

I-65/I-70 NORTH SPLIT PROJECT FACT SHEET

System-Level Analysis for Downtown Interstates

May 2018

Based on input from the community, the Indiana Department of Transportation (INDOT) conducted a System-Level Analysis for the downtown Indianapolis interstates.

The purpose of the analysis is to define the scope of the North Split Project – aimed at rehabilitating the I-65/I-70 North Split interchange to improve safety and address deteriorating bridge and pavement conditions in the project area – and inform current public dialogue about the future of downtown Indianapolis interstates.

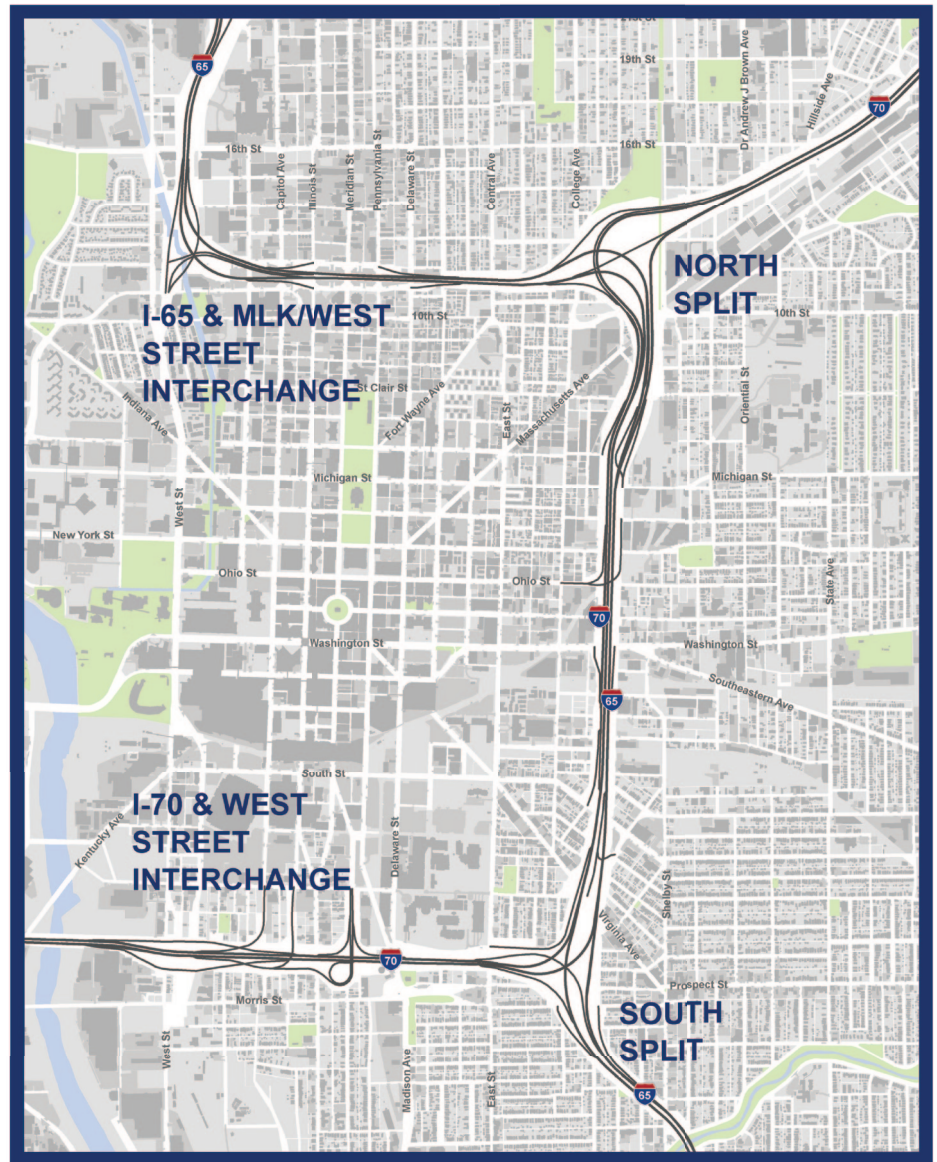
While the analysis provides an initial baseline for public dialogue regarding potential major changes to downtown interstates, it does not make a specific recommendation for a future system. Rather, this analysis will inform the project-level National Environmental Policy Act (NEPA) evaluation for the North Split Project. The objective at this stage is to advance the North Split Project to maintain the existing interchange in a safe, functioning condition and to do so with an understanding of downtown interstate system options.

Decommissioning Existing Interstates

One approach suggested to INDOT by the community was to decommission (or remove) the existing interstate system. As part of this analysis, INDOT reviewed urban freeway treatments nationwide.

Research showed that decommissioning typically works for facilities with low traffic volumes, short sections of uncompleted freeways, barriers to waterfronts, segments remaining after tunneling or realignment, or parallel freeways to serve the diverted traffic.

One focus of INDOT's System-Level Analysis was to understand how decommissioning has worked in other cities, and determine what could be possible in Indianapolis.



KNOW THE FACTS



CONCEPTS REVIEWED

Seven concepts were reviewed in the System-Level Analysis, some of which were suggested by engaged citizens. The asterisk denotes those concepts presented by community groups.

① NO-BUILD: MAINTAIN EXISTING

This concept would maintain the existing interstate system with no operational improvements. The number of lanes and their locations would remain the same, and the existing ramp connections to local streets would not change.

② TSM: TRANSPORTATION SYSTEM MANAGEMENT – DIVERT TRAFFIC TO I-465 OR TO TRANSIT*

The traffic volumes on the various legs of the downtown interstate system range from 109,000 to 161,000 vehicles per day. The term TSM refers to actions that would reduce traffic demand on the system. Three potential actions were reviewed including diversion of through trips to I-465, diversion of downtown interstate trips to transit, and diversion of trips with tolling. Through trips are categorized as interstate trips from outside I-465, through downtown, to outside I-465.

③ UPGRADE EXISTING INTERSTATES

This concept would involve a full reconstruction of I-65 and I-70 through downtown, using the same general alignment and configuration that exists today. There would be bridge rehabilitation/replacement and pavement replacement throughout, ramp and interchange improvements to reduce conflicts, and added lanes in some locations to reduce congestion and increase safety.

④ DEPRESS DOWNTOWN INTERSTATES*

This concept would involve a full reconstruction of I-65 and I-70 as a depressed system. It is assumed to have the same number of lanes and interchanges as Concept 3 (upgrade existing interstates), but the interstates would be below ground level and most crossing streets would pass over the interstate instead of under.

⑤ REPLACE INTERSTATES WITH AT-GRADE BOULEVARDS*

In this concept, I-65 and I-70 would be replaced with at-grade, six-lane boulevards on all three legs of the inner loop. The boulevards would be low-speed, divided roadways with landscaped medians in the center and landscaped buffers on both sides. In this concept, there would be signalized intersections at all major cross streets.

⑥ CONSTRUCT AT-GRADE BOULEVARDS + INTERSTATES IN TUNNELS*

This concept would replace I-65 and I-70 with boulevards plus tunnels to serve traffic through downtown. The boulevards would be the same as described above, with six-lane freeway sections in tunnels underneath and signalized intersections at all cross streets.

⑦ CONSTRUCT NEW LINK + NEW I-65 WEST LEG TUNNEL

The downtown inner loop today is missing a link on the west side. This concept would construct a new west leg interstate link in a tunnel under West Street. I-65 would be rerouted under West Street, then on to the south leg of the inner loop to rejoin the existing I-65 at the South Split interchange. The north leg of the inner loop and West Street would both be reconstructed as six-lane boulevards.

COMPONENTS REVIEWED

The System-Level Analysis reviewed the performance, cost and impacts of each concept.



PERFORMANCE

How well does the roadway system function?



COST

How much will it cost to construct?



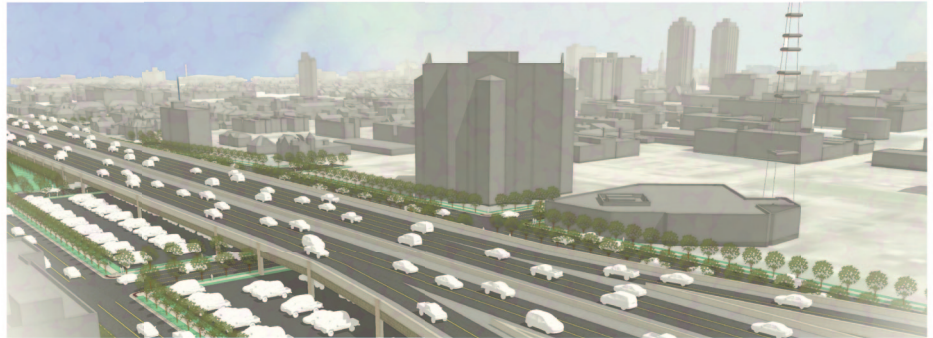
IMPACTS

How does it impact downtown and neighborhood traffic, connectivity, right-of-way needs, historic resources, recreational areas and trails, and natural resources?



Sample Depressed Interstate

Does not represent final design



Sample Upgraded Interstate

Does not represent final design

TSM ANALYSIS RESULTS

The three transportation system management actions examined in the System-Level Analysis showed similar results.

① DIVERSION TO I-465




Through trips were estimated in three ways – tracing trips using the Indianapolis Metropolitan Planning Organization's (IMPO's) travel demand model, tracing trips using location-based services of smartphones, and testing unlimited capacity on I-465 using the IMPO's model. Each estimate showed only about 10 percent of downtown interstates trips were through trips during peak periods. This means diverting through trips to I-465 would not materially affect performance of the concepts.

② DIVERSION TO TRANSIT

Ridership from current IndyGo service changes is accounted for in travel demand models. The analysis of Bus Rapid Transit ridership showed inner loop traffic reduction less than one percent. Most traffic diversion will be from local streets, not interstates. Therefore, diverting trips to transit would not materially affect performance of the concepts.

③ DIVERSION WITH TOLLING

Tolls on interstates inside I-465 could be used to divert through traffic to I-465. However, because only 10 percent of trips on downtown interstates in peak periods are through trips, diverting these trips to I-465 with tolls would not materially affect performance of the concepts.

CONCEPT	 PERFORMANCE	 COST	 IMPACTS			
	Total Network Delay (Compared to Existing)	Estimated Cost	Time of Construction	Visual/ Connectivity	Right-of-Way (Total Area)	Relocations (Properties)
CONCEPT 1 No-Build (Maintain Existing)	No Change	No Change	---	No Change	No Change	No Change
CONCEPT 2 Transportation System Management	---	---	---	---	---	---
CONCEPT 3 Upgrade Existing Interstates	10% less delay (AM) 6% less delay (PM)	\$900 M - \$1.6 B (+\$3 M/yr O&M)	5 years	Mixed/Good	1-5 Acres	5-10
CONCEPT 4 Depress Downtown Interstates	10% less delay (AM) 6% less delay (PM)	\$1.5 B - \$2.4 B (+\$6 M/yr O&M)	6 years	Good/Good	5-10 Acres	10-15
CONCEPT 5 Boulevards to Replace Interstates	40% more delay (AM) 145% more delay (PM)	\$500 M - \$900 M (+\$2 M/yr O&M)	4 years	Good/Mixed	1-5 Acres	1-5
CONCEPT 6 Boulevards and Interstate Tunnels	9% less delay (AM) 3% more delay (PM)	\$3.3 B - \$5.5 B (+\$7 M/yr O&M)	10 years	Good/Mixed	5-10 Acres	5-10
CONCEPT 7 West Street Interstate Tunnel and Boulevard	23% more delay (AM) 24% more delay (PM)	\$1.6 B - \$2.6 B (+\$4.5 M/yr O&M)	7 years	Mixed/Mixed	40-50 Acres	30-40

CONCLUSIONS

The conclusions of the System-Level Analysis include the following:

- As a matter of public safety, the North Split interchange needs to be reconstructed in the next two to four years.
- Major changes to the configuration of the inner loop system would take many years to plan, study, design, and implement.
- The interchange will need to work effectively with the interstate system that currently exists.
- The future expense of modifying the North Split interchange does not prohibit options for the future system, nor does it preclude this project from moving forward.

The entire System-Level Analysis can be found on the North Split Project website: www.northsplit.com.

NORTH SPLIT PROJECT / PO BOX 44141 / INDIANAPOLIS, INDIANA 46244
info@northsplit.com (EMAIL) / NORTHSPPLIT.COM (WEBSITE)