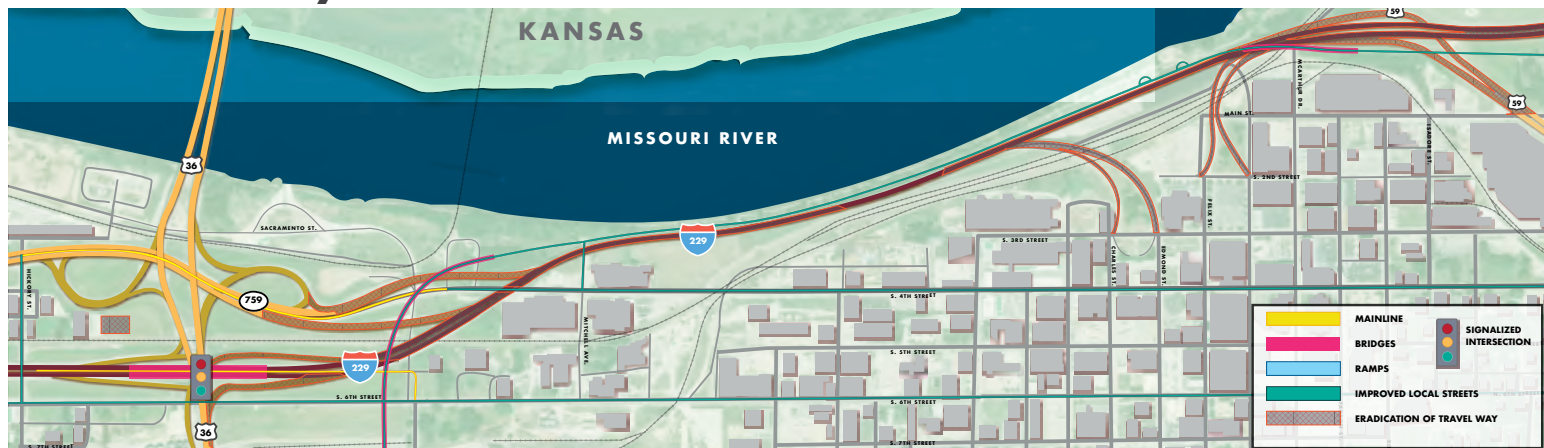


## NIS-16: Parkway Option



This alternative removes the Interstate classification from Hwy 36 to at least Highland Avenue. In this section, I-229 is decommissioned, the double-decker bridge removed, and a scenic 2-lane parkway is constructed. The 2-lane parkway would be constructed at grade (must comply with floodplain and stormwater drainage requirements) in generally the same location as the existing double-decker bridge between the Burlington Northern Railroad tracks and the Missouri River.

## NIS-15: Dewey Avenue Extension



This alternative removes the Interstate classification between Highland Avenue and Hwy 36. In this section, I-229 is decommissioned, the double-decker bridge removed, and a scenic 2-lane boulevard constructed with a connection to the boulevard on Dewey Avenue. The 2-lane boulevard would be constructed at grade (must comply with floodplain and stormwater drainage requirements) in the same location as the existing double-decker bridge between the Burlington Northern Railroad tracks and the Missouri River.

## NIS-22: Boulevard East of Tracks



This new alternative proposes removing a portion of I-229, roughly between U.S. Route 36 and McArthur Drive, and replacing it with a new four-lane boulevard that would generally run parallel to the BNSF railroad tracks, east of the existing I-229 configuration. The alternative would include a new elevated structure between the current Edmond Street ramp and I-229 north of U.S. Route 59 (St. Joseph Avenue). The new structure would connect I-229 with downtown St. Joseph via a signalized intersection at Charles and Edmond streets and ramps at St. Joseph Avenue. This alternative would require partial or complete de-designation of I-229 as interstate.

**I-229 MOVING FORWARD**

**ALTERNATIVES NO LONGER CONSIDERED**



## NIS-07: 4-Lane with Intersections at Edmond & Felix Streets



This alternative would remove the Interstate classification between Hwy 36 and Hwy 59. In this section, I-229 would be decommissioned, the double-decker bridge removed, and a four-lane principal arterial constructed. The four-lane principal arterial would be constructed at grade (elevated as necessary for compliance with floodplain and stormwater drainage requirements) in the same location as the existing double-decker bridge between the Burlington Northern Santa Fe Railroad tracks and the Missouri River.

## NIS-01: Elevated T-Intersection



This alternative removes the interstate classification between Hwy 36 and Hwy 59. In this section, I-229 is decommissioned, the double-decker bridge removed, and a four-lane principal arterial constructed. The four-lane principal arterial would be constructed at grade (elevated as necessary for compliance with floodplain and stormwater drainage requirements) in generally the same location as the existing double-decker bridge between the Burlington Northern Santa Fe Railroad tracks and the Missouri River.

## NIS-06: One-Way Pairs 3rd & 4th Streets, Michel and Franklin Streets



This alternative removes the Interstate classification between Hwy 36 and Hwy 59. In this section, I-229 is decommissioned, the double-decker bridge removed, and nothing constructed in its current location, opening up the riverfront. Traffic is routed through downtown on local collector streets.



## NIS-17: One Way Pairs 5th & 6th Streets



This alternative removes the Interstate classification between Hwy 36 and Hwy 59. In this section, I-229 is decommissioned, the double-decker bridge removed, and nothing constructed in its place, therefore, opening up the riverfront. Traffic is routed through downtown on local collector streets.

## NIS-04: Arterials East



In this Alternative, the double-decker bridge is removed, and nothing is constructed in its place, opening up the riverfront. Traffic is routed through downtown on local collector streets, including 6th Street, 4th Street, 3rd Street, Francis Street, and Felix Street. This Alternative requires partial or full de-designation of I-229 as interstate.

## NIS-10 Kansas Side from 59



This alternative consists of the relocation of the mainline I-229 corridor from the east side of the Missouri River to the west side of the Missouri River. I-229 would cross over the Missouri River from just north of the downtown area at the intersection of US 59, St. Joseph Ave, and I-229.

At this location, a new interchange facility would accommodate the connection on the north end of the alignment shift and cross over the Missouri River to the west on an elevated bridge structure. The bridge structure would be approximately 2700 feet long and span the Missouri River and its floodway.



# NIS-20: Kansas Side from Cook



This alternative consists of the relocation of the mainline I-229 corridor from the east side of the Missouri River to the west side of the Missouri River. I-229, near Cook Road, would curve to the west and cross over the Missouri River. The bridge structure would be approximately 2700 feet long and span the Missouri River and its floodway. A new interchange facility would provide connections between Cook Road and I-229.

## No-Build Alternative



This alternative leaves in place the I-229 double-decker bridge. Routine maintenance of the bridge would continue, but no major rehabilitation would be done. Without significant rehabilitation and only routine maintenance, the bridge would likely be closed in the next ten years. This alternative is required to be carried forward as a baseline for comparison purposes.

## Rehab Alternative



This alternative would leave the I-229 double-decker bridge in place and assume that within the next 5-7 years, MoDOT would complete a significant structural rehabilitation, including removing the concrete-wearing surface, a hydro-demolition of the deck, and installation of a new concrete-wearing surface. Additionally, all expansion joints and barriers would be replaced. The steel superstructure would be sandblasted and recoated throughout, and various substructure units would have fiber wrap, formed, and unformed repairs completed. This alternative also assumes ongoing routine maintenance in addition to the major rehabilitation and would require the structure to be rebuilt in approximately 25 years.