## ANORTH SPLIT UPGRADES ORIVING PROGRESS

## I-65/I-70 North Split Project

Public Open House May 23, 2018



## **About INDOT**

- INDOT's mission
  - Plan, build, maintain and operate transportation systems
  - Enhance safety, mobility and economic growth
- Interstates, US Highways, State Roads
- INDOT maintains more than 11,000 centerline miles and 6,000 bridges across the state
- \$1.2 billion in construction last year





#### Introduction

- In the fall 2017 INDOT started an environmental study for the North Split interchange
  - Safety concerns
  - Poor condition of bridges and pavement
  - Early action needed
- Met with community groups and received a number of public comments
- In response to public comments, completed a System-Level Analysis of the downtown interstate system
- Purpose today is to present the results of the System-Level Analysis





## **System-Level Analysis**

- Studies all downtown interstates
- Informs North Split interchange project
- Provides basic information about system concepts to support public dialogue
- Does not identify a specific plan for downtown interstates
- Provides a starting point for possible future studies

North Split Project

DES Nos. 1592385 and 160080

SYSTEM-LEVEL ANALYSIS FOR DOWNTOWN INTERSTATES

May 2, 2018



NORTH SPLIT
UPGRADES



## **System-Level Analysis Overview**

#### The System-Level Analysis of downtown interstates:

- Was not intended to answer all questions or address all issues
- Focuses on the most basic parameters: performance, cost, and impacts
- Analyzed current conditions, not future forecasts
- Was fact finding, not deliberative
- Did not make recommendations or decisions for the future of downtown interstates



## **Components Reviewed**



**Performance** – How well does the roadway system function?



**Cost** – How much will it cost to construct?



**Impacts** – How will it affect the community?

- local street and neighborhood traffic
- construction and traffic maintenance
- neighborhood connectivity/visual continuity
- right-of-way needs
- historic resources
- recreational areas and trails
- natural resources



## **Decommissioning Existing Interstates**

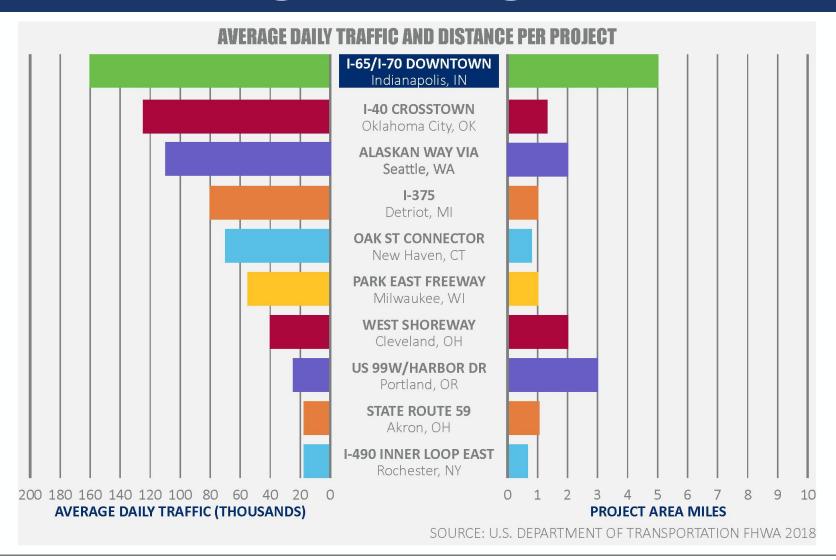
- Reviewed urban freeway treatments nationwide
- Where decommissioning works
  - Low traffic volumes
  - Short sections of uncompleted freeways
  - Barriers to waterfronts
  - Remaining segments after realignment
  - Parallel with other freeways
- Focus of System-Level Analysis is, "What works in Indianapolis?"

#### **DECOMMISSIONING PROJECT EXAMPLES**

- US 99W/Harbor Drive, Portland, OR
- Park East Freeway, Milwaukee, WI
- I-490 Inner loop East, Rochester, NY
- State Route 59, Akron, OH
- West Shoreway, Cleveland, OH
- I-375, Detroit, MI
- Route 34/Oak Street Connector, New Haven, CT
- I-40 Crosstown Expressway, Oklahoma City, OK
- Route 99/Alaskan Way Viaduct, Seattle, WA
- Scajaquada Expressway, Buffalo, NY
- I-345, Dallas, TX
- I-375, Detroit, MI
- I-980, Oakland, CA
- Route 710, Pasadena, CA
- I-490 Inner Loop North, Rochester, NY
- I-280 Spur, San Francisco, CA
- I-81, Syracuse, NY
- Route 29, Trenton, NJ



## **Decommissioning Existing Interstates**





## Concepts

- 1. No-Build (maintain existing)
- 2. Transportation System Management (TSM)- divert traffic to I-465 or to transit\*
- 3. Upgrade existing interstates
- 4. Depress downtown interstates\*
- 5. Replace interstates with at-grade boulevards\*
- 6. Construct at-grade boulevards + interstates in tunnels\*
- 7. Construct new interstate link new I-65 west leg tunnel



\* Suggested by community groups

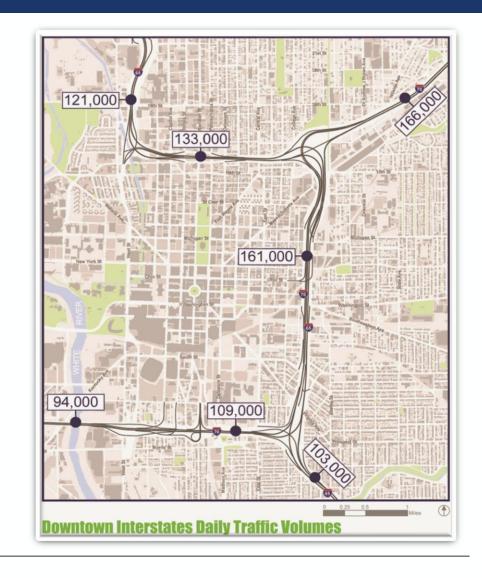


## CONCEPT (1) No-Build



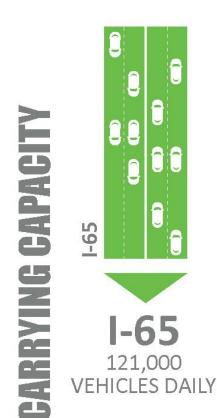
## Concept 1: No-Build

- Maintain the existing interstate system with no operational improvements
- Preserve number and location of lanes
- Keep existing ramp connections to local streets
- Basis of comparison for other concepts





## Concept 1: No-Build





#### **LOCAL ROADS**

121,000 VEHICLES DAILY



## Concept 1: No-Build

#### Performance

- Total delay is baseline for other concepts
  - 21,346 hours (AM peak)
  - 23,471 hours (PM peak)

#### Cost

Cost to maintain inner loop over next 30 years is approximately \$437M

#### Impacts

 Regular traffic disruption due to interstate closures to replace pavement and bridges





# CONCEPT 2 Transportation System Management



### **Concept 2: Transportation System Management**

- Reduce traffic on downtown interstates
- Three potential actions
  - Divert through trips\* to I-465
  - Divert downtown interstate trips to transit
  - Divert trips with tolling

\*Through trips = Interstate trips from outside I-465, through downtown, to outside I-465





### **Concept 2: Transportation System Management**

#### Diversion to I-465

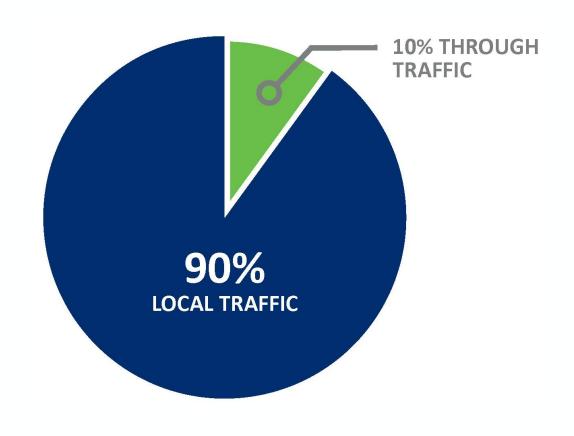
- Through trips estimated 3 ways
  - Trace trips using IMPO travel demand model
  - Trace trips using location-based services of smartphones
  - Test unlimited capacity on I-465 using IMPO travel demand model



### **Concept 2: Transportation System Management**

#### Diversion to I-465

- Through trips estimated 3 ways
  - Trace trips using IMPO travel demand model
  - Trace trips using location-based services of smartphones
  - Test unlimited capacity on I-465 using IMPO travel demand model
- Each estimate showed around 10% through trips on downtown interstates in peak periods
- Diverting through trips to I-465 would not materially affect performance of concepts





## 2: Transportation System Management

#### Diversion to Transit or Tolling

• <u>Transit</u>: Analysis of bus rapid transit (BRT) ridership shows inner loop traffic reduction less than 1%. Most traffic diversion to BRT will be from local streets, not interstates

• Tolls: Could only be effective for diverting through trips to I-465 if there were more

through trips.

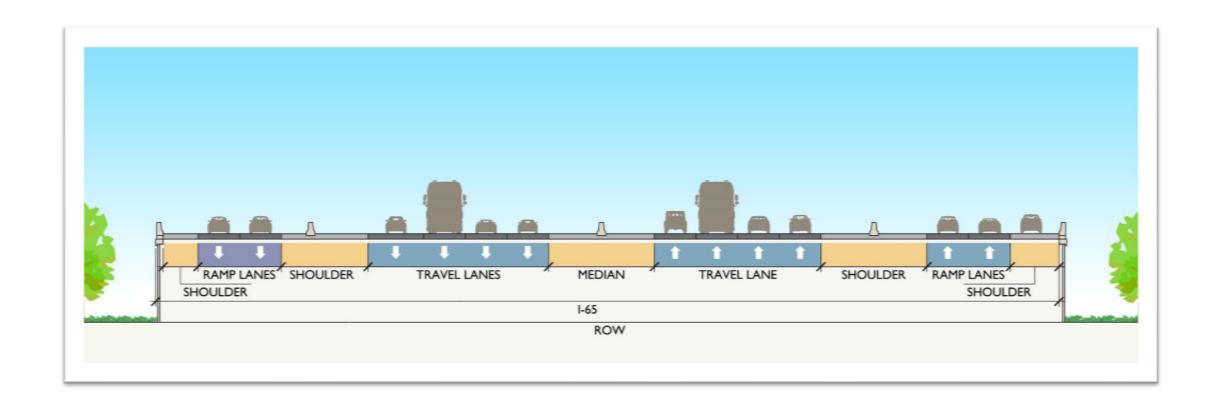




# CONCEPT 69 Upgrade Existing Interstate System



### **Concept 3: Upgrade Existing Interstate System**





### Concept 3: Upgrade Existing Interstate System

#### Performance

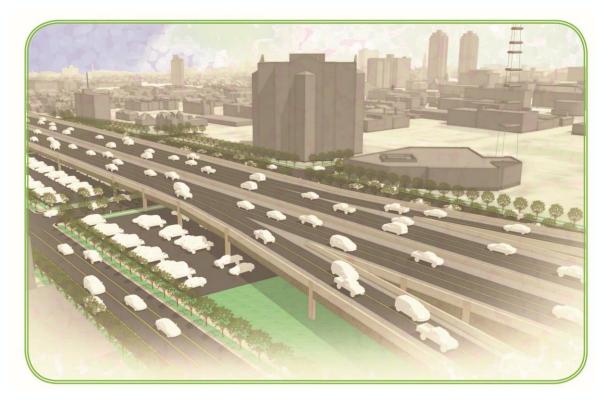
- Total delay is REDUCED compared to existing
  - 10% less in AM peak, 6% less in PM peak
- Reduced congestion on interstates

#### Cost

Construction = \$900M - \$1.6B

#### Impacts

- Local street traffic generally unchanged
- 5 years of construction
- 1 to 5 acres new right of way; 5 to 10 relocations
- Visual quality mixed, connectivity good

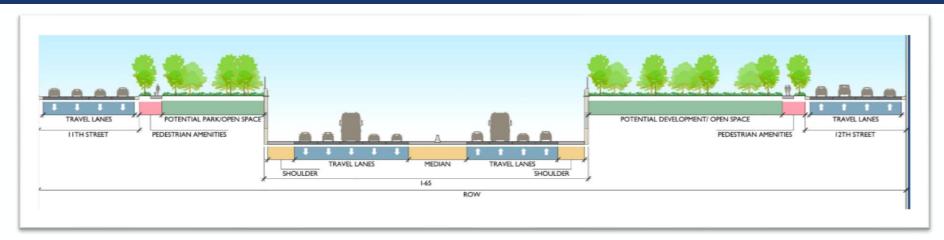


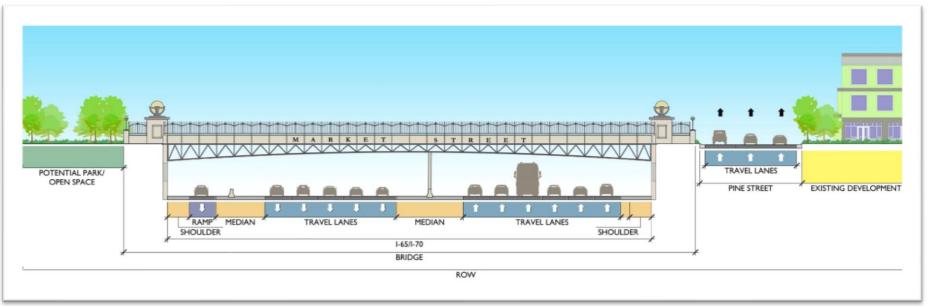


## CONCEPT (2) Depress Downtown Interstates



## **Concept 4: Depress Downtown Interstates**







## Concept 4: Depress Downtown Interstates

#### Performance

- Total delay is REDUCED compared to existing
  - 10% less in AM peak, 6% less in PM peak
- Reduced congestion on interstates

#### Cost

Construction = \$1.5B - \$2.4B

#### Impacts

- Local street traffic generally unchanged
- 6 years of construction
- 5 to 10 acres new right-of way; 10 to 15 relocations
- Visual quality and connectivity good



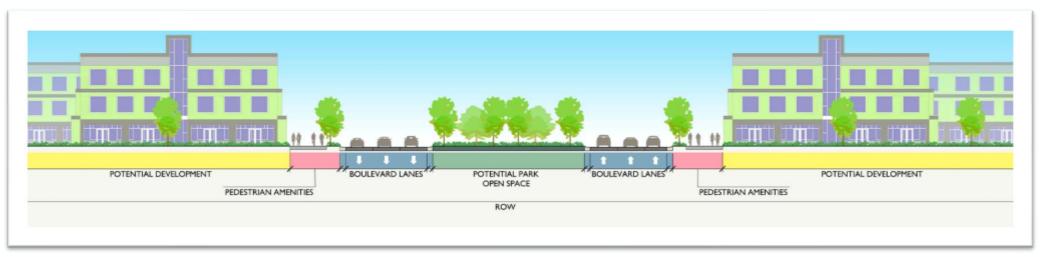


## CONCEPT 5 Replace Interstates with Boulevards



### **Concept 5: Replace Interstates with Boulevards**







#### **Concept 5: Replace Interstates with Boulevards**

#### Performance

- Total delay is MUCH HIGHER than existing
  - 40% more in AM peak, 145% more in PM peak
- High level of congestion on all boulevards

#### Cost

- Construction = \$500M \$900M
- Local street investments not included

#### Impacts

- Large traffic increases on streets, interstate queues
- 4 years of construction
- 1 to 5 acres new right of way; 1 to 5 relocations
- Potential for excess right of way
- Visual quality good, connectivity affected by traffic levels

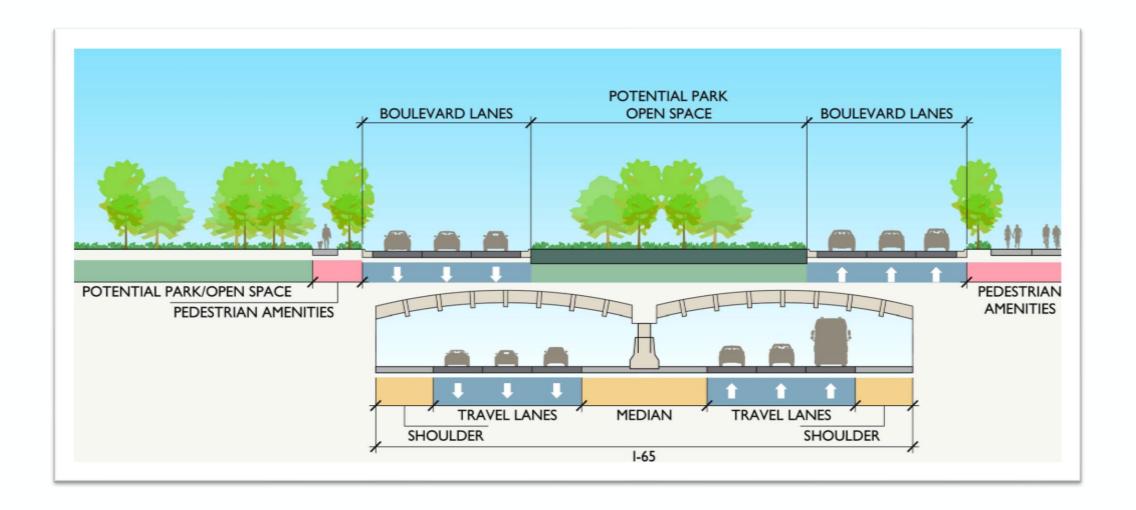




## CONCEPT 6 Replace with Boulevards & Tunnels



## Concept 6: Replace with Boulevards and Tunnels





#### Concept 6: Replace with Boulevards and Tunnels

#### Performance

- Total delay is SIMILAR to existing
  - 9% less in AM peak, 3% more in PM peak
- High congestion levels on boulevards

#### Cost

Construction = \$3.3B - \$5.5B

#### Impacts

- Local street traffic generally unchanged
- 10 years of construction
- 5 to 10 acres new right-of way; 5 to 10 relocations
- Visual quality good, connectivity mixed

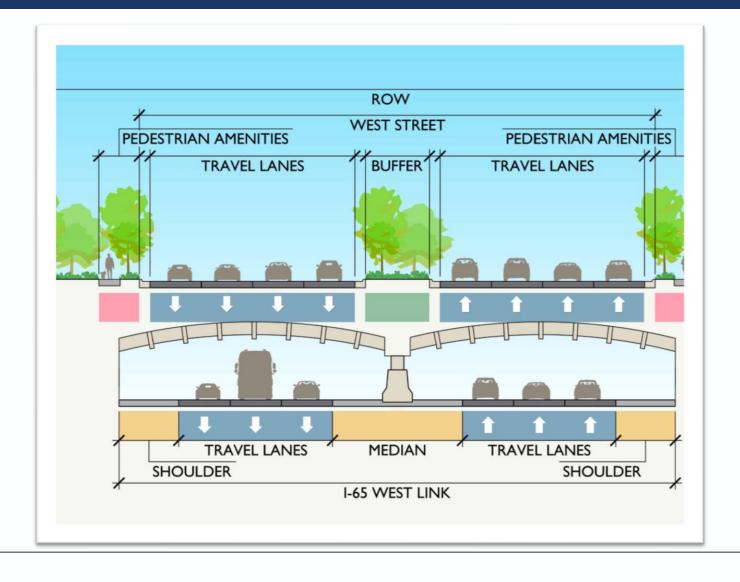




## CONCEPT (7) Construct New Interstate Link



## Concept 7: Construct New Interstate Link





## **Concept 7: Construct New Interstate Link**

#### Performance

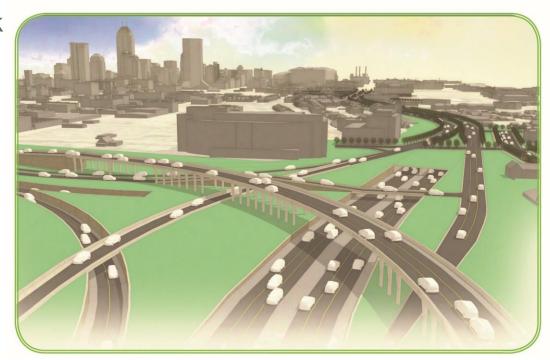
- Total delay is HIGHER than existing
  - 23% more in AM peak, 24% more in PM peak
- North boulevard highly congested

#### Cost

Construction = \$1.6B - \$2.6B

#### Impacts

- Traffic increase on streets, south and east
- 7 years of construction
- 40 to 50 acres new right of way; 30 to 40 relocations
- Visual quality and connectivity mixed





## Concepts at a Glance

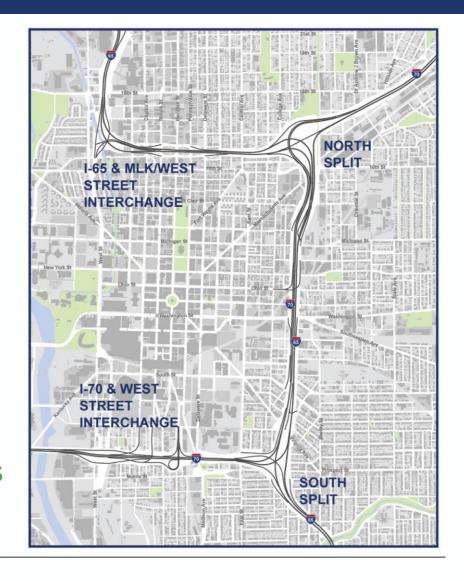
Concept	Performance	Costs	Impacts			
	Total Network Delay (compared to existing)	Estimated Costs	Time of Construction	Visual/ Connectivity	ROW Total Area	Relocations (Properties)
1 - No Build	No change	No change		No change	No change	No change
2 - TSM						
3 - Upgrade Existing Interstates	10% less delay (AM) 6% less delay (PM)	\$900M - \$1.6B	5 years	Mixed/Good	1-5 acres	5-10
4 - Depress Downtown Interstates	10% less delay (AM) 6% less delay (PM)	\$1.5B - \$2.4B	6 years	Good/Good	5-10 acres	10-15
5 - Boulevards to Replace Interstates	40% more delay (AM) 145% more delay (PM)	\$500M - \$900M	4 years	Good/Mixed	1-5 acres	1-5
6 - Boulevards and Tunnels	9% less delay (AM) 3% more delay (PM)	\$3.3B - \$5.5B	10 years	Good/Mixed	5-10 acres	5-10
7 - West St. Interstate Tunnel and Boulevard	23% more delay (AM) 24% more delay (PM)	\$1.6B - \$2.6B	7 years	Mixed/Mixed	40-50 acres	30-40



#### What does this mean for downtown interstates?

- Many issues to consider in defining the future of downtown interstates
- System-Level Analysis looked at core issues of performance, cost, and impacts
- A starting point for future studies
- The community should take the time necessary to decide the future of downtown interstates.

 Please submit comments on System-Level Analysis by June 7.





### What does this mean for the North Split Project?

- The North Split interchange needs to be reconstructed in 2 to 4 years due to bridge and pavement conditions.
- Given this early timeframe, the interchange will need to work effectively with existing interstates.
- The cost of reconstructing the North Split interchange now does not automatically preclude future options for the downtown interstate system.

- Public comment opportunities will continue throughout the North Split Project.
- Public comment period for alternatives anticipated late summer/fall 2018.



## North Split Project Next Steps

- Continue environmental review process for the North Split
  - Develop alternatives
  - Identify benefits and impacts
  - Continue public involvement and feedback





#### **Questions**

Report Available: www.northsplit.com

Submit Comments: info@northsplit.com

Comments due June 7, 2018

#### **Contact:**

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**Public Involvement** 

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