

# Construction Staging Workshop

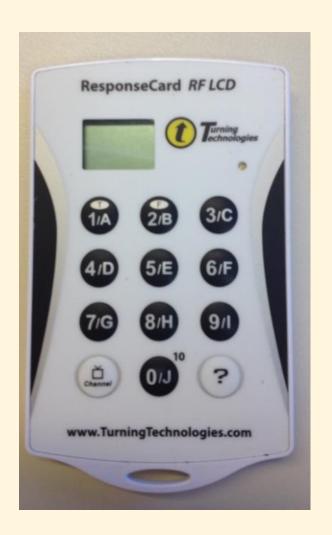
June 20, 2017

#### Purpose of Meeting

- ✓ Project Purpose and Need
- ✓ Construction Staging and Schedule Alternatives
  - We need your input!
- ✓ Next Steps and Schedule

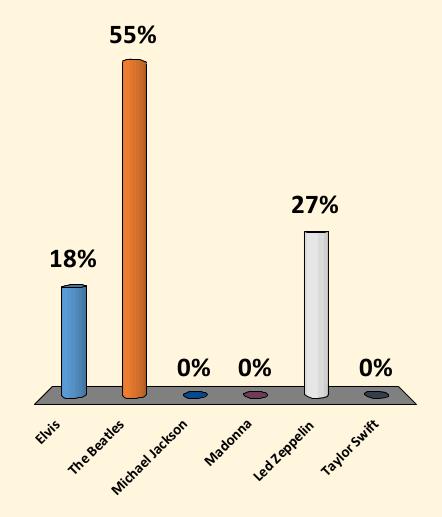
#### **Audience Polling**

- Press number on "clicker" that corresponds to an answer that is asked.
- Allows for instant polling of the group.
- Let's Practice.



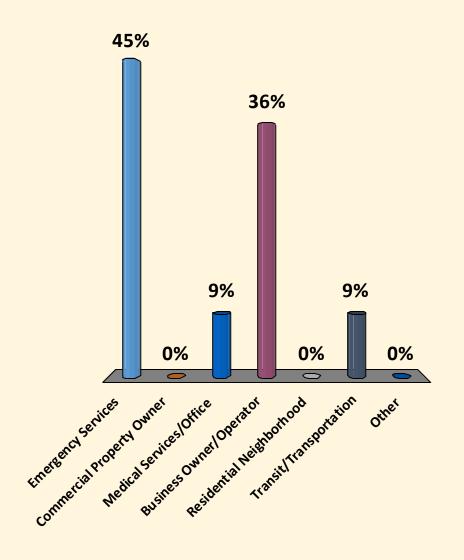
#### I would consider myself a fan of \_\_\_\_\_\_.

- A. Elvis
- B. The Beatles
- C. Michael Jackson
- D. Madonna
- E. Led Zeppelin
- F. Taylor Swift



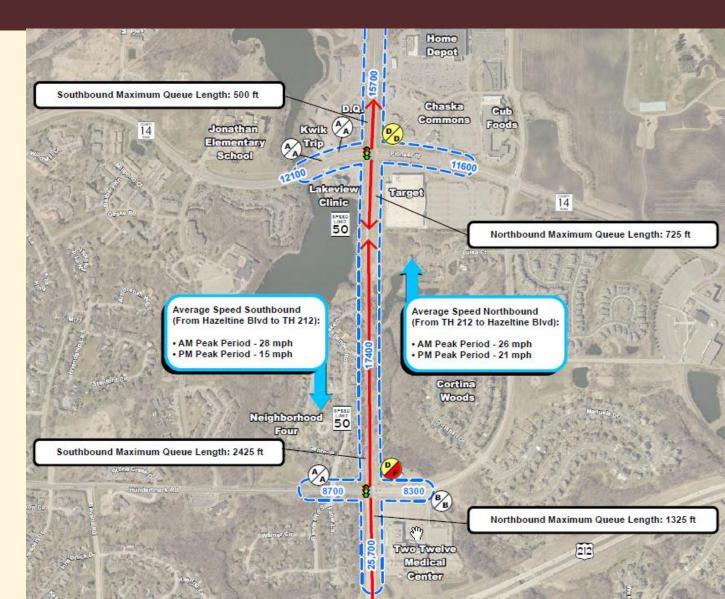
#### What best describes your interest in Highway 41?

- A. Emergency Services
- B. Commercial Property Owner
- C. Medical Services/Office
- D. Business Owner/Operator
- E. Residential Neighborhood
- F. Transit/Transportation
- G. Other



#### Purpose & Need

- Existing roadway has not kept up with growth in Chaska and the region:
  - ✓ Excessive congestion and queue lengths during peak travel times
  - ✓ Elevated crash rates
- Residential and Employment access needs
- Americans with Disabilities (ADA) deficiencies



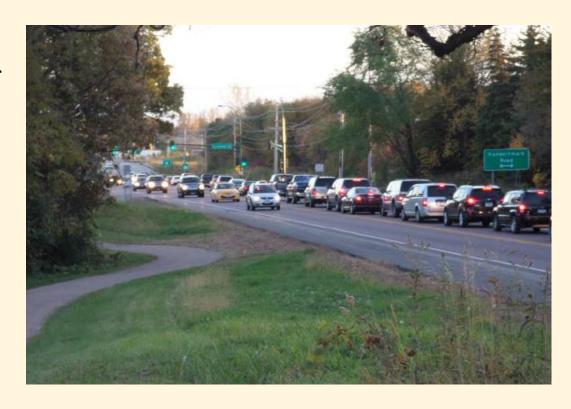
#### **Project Key Elements**

- Project led by Carver County (federal & state grant funds)
  - Hwy 41 is a state roadway MnDOT requirements and procedures apply
- Expand Hwy 41 to four-lane between US 212 and Pioneer Trail
- Intersection improvements at Hundertmark Road & Pioneer Trail
- Pedestrian and Bicycle Enhancements
- Construction is scheduled to begin in the Spring of 2018

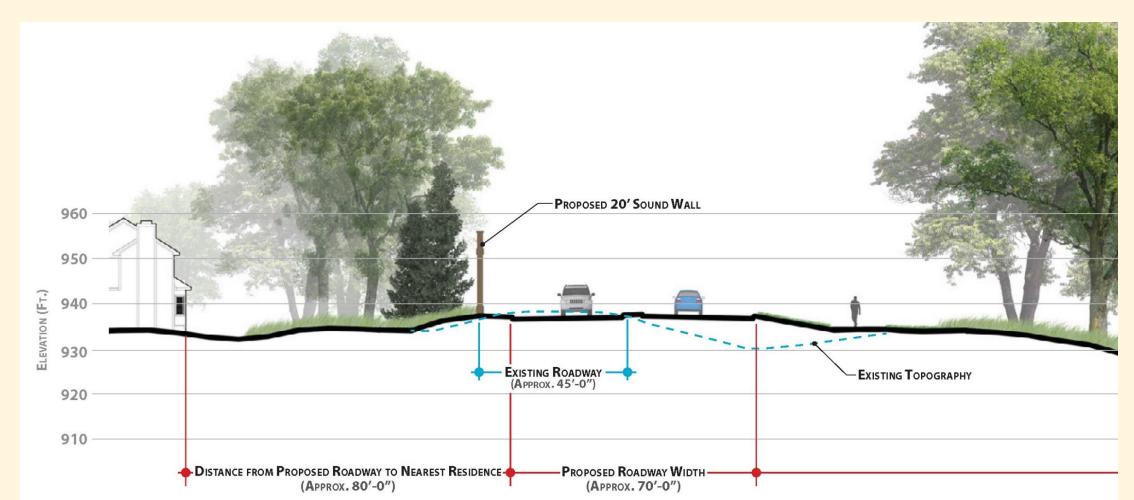


#### Project Benefits

- Decreases Delay
  - Today: up to 4 minutes of delay during peak hour
  - Future with Preferred Alternative: at most 75 seconds of delay anticipated
- Decreases Queuing
  - Today: over 100 vehicles queued up during peak hour
  - Future with Preferred Alternative: at most 22 vehicles anticipated to be queued up
- Improves Pedestrian Safety
  - Pedestrian Underpass
  - Trail Network Connection
  - Pedestrian Crossings at Signals

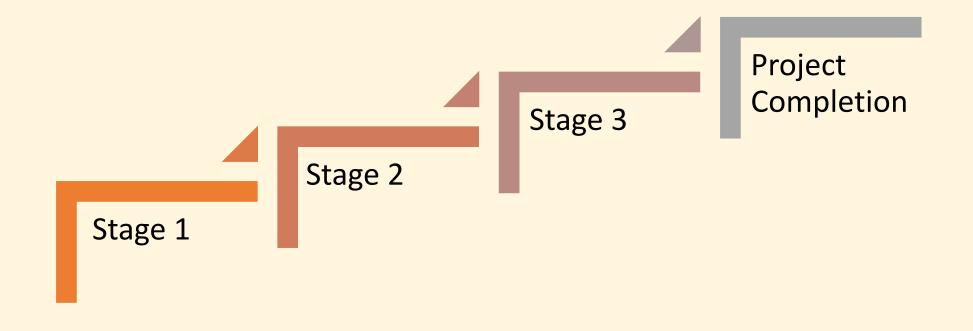


#### **Typical Section**



#### What is Construction Staging?

Sequencing of work, or the steps that need to be taken during construction in order to build a project.



**Construction Staging** 



**Schedule** 

Key Routes

Access In/Out

**Public Safety** 

Working Space

Underground Utilities

**Emergency Services** 

Community Events

Construction duration based on production rates and working days

May to October is "normal"

5-6 working days not including holidays

#### **Detour Route**

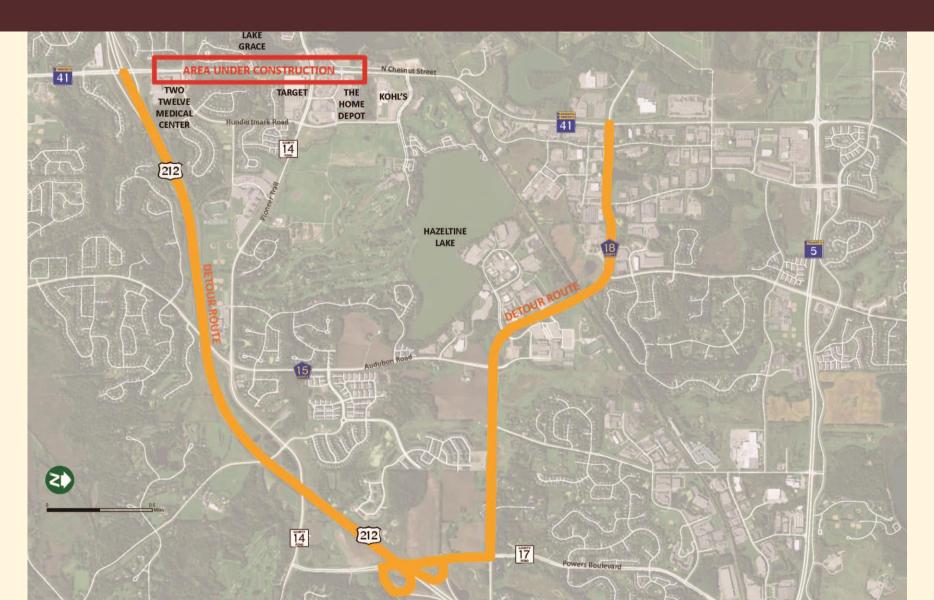
10 min detour route

VS.

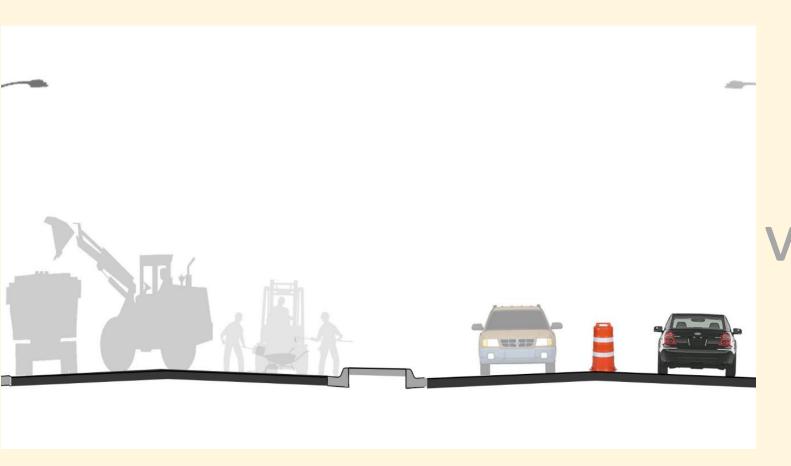
5 min regular route

#### How it works

1/3 follow detour1/3 destinations within1/3 find different route or change trip

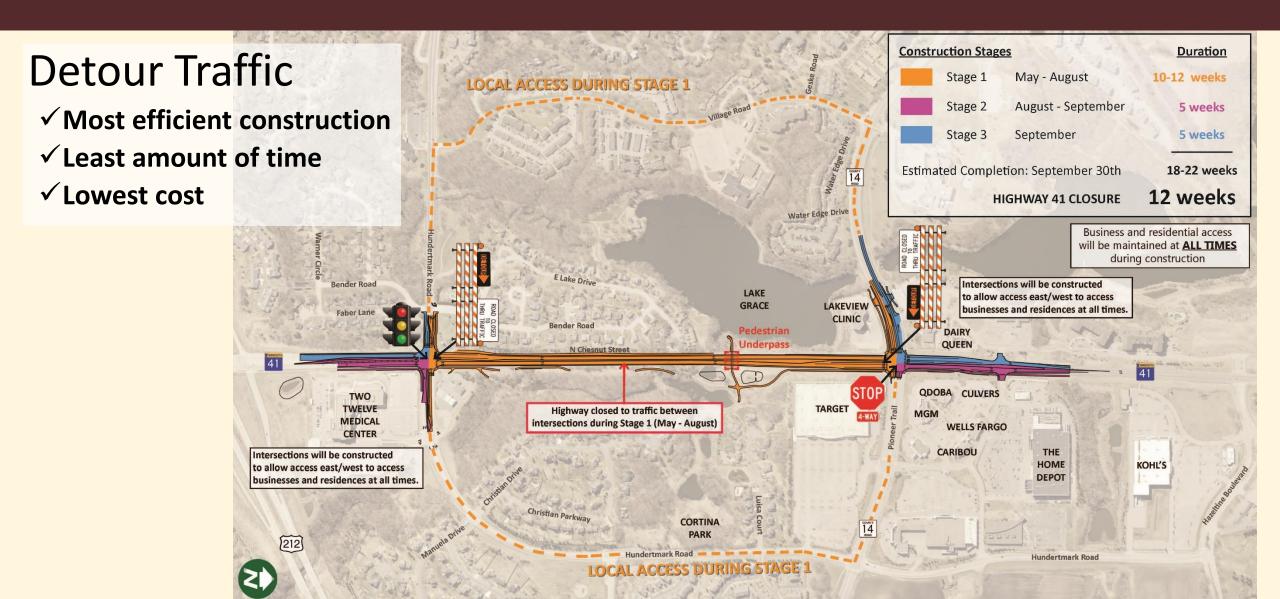


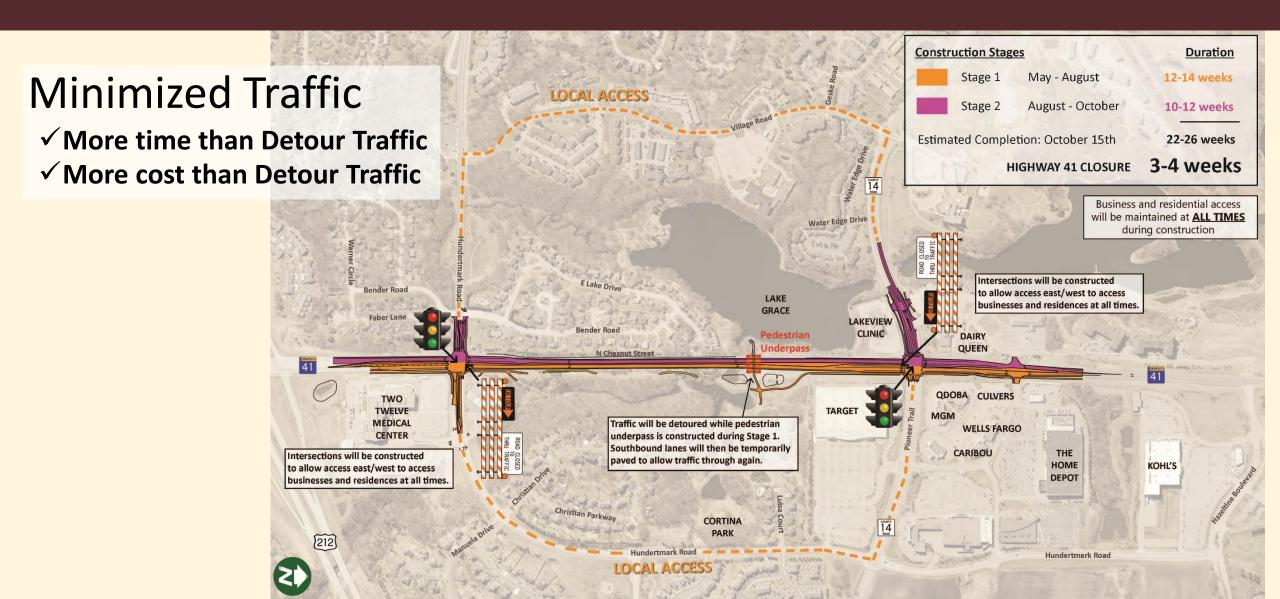
#### **Under Traffic**

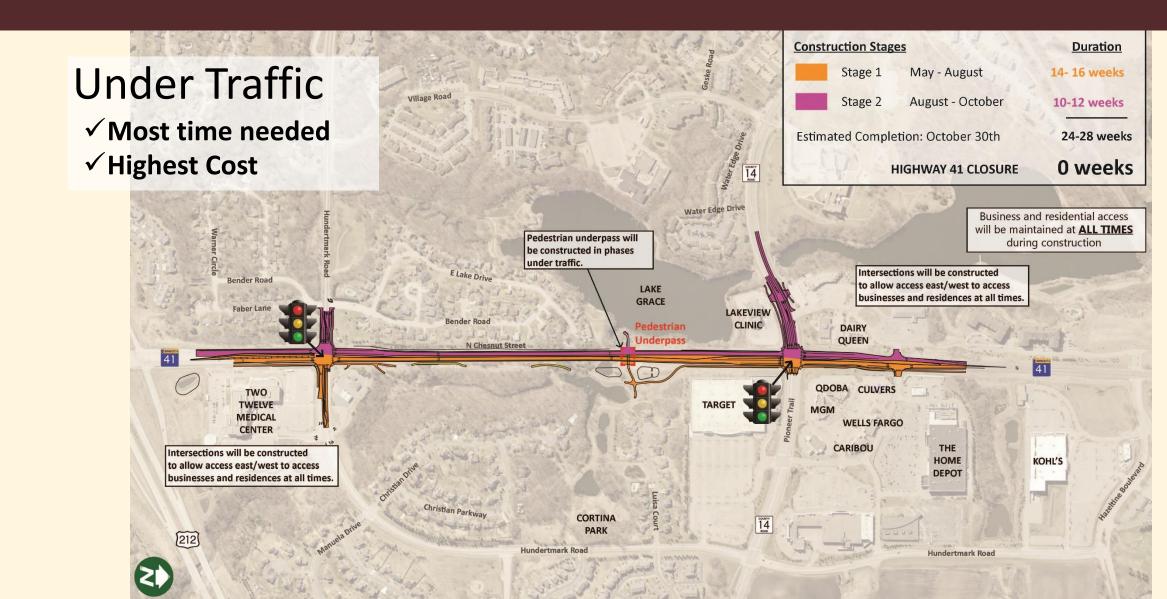


#### **Detour Traffic**

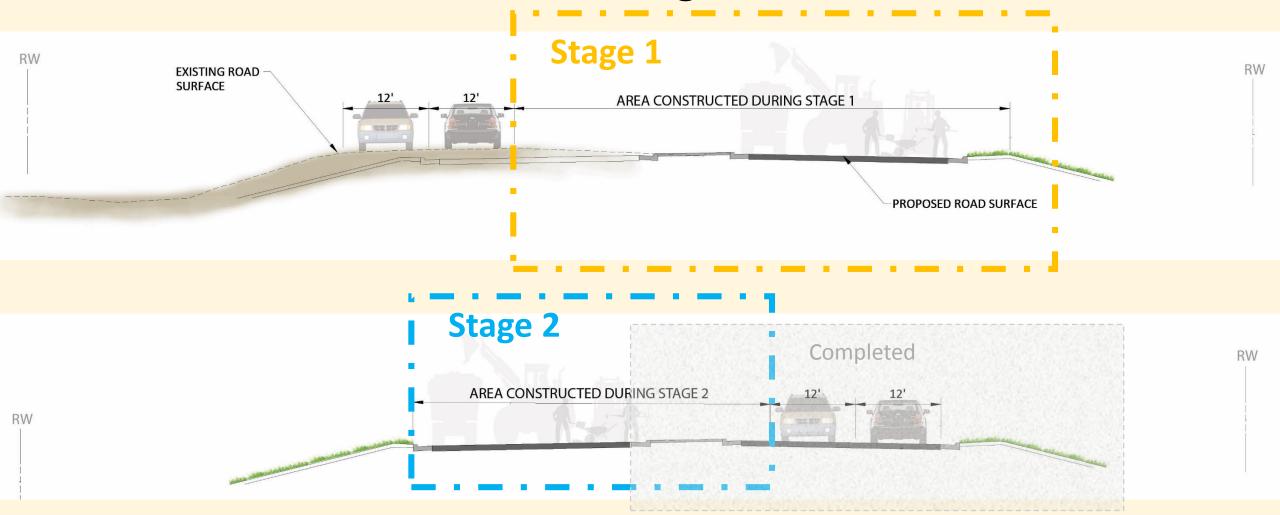




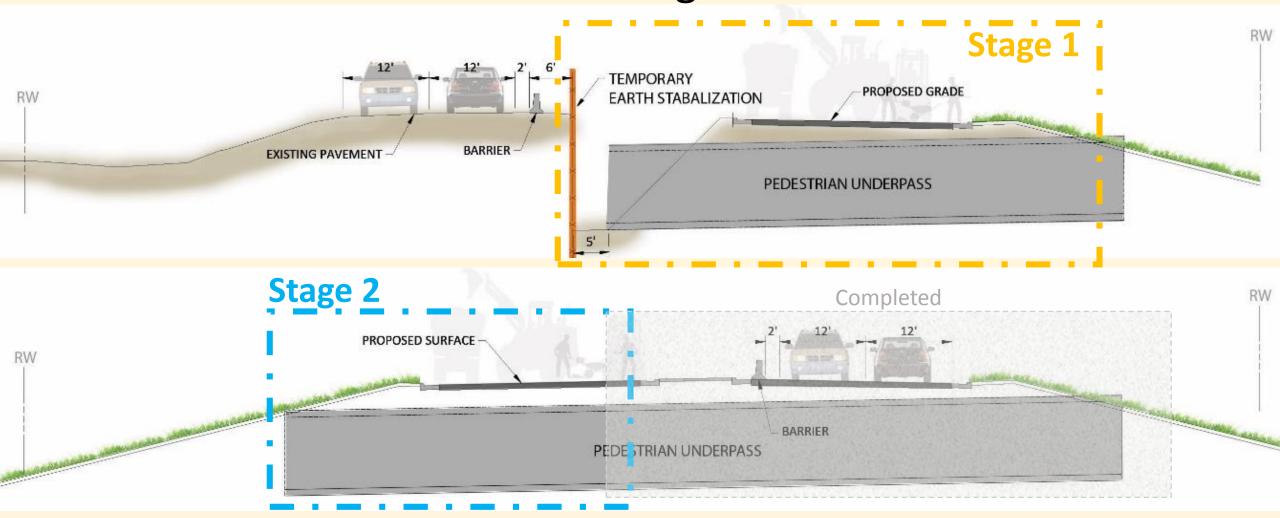




#### **Under Traffic Construction Phasing**



#### **Under Traffic Construction Phasing**



#### Summary of Alternatives

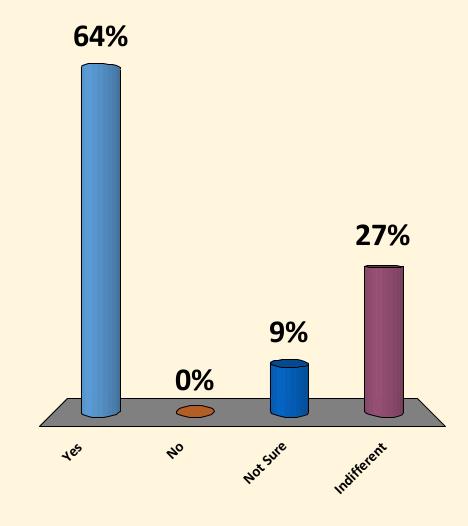
- Option 1, Detour Traffic
  - Full closure allows for most efficient construction
  - Least amount of time to construct
  - Lowest cost of construction
- Option 2, Minimized Detour
  - Closure during underpass construction
  - More time to construct compared to Option 1
  - Greater cost of construction compared to Option 1
- Option 3, Under Traffic
  - No road closures
  - Most time needed to construct
  - <u>Highest costs</u> of construction

#### Could you support Option 1, Detour Traffic?

- A. Yes
- B. No
- C. Not Sure
- D. Indifferent

#### Option 1, Detour Traffic

- Full closure allows for most efficient construction
- **Least amount of time** to construct
- Lowest cost of construction

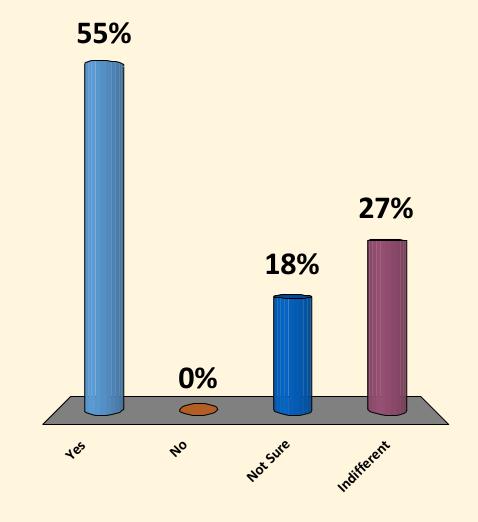


#### Could you support Option 2, Minimized Traffic?

- A. Yes
- B. No
- C. Not Sure
- D. Indifferent

#### Option 2, Minimized Traffic

- Closure during underpass construction
- More time to construct compared to Option 1
- Greater cost of construction compared to Option 1

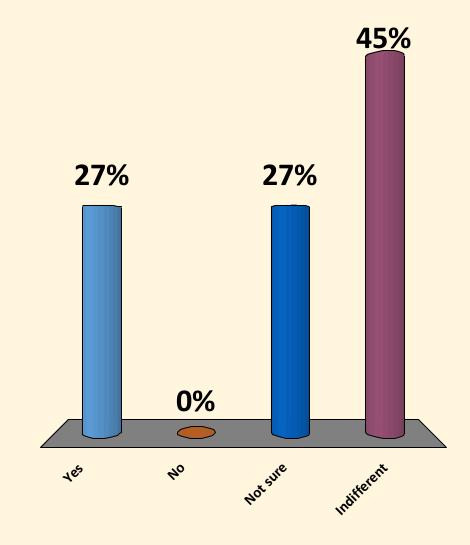


#### Could you support Under Traffic?

- A. Yes
- B. No
- C. Not sure
- D. Indifferent

#### Option 3, Under Traffic

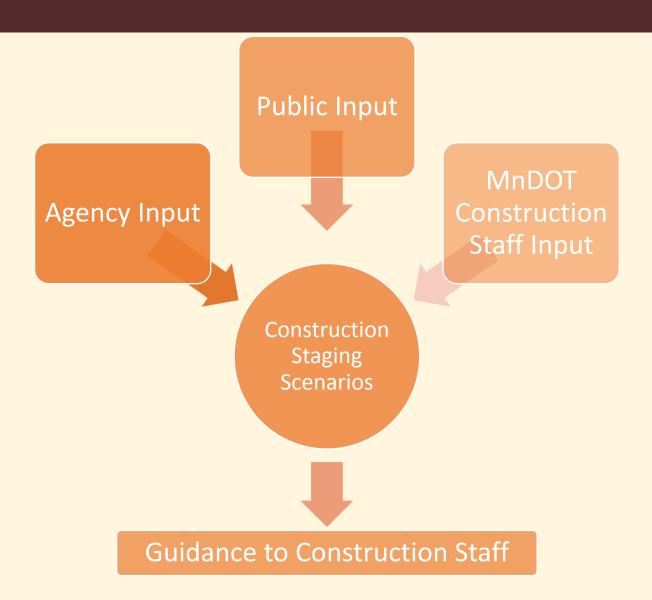
- No road closures
- Most time needed to construct
- **Highest costs** of construction



#### **Construction Staging**

**Questions / Clarifications?** 

### Timeline Fall 2017 Staging Workshop *Winter 2018* **Bid Letting** (Contractor Input) Spring 2018 Construction





# Project Contacts/Information

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