# ANORTH SPLIT UPGRADES ORIVING PROGRESS

## CSS Neighborhood Workshops Round 2

July-August 2019



## Neighborhood Workshop Agenda

## Neighborhood Workshops- Second Round

- 1. Welcome and Introductions
- 2. I-65/I-70 North Split Project Update
- 3. CSS Update
- Process Summary
- Visioning Results
- Project Elements
- Additional Opportunities
- 4. CSS Design Workshop

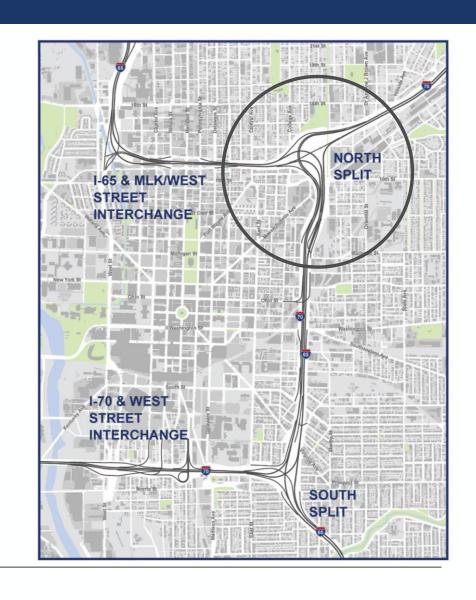




## North Split Interchange

## INDOT is reconstructing the North Split interchange

- Where I-65 and I-70 meet at the northeast corner of downtown inner loop
- Constructed 40 to 50 years ago
- Second-most heavily-traveled interchange in the state 214,000 vehicles per day
- Project goals:
  - Replace deteriorated pavement and bridges
  - Improve safety
  - Improve traffic flow

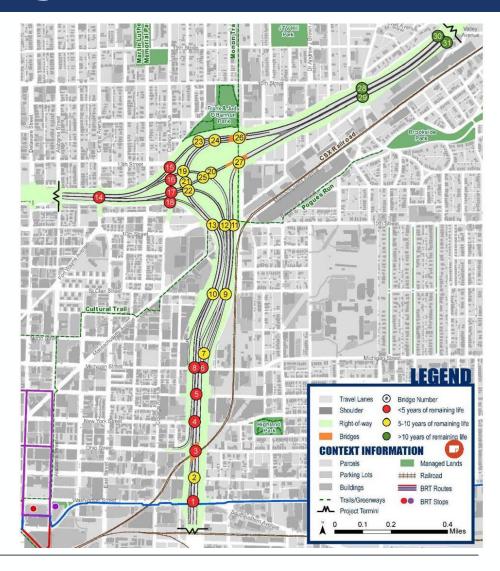




## **Physical Condition and Safety**

## Deteriorated pavement and bridge conditions.

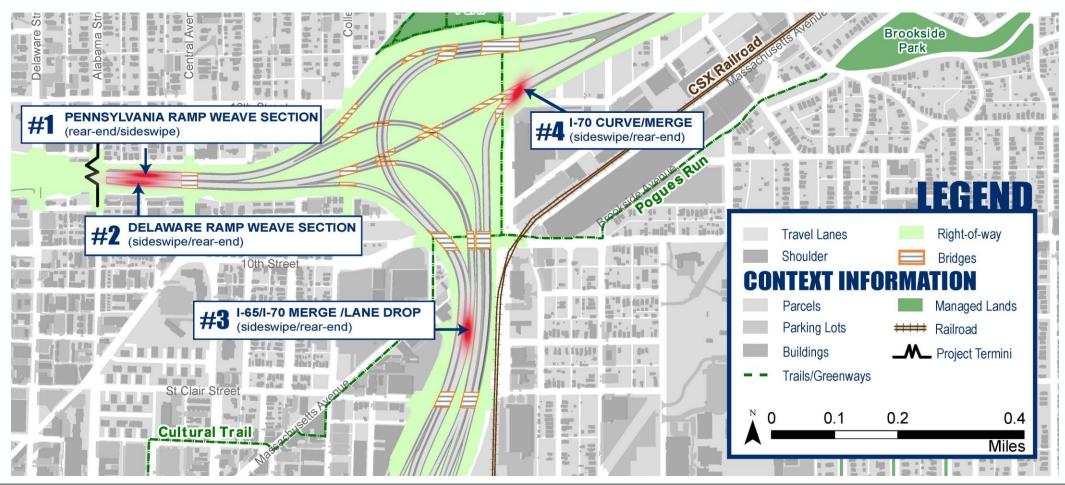
- Constructed in the 1960s and 1970s –
   pavement is past its life expectancy
- Bridge conditions are poor and getting worse:
  - Under 5 years of life (11 bridges)
  - 5 10 years of life (16 bridges)
- Over 1,600 crashes from 2012 to 2016





## Safety - High Crash Locations

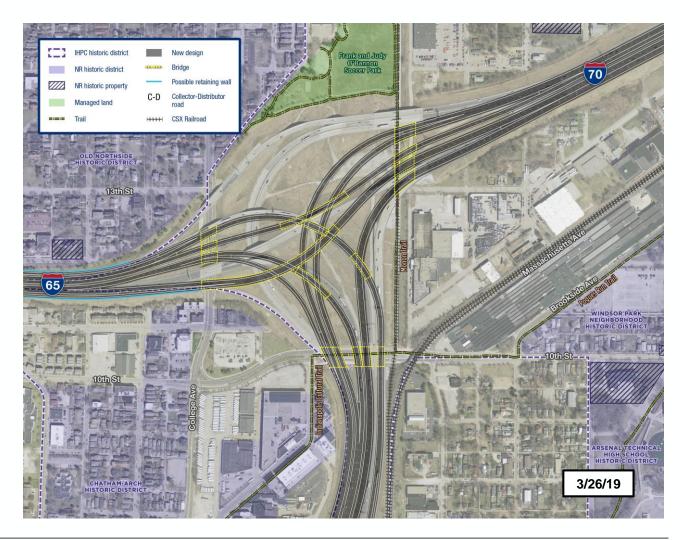
## **Top 4 Crash Locations**





## **Preliminary Preferred Alternative**

- Replaces all pavement and bridges
- Improves safety at the most hazardous locations
- Removes the worst bottlenecks
- More compact interchange
- Does not add through lanes
- Within existing right-of-way
- Minimizes outside walls
- Two restricted ramp movements
  - Delaware ramp to I-70 only
  - Pennsylvania exit from I-65 only





## **Major Project Milestones**

September 2017 Project Initiation

May 2018 System-Level Analysis of Downtown

Interstates

September 2018 Alternatives Screening Report

Spring – Fall 2019 Project Refinement and Context
 Sensitive Solutions (CSS) process

Mid-2020 Environmental Assessment complete

2021 - 2022 Project Construction





## Construction & Maintenance of Traffic

- Two-year period of construction (2021 2022)
- Maintenance of traffic planning currently underway
- Extended closure of some interstate segments, but full closure not anticipated
- Short-term closures of local cross streets for bridge construction
- Traffic Management Plan (TMP)
  - Temporary Traffic Control Plan
  - Traffic Operations Plan
  - Public Information Plan
  - TMP Task Force

**Fourth Edition** 

## TRAFFIC MANAGEMENT PLAN





## **North Split Project Summary**

## Objective: Reconstruct the Interchange

- Replace pavement and bridges
- Address major safety problems
- Eliminate bottlenecks to improve level of service

## **But Consider the Neighborhood Context**

- Enhance neighborhood integration
- Provide neighborhood connectivity
- Engage neighbors and stakeholders in context sensitive design





# A NORTH SPLIT UPGRADES DRIVING PROGRESS

CSS Update:
Public Engagement &
Round 1 Visioning Meetings



## **CSS Process**

MONTH 1
MONTH 3

MONTH 4 MONTH 6 MONTH 7 MONTH 9 MONTH 10 MONTH 12

PART 1 VISIONING

Conduct Inventory

Develop Character

and Themes

and Assessment

# PART 2 PRELIMINARY DESIGN TREATMENTS

- •Develop Conceptual
  Treatments
- •Develop Conceptual CSS Plan

# PART 3 CSS DESIGN GUIDELINES PACKAGE

- •Revise and Finalize CSS Design Treatments
- •Develop Preferred Conceptual Plan Costs

## SPECIFICATIONS & STANDARD DETAILS

 Develop specifications and standard details





## CSS Public Engagement...by the numbers







## Workshop 1 Orientation - Station 1: CSS Overview

### What is CSS?

### "Context Sensitive Solutions and Design" (CSS/D)

is a collaborative, interdisciplinary decision-making process and design approach that involves all stakeholders to develop a transportation facility that fits its physical setting.

- US Department of Transportation

Federal Highway Administration

#### **PASS GOBE PRINCIPLES**

### **DECISION- MAKING PROCESS**

Strive towards
a shared
stakeholder
vision to provide
a basis for
decisions.

Demonstrate a comprehensive understanding of contexts.

Foster continuing communication and collaboration to achieve consensus.

Exercise flexibility
and creativity to
shape effective
transportation solutions,
while preserving
and enhancing
community and natural
environments.

### **ESS CORE PRINCIPLES**

### **DESIGN APPROACH**

Safe for all users.

Shared stakeholder vision as a basis for decisions and for solving problems. meet or exceed the
expectations of
both designers and
stakeholders, thereby
adding lasting value
to the community, the
environment, and the
rransportation system.

Demonstrate effective and efficient use of resources

### LANDFORM ELEMENTS



• May include existing or proposed landforms and land treatments, graded terrace landings, transitional slopes, natural forms

#### LOCAL INFRASTRUCTURE ELEMENTS



#### INTERCHANGE INFRASTRUCTURE ELEMENTS

•May include retaining walls, fencing, rip-rap, slope stabilization, bridge structural forms, pier shape

## VEGETATION ELEMENTS



 May include existing vegetati preservation and protection, proposed plantings such as: trees, shrub massing areas, seeded areas, etc.

## & PUBLIC ART ELEMENTS



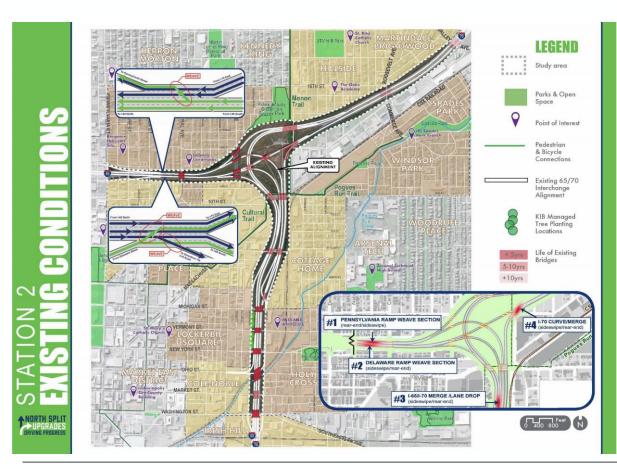
•May include gateway elements, under-bridge treatments, community nodes, plaza areas, art integration components, etc.





CSS PROCESS

## Workshop 1 Orientation - Station 2: Context







## Workshop Orientation - Station 2: Context

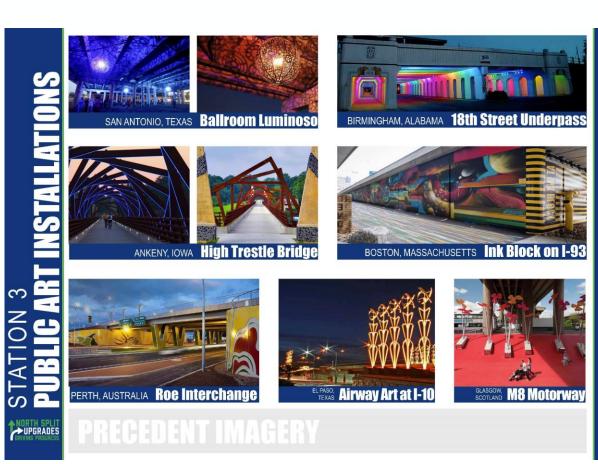






## Workshop 1 Orientation - Station 3: Priorities







# LANDFORM ELEMENTS

# LOCAL INFRASTRUCTURE ELEMENTS

# INTERCHANGE INFRASTRUCTURE ELEMENTS

# **VEGETATION ELEMENTS**

## COMMUNITY & PUBLIC ART ELEMENTS



 May include existing or proposed landforms and land treatments, graded terrace landings, transitional slopes, natural forms



 May include pavement treatments, vehicular bridges, pedestrian bridges, traffic barriers, sidewalks, planters, trails, bike lanes, signage, lighting



 May include retaining walls, fencing, rip-rap, slope stabilization, bridge structural forms, pier shape design



•May include existing vegetation preservation and protection, proposed plantings such as: trees, shrub massing areas, seeded areas, etc.

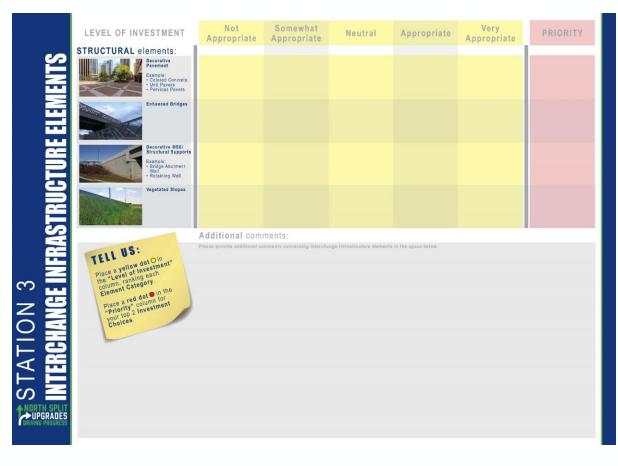


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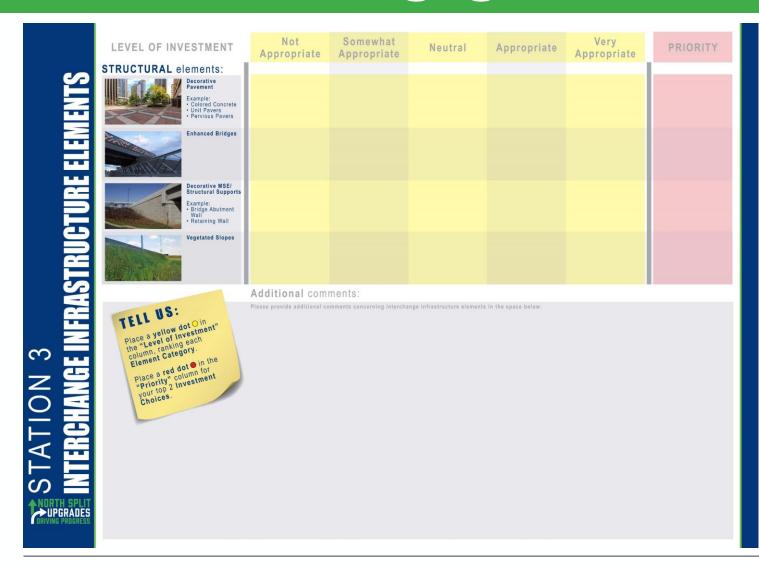


## Workshop Orientation - Station 3: Priorities



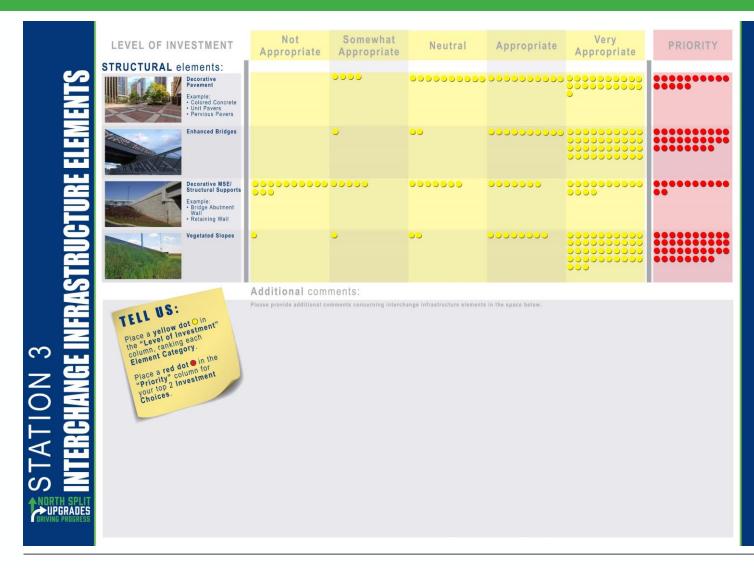






# Interchange Infrastructure Elements: Structural Elements



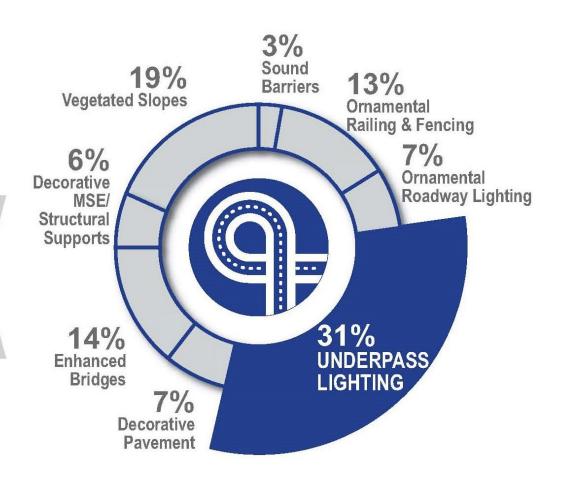


# Interchange Infrastructure Elements: Structural Elements

Residents indicated that more vegetated slope treatments were APPROPRIATE and should be given PRIORITY.



INTERCHANGE INFRASTRUCTURE ELEMENTS





mud & debris

clean up?

# Workshop Orientation





Will the interstate be wider next to our neighborhood?

What kind of impact do our comments have on the design?

Workshop Orientation – Feedback Form





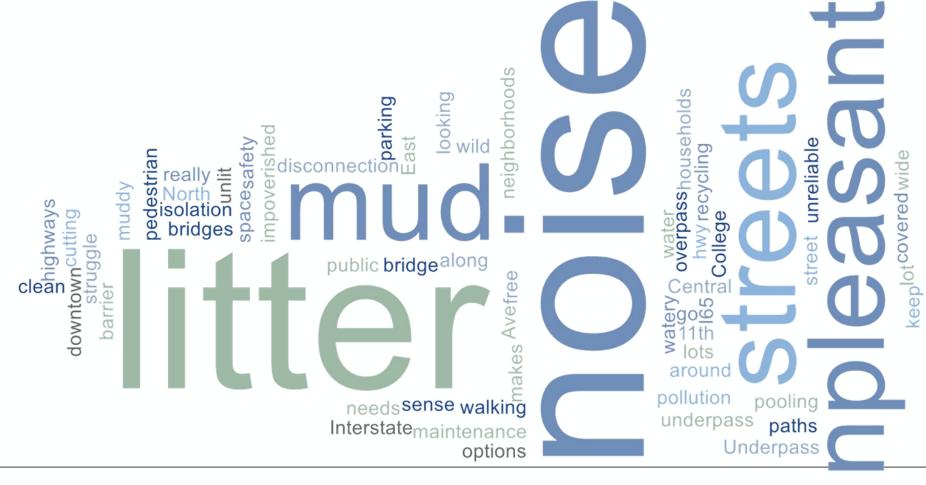


1. What do you like MOST about your neighborhood?



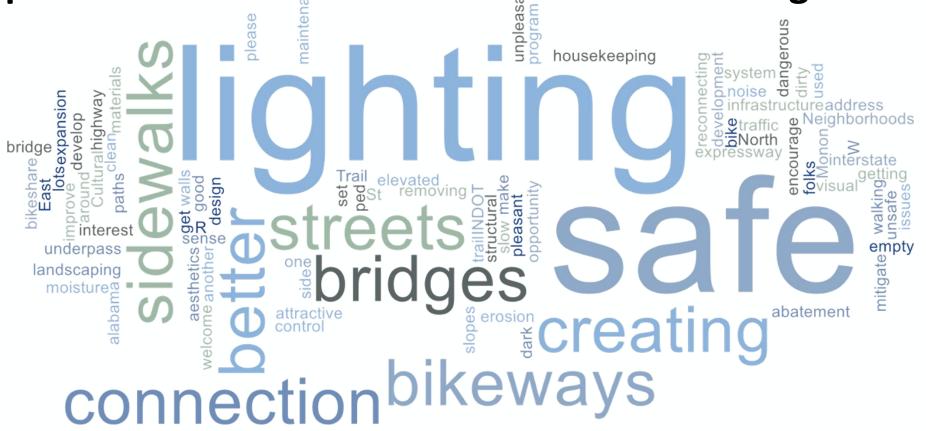


## 2. What do you like LEAST about your neighborhood?





3. What are the most important connectivity-related improvements that need to be made to the neighborhood?





4. Additional feedback topics and input...





## **CSS Process**



MONTH 4 MONTH 6 MONTH 7 MONTH 9 MONTH 10 MONTH 12

# PART 2 PRELIMINARY DESIGN TREATMENTS

- Develop Conceptual Treatments
- Develop Conceptual
  CSS Plan

# PART 3 CSS DESIGN GUIDELINES PACKAGE

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# ANORTH SPLIT UPGRADES DRIVING PROGRESS

# CSS Public Engagement Input and Outcomes







# Goals and **Objectives**

### VISION STATEMENT

The I65/I70 North Split Project will focus on five project goals for community growth including safety, identity, connectivity, sustainability, and artistry. Conceptualized through a Context Sensitive Solutions (CSS) process. the well-designed, multi-modal public infrastructure will capitalize on surrounding connections, expand the public realm, and address the relationship between the new interchange and the existing adjacent neighborhoods.





#### SAFETY OBJECTIVES



**IDENTITY OBJECTIVES** 













CULTIVATE IDENTIFIABLE COMMUNITIES

**CONNECTIVITY OBJECTIVES** 









# CONNECTIVITY

SUSTAINABILITY

RTISTRY



SUPPORT CONNECTED









amenity improvement and additions to key aeas within & adjacent



### SUSTAINABILITY OBJECTIVES



ADVANCE SUSTAINABLE COMMUNITIES













#### **ARTISTRY OBJECTIVES**



ENHANCE ARTFUL





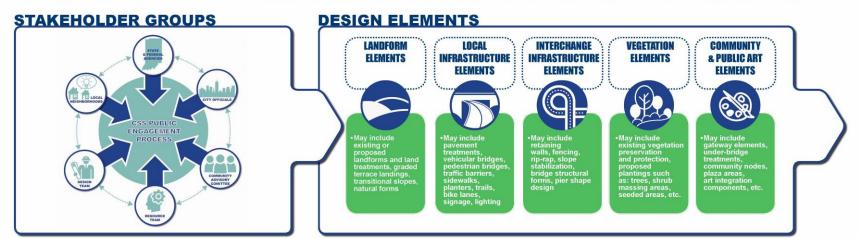


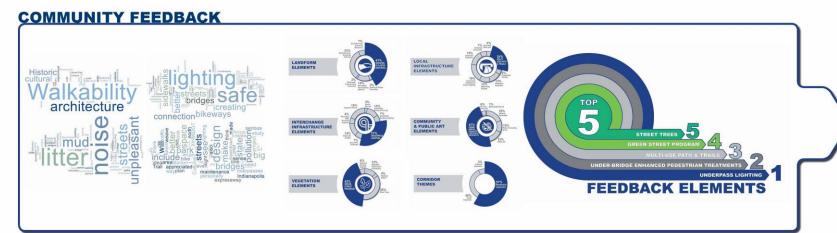




## Preliminary CSS Themes and Ideas

## PUBLIC ENGACEMENT OUTCOMES





### **CHARACTER & THEMES**

DESIGN THEME CONCEPT

DESIGN THEME
CONCEPT

B



# A NORTH SPLIT UPGRADES DRIVING PROGRESS

Preliminary CSS Themes and Ideas

**Workshop Orientation** 







# WHERE ARE WE NOW?

of the CSS Process.

PRELIMINARY DESIGN TREATMENTS Preliminary Design Treatments are a series of recommendations or ideas

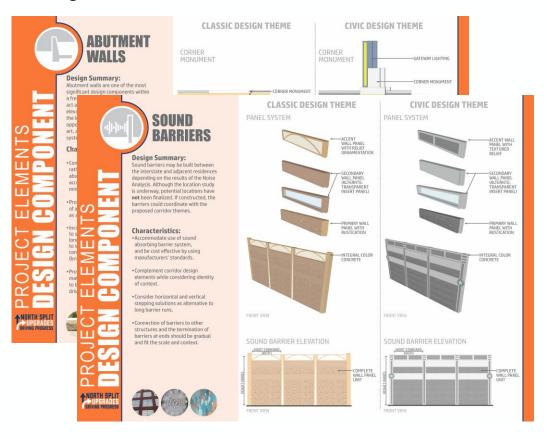
based on the visioning phase

The preliminary design treatments illustrate ways the stakeholder comments can be incorporated into physical design treatments.

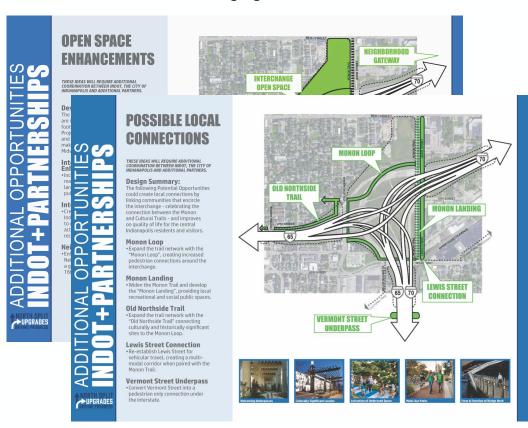




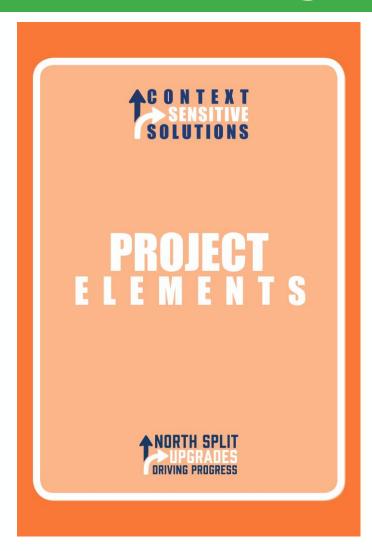
## **Project Elements**



# **Additional Opportunities**







### COMPONENT IDENTIFICATION

### TREATMENT DEVELOPMENT:

After collecting input at stakeholder and neighborhood meetings, twelve components that support the project goals and objectives were identified as being of most importance to the North Split Redesign project treatments.

These design components are the cornerstone pieces of the North Split CSS process; they meet both the safety and functionality requirements set for the driver experience above, as well as the aesthetic and safety needs expressed by the neighboring communities for the pedestrian experience below.



Color, Form & Texture **Palettes** Pulls inspiration for



Piers & Columns Acts as decorative support structures for extended

bridge spans.

























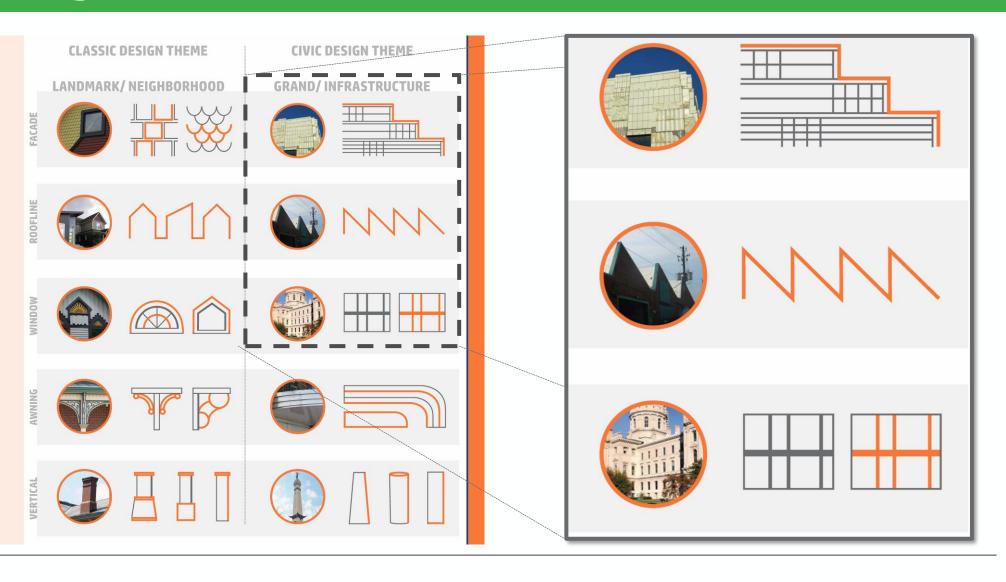
### Design Summary:

Form and texture are also significant elements in reinforcing corridor continuity. A stronger relationship between the project and the context is achieved by replicating forms and textures seen in environs around the project site. Forms and textures can provide an opportunity to introduce patterns and shapes that both define scale and unify a design palette.

### **Characteristics:**

- Use forms and textures that are inspired by local structures, buildings, trails, and environment.
- Embrace the natural texture of constructed materials that are complementary to other textures proposed therefore minimizing surface applications.
- Specify forms and textures that can be replicated efficiently at a high quality of construction.

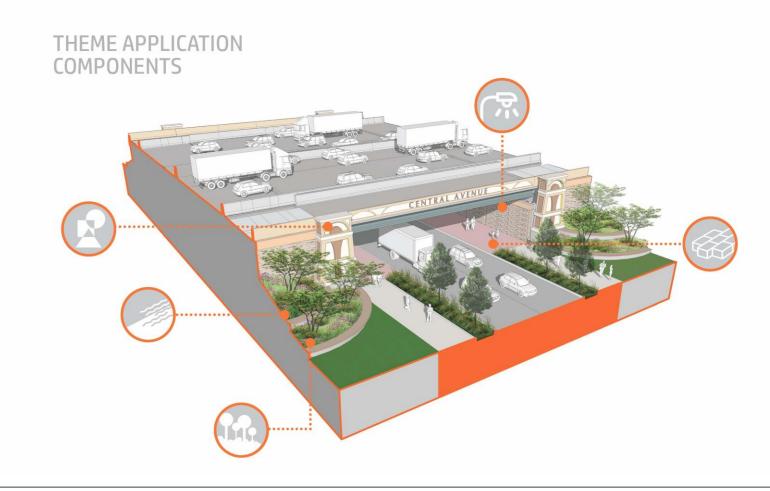




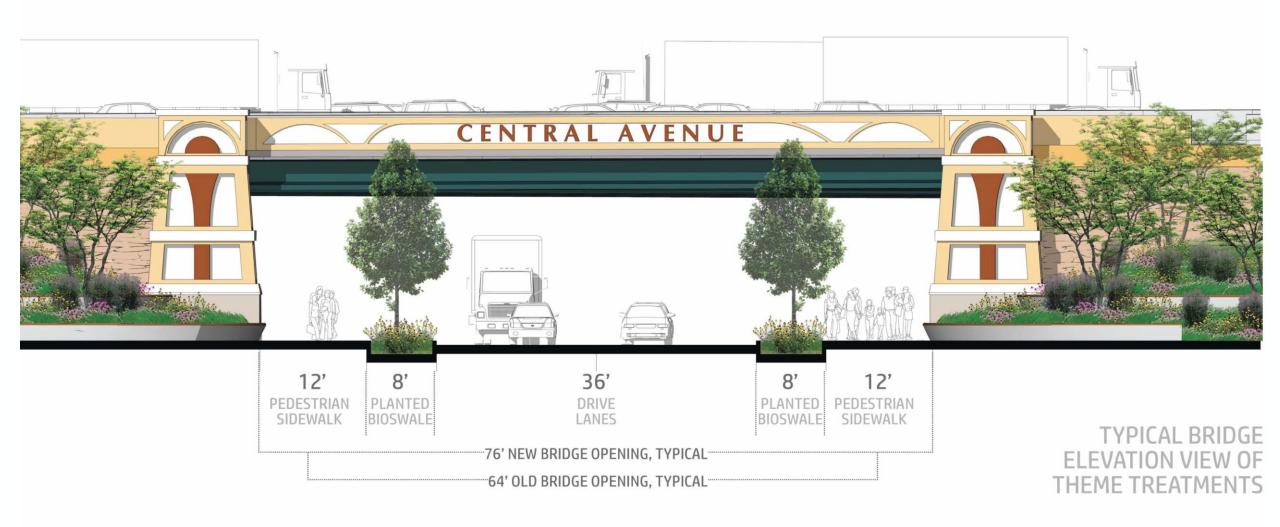


# THEME APPLICATION: "CLASSIC DESIGN"

Influenced by the local landmarks and inspired by some of the neighborhoods' architecture, the Classic Design Theme builds upon that character utilizing forms and shapes found in the neighborhood context.



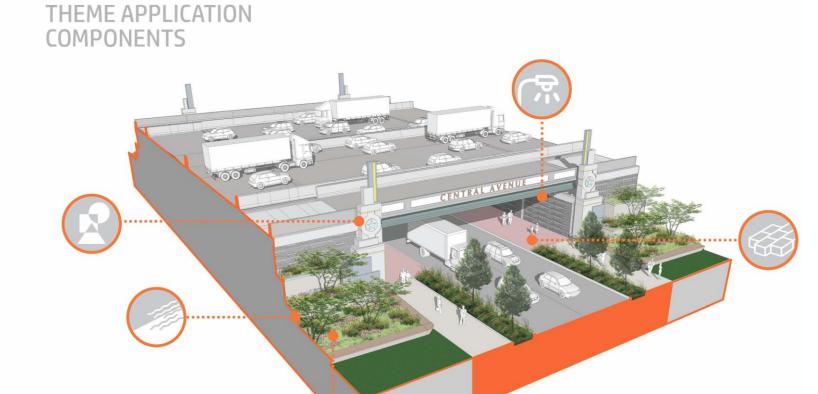




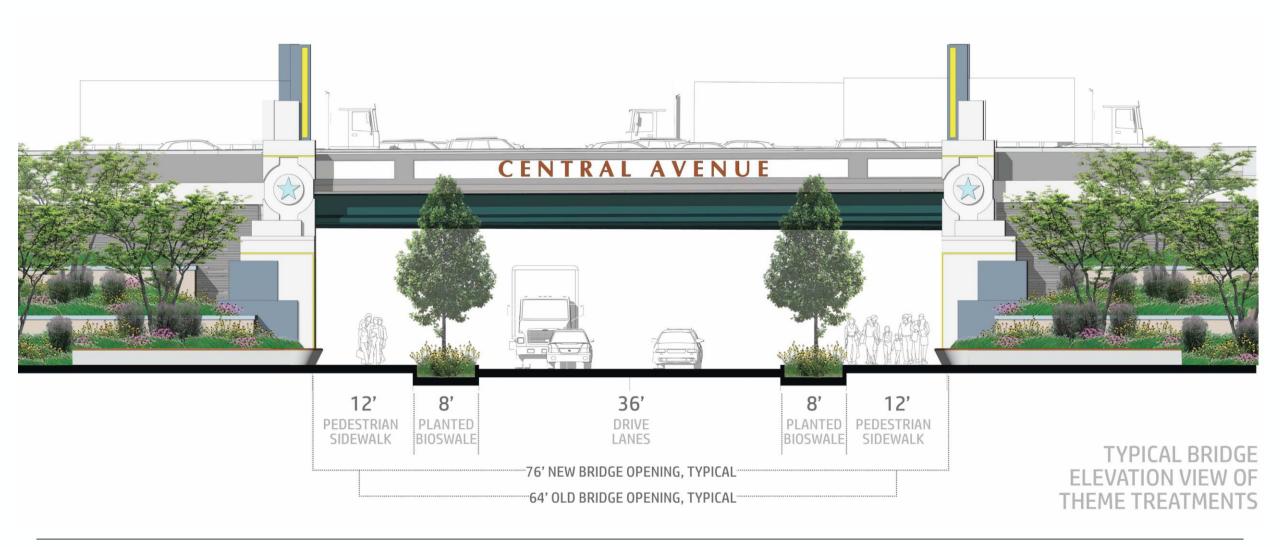


# THEME APPLICATION: "CIVIC DESIGN"

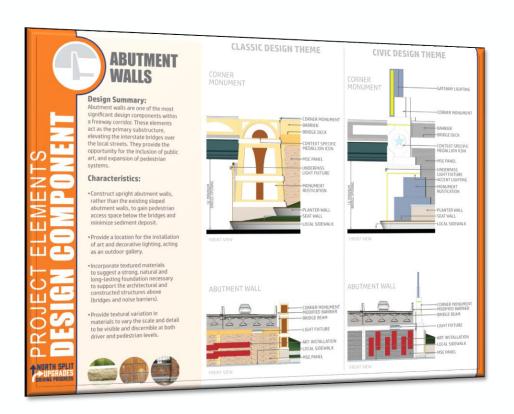
Influenced by the city's identity and inspired by some spaces of the public realm, the Civic Design Theme highlights that monumentality utilizing forms and shapes that celebrate the capitol city.



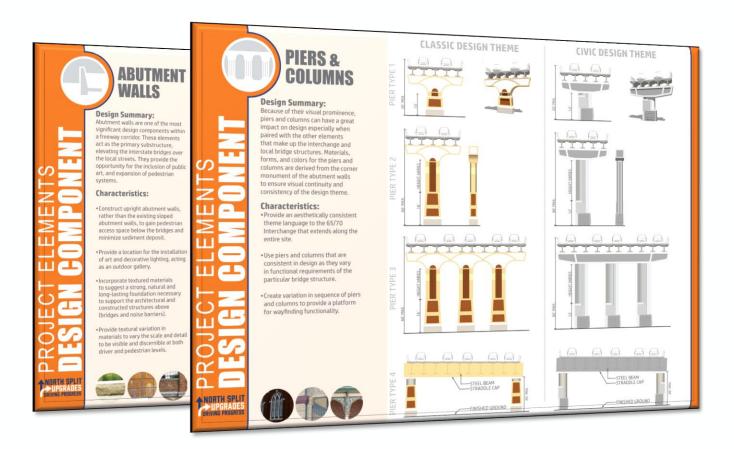














RETAINING

WALLS

Characteristics:

\*Provide a location for the

placement of vegetation to assist

surround in a naturalized fashion.

. Design with textured materials to suggest a strong, natural and

long-lasting foundation system-

a necessary support for the more

above (bridges and noise barriers).

Design with textural variation

in materials to provide a level

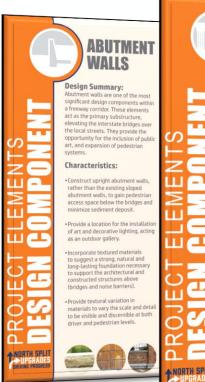
pedestrian levels.

of scale and detail that is visible and discernible at both driver and

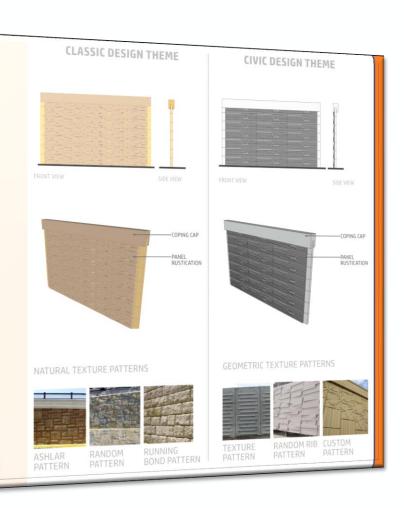
architectural, constructed structures

in stabilization, and help soften and

blend the bridge structures with the











### Design Summary:

Abutment walls are one of the most significant design components within a freeway corridor. These elements act as the primary substructure, elevating the interstate bridges over the local streets. They provide the opportunity for the inclusion of public art, and expansion of pedestrian

### Characteristics:

- · Construct upright abutment walls, rather than the existing sloped abutment walls, to gain pedestrian access space below the bridges and minimize sediment deposit.
- \*Provide a location for the installation of art and decorative lighting, acting as an outdoor gallery.
- Incorporate textured materials to suggest a strong, natural and long-lasting foundation necessary to support the architectural and constructed structures above (bridges and noise barriers).
- Provide textural variation in materials to vary the scale and detail to be visible and discernible at both driver and pedestrian levels.





### Design Summary:

Because of their visual prominence, piers and columns can have a great impact on design especially when paired with the other elements that make up the interchange and local bridge structures. Materials. forms, and colors for the piers and columns are derived from the corner monument of the abutment walls to ensure visual continuity and consistency of the design theme.

### Characteristics:

- \*Provide an aesthetically consistent theme language to the 65/70 Interchange that extends along the entire site.
- \*Use piers and columns that are consistent in design as they vary in functional requirements of the particular bridge structure.
- Create variation in sequence of piers and columns to provide a platform for wayfinding functionality.







### Design Summary:

Retaining walls help to stabilize steep grades by creating sloped and/or tiered terrain, that can provide space for enhanced plantings and expanded pedestrian systems.

### Characteristics:

- \*Provide a location for the placement of vegetation to assist in stabilization, and help soften and blend the bridge structures with the surround in a naturalized fashion.
- \*Design with textured materials to suggest a strong, natural and long-lasting foundation systema necessary support for the more architectural, constructed structures above (bridges and noise barriers).
- · Design with textural variation in materials to provide a level of scale and detail that is visible and discernible at both driver and pedestrian levels.





### Design Summary:

High-quality lighting for pedestrian and vehicular safety is a key component of each design theme. While lighting at the interstate level must meet certain design and implementation standards, lighting at the local level will offer more in the way of aesthetic enhancement while still controlling light pollution levels in residential neighborhoods.

### Characteristics:

- · Provide a hierarchy of complimentary lighting types and lighting levels.
- · Control levels of light encroachment into residential areas as much as possible.
- Provide uniformity through cohesive
- Provide sufficient levels of lighting for pedestrian and vehicular facilities.

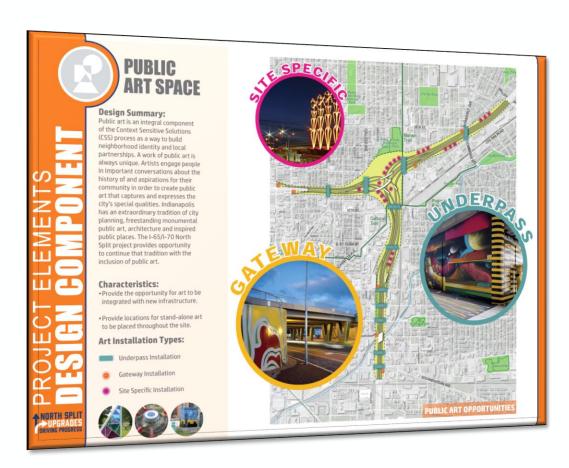
























### SIDE SLOPE **TREATMENT**

### Design Summary:

Grading and construction of the interstate's side slopes is the primary means of fitting the project into the landscape. Side slope treatments can elevate the overall appearance and minimize scale of infrastructure. In addition, proper grading can also increase slope stability, assure motorist safety, preserve existing vegetation and reduce maintenance costs.

### Characteristics:

- Integrate landform design, grading, drainage, and detention basin configuration with landscaping of expansive interchange areas.
- · Grade embankments to slopes that are safely maintainable and eliminate rip-rap.
- . Configure ditches, swales, and detention basins to appear natural, and provide opportunities for accommodating aquatic plantings.
- · Provide sufficient medium for successful growth of vegetative



- = = EXISTING GRADE & ROADWAY
- NEW ROADWAY POTENTIAL 3:1 SIDE SLOPE
- POTENTIAL 2:1 SIDE SLOPE - - - POTENTIAL MSF WALL















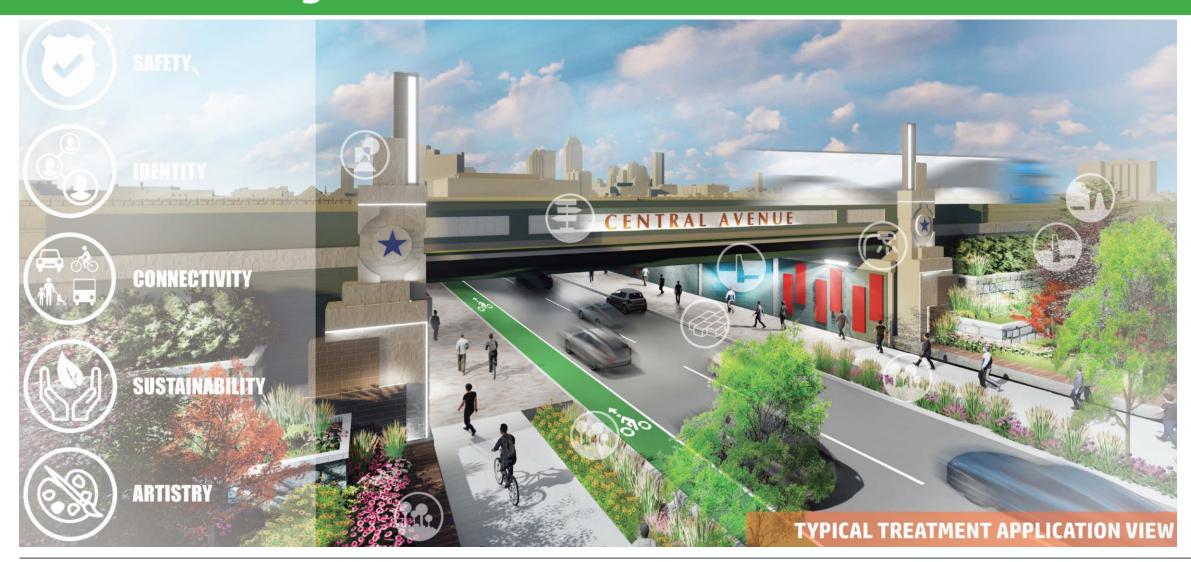




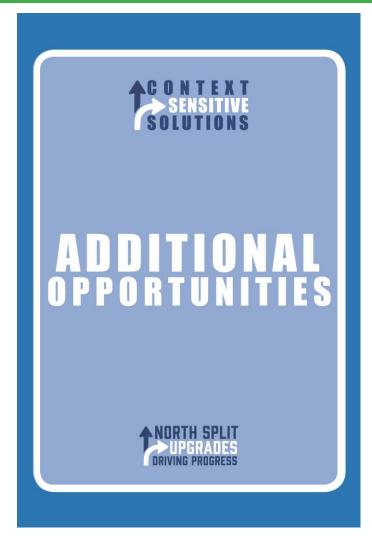












# **→** UPGRADES

# POSSIBLE LOCAL CONNECTIONS

THESE IDEAS WILL REQUIRE ADDITIONAL COORDINATION BETWEEN INDOT, THE CITY OF INDIANAPOLIS AND ADDITIONAL PARTNERS.

### **Design Summary:**

The following Potential Opportunities could create local connections by linking communities that encircle the interchange – celebrating the connection between the Monon and Cultural Trails – and improves on quality of life for the central Indianapolis residents and visitors.

### Monon Loop

 Expand the trail network with the "Monon Loop", creating increased pedestrian connections around the interchange.

### Monon Landing

 Widen the Monon Trail and develop the "Monon Landing", providing local recreational and social public spaces.

### **Old Northside Trail**

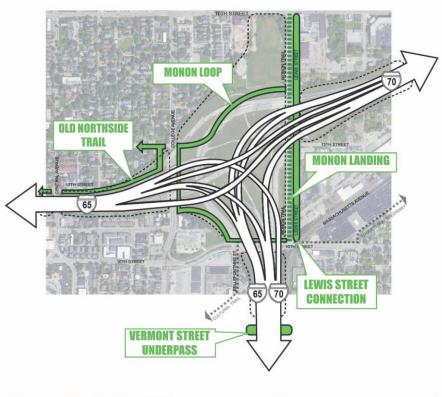
 Expand the trail network with the "Old Northside Trail" connecting culturally and historically significant sites to the Monon Loop.

### **Lewis Street Connection**

 Re-establish Lewis Street for vehicular travel, creating a multimodal corridor when paired with the Monon Trail.

### **Vermont Street Underpass**

 Convert Vermont Street into a pedestrian only connection under the interstate.









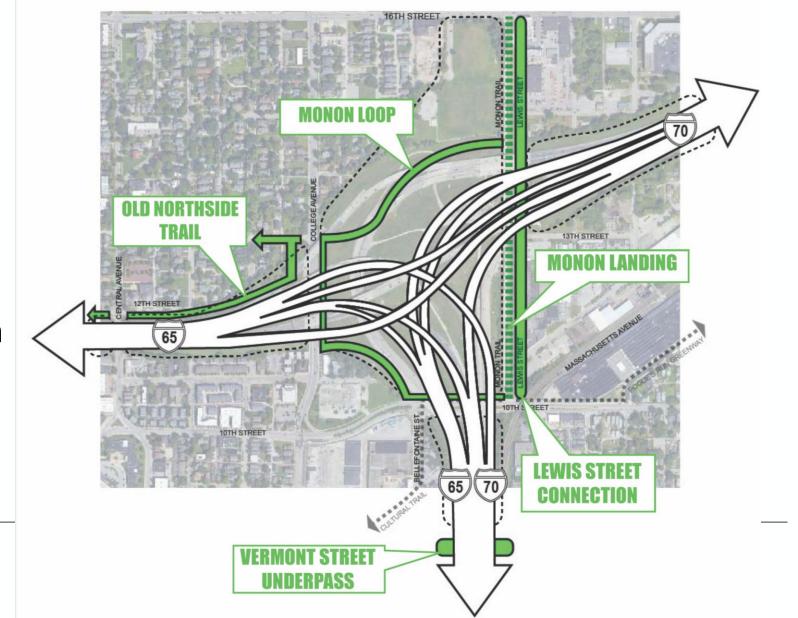






# **Local Connectivity**

- Monon Landing
- Monon Loop
- Old Northside Trail
- Lewis Street Connection
- Vermont Street
   Pedestrian Underpass





# **MONON LANDING**







# VERMONT STREET UNDERPASS

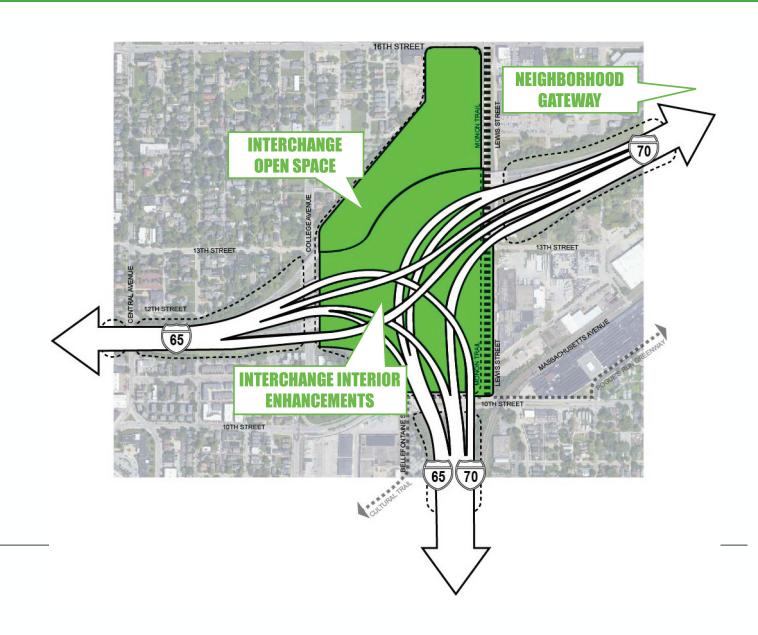






# **Open Space Enhancements**

- Interchange Interior Enhancements
- Interchange Open Space
- Neighborhood Gateway









# ANORTH SPLIT UPGRADES DRIVING PROGRESS

**Next Steps in CSS Process** 



# **CSS Next Steps**

# North Split CSS Design Process

Broken into three (3) parts:

- Part 1: Visioning
- Part 2: Develop Preliminary Design Treatments/Concepts
- Part 3: Develop CSS Design Guidelines Package





# **CSS Next Steps**

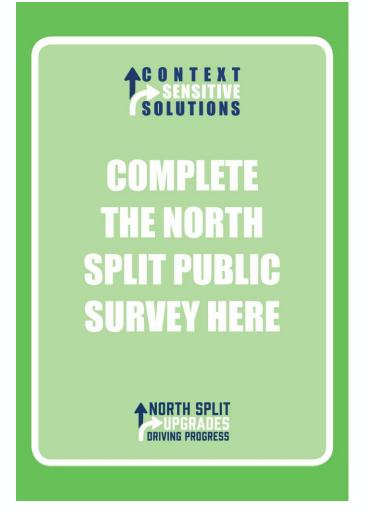
# Next Steps...

- Round 2 Neighborhood Workshops July/August
- CAC meeting on August 9
- Public meeting on August 15
- Evaluate public feedback and responses
- Develop final CSS guidelines Fall 2019
- Public meeting Winter 2019



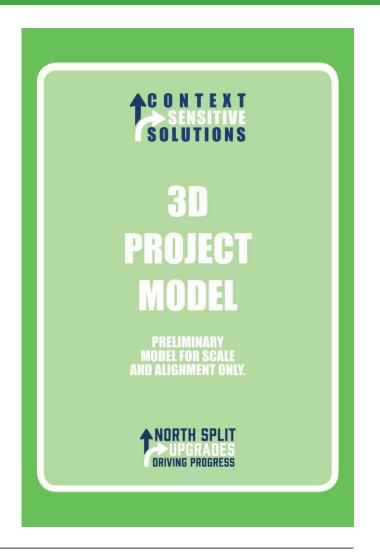


# **CSS Workshop and Stations**



# Two Additional Open House Stations:

- Survey Station
- 3D Project Model of Interchange Alignment







# CSS Neighborhood Workshops Second Round