# 21<sup>st</sup> Ave. and Main St. Intersection Improvements Project

**Community Meeting** 

5:30 - 7:00 PM



# **PROJECT TEAM**

#### **Erin Provo**

Senior Civil Engineer City of Longmont



# **Chris Vogelsang**

Transportation Principal OV Consulting



#### John Hausman

Senior Project Manager Muller Engineering Company



# **TONIGHT'S AGENDA**

### 1.Presentation (20 minutes)

- Use comment cards on your seat to ask questions
- Hold up card and we will pick it up

### 2.Q&A (15 minutes)

We will read aloud and respond to the comments and questions that are collected

## 3. Open House (40 minutes)

- Visit stations and ask questions of project team members
- Leave comments on concept designs
- Tell us how you think the design concepts should be graded

# **PROJECT OVERVIEW**

# Why this intersection?

- Main Street Corridor Plan (2019)
- Transportation Mobility Plan (TMP)

# What is the goal of this project?

 Safer and more comfortable connections for all travelers

### **VISION ZERO**

Approach to end traffic deaths and serious injuries.

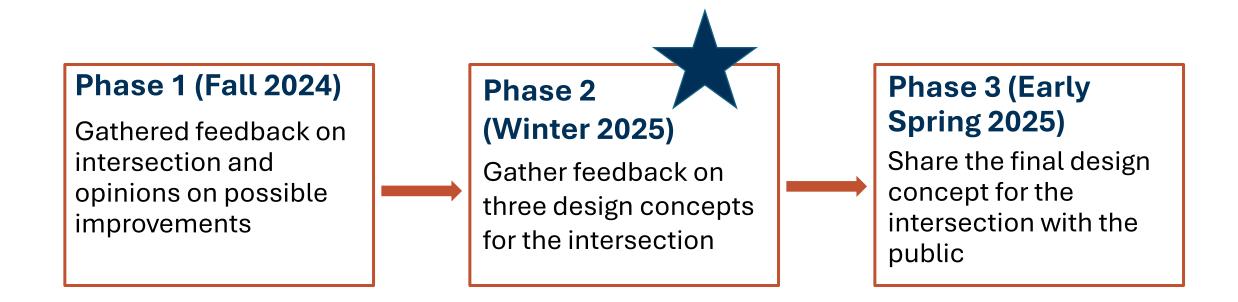
Longmont's Vision Zero Goal is to reduce roadway deaths and severe injuries by 2040.



# COMMUNITY ENGAGEMENT



# **ENGAGEMENT OVERVIEW**



Community engagement includes community surveys, a public meeting, community events and a project webpage.

# **ENGAGEMENT SUMMARY – PHASE 1**

### **NEARLY 700 COMMUNITY SURVEY RESPONSE!**





# WHAT WE HEARD

**81**% of survey respondents who walk/use a mobility device and **79**% who bicycle/scoot feel "very unsafe" or "unsafe" crossing the intersection.

Drivers noted a need for protected left turn arrows and said the street layout is confusing.

Community members generally support a protected intersection, raised crosswalks, pedestrian refuge islands, and bicycle lanes.

# DESIGN CONCEPTS



# HOW DESIGN CONCEPTS WERE GRADED

Each design concept was graded based on how well it scores in the following topics:

- Safety & Comfort
- Connectivity & Access
- Project Complexity & Constructability
- Intersection Operations
- Public Support

# IMPROVEMENTS COMMON TO ALL CONCEPTS

No Right-Turn on Red



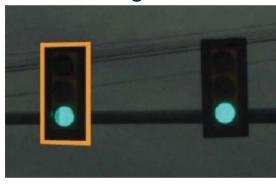
Removal of Channelized Right-Turn Lanes



**Pedestrian Head Start** 



**Reflective Signals** 



**Protected Left Turn on Green Arrow** 

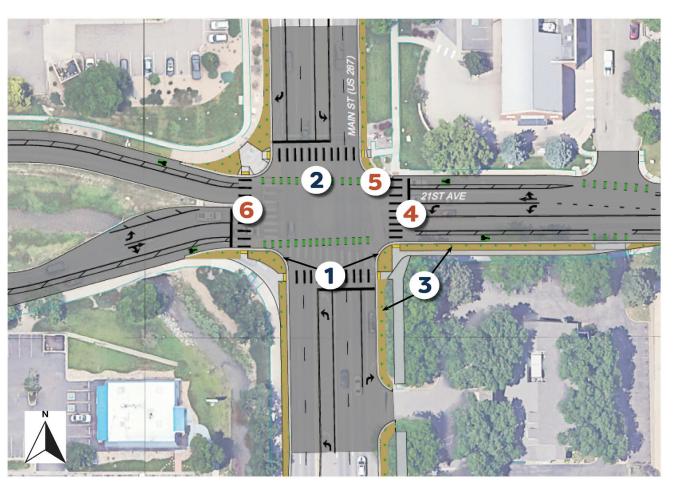


**Narrower Vehicle Lanes** 



# **CONCEPT 1: COMPACT INTERSECTION**

Shorter crossing distances for pedestrians and slower turning vehicles.



#### **Pros**

- Sharper corners reduce right-turn speeds for vehicles
- **2.** Bike lanes on 21st Ave. extended through intersection
- 3. Most potential for adding landscaping to green and cool the street

- **4.** Least impact on left-turn speeds for vehicles among all three concepts
- **5.** Bicycles share the street with vehicles at the intersection
- 6. No bicycle facilities north and south along Main St.

# **COMPACT INTERSECTION EXAMPLE**

Shorter crossing distances for pedestrians and slower turning vehicles.



Example: 3<sup>rd</sup> Ave. and Martin St. (Longmont, CO)

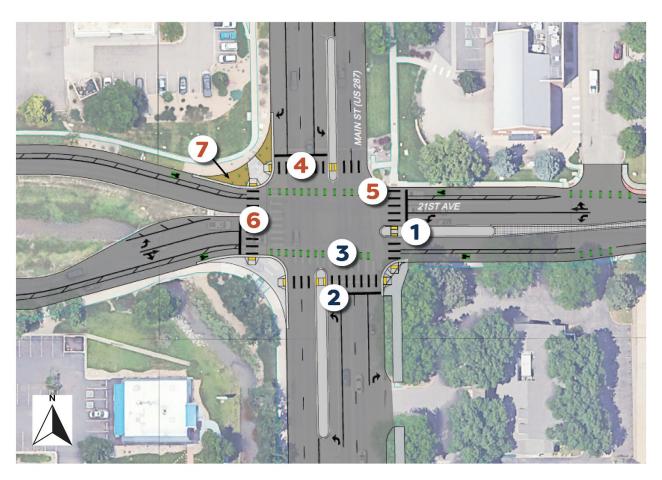
#### **Pros**

- **1.** Sharper corners reduce right-turn speeds for vehicles
- 2. Bike lanes on 21st Ave. extended through intersection
- **3.** Most potential for adding landscaping to green and cool the street

- **4.** Least impact on left-turn speeds for vehicles among all three concepts
- 5. Bicycles share the street with vehicles at the intersection
- 6. No bicycle facilities north and south along Main St. (not shown)

# **CONCEPT 2: RAISED MEDIANS**

Includes raised medians to slow down turning vehicles and improve pedestrian and bicyclist safety.



#### **Pros**

- 1. Median provides refuge for pedestrians
- Median reduces left-turn speeds for vehicles
- **3.** Bike lanes on 21st Ave. extended through intersection

- **4.** Longest crossing distances for pedestrians among all three concepts
- 5. Bicycles share the street with vehicles at the intersection
- 6. No bicycle facilities north and south along Main St.
- Lower potential for landscaping to green and cool the street

# RAISED MEDIANS EXAMPLE

Includes raised medians to slow down turning vehicles and improve pedestrian and bicyclist safety.



Example: S. College Ave. and W. Mountain Ave. (Fort Collins, CO)

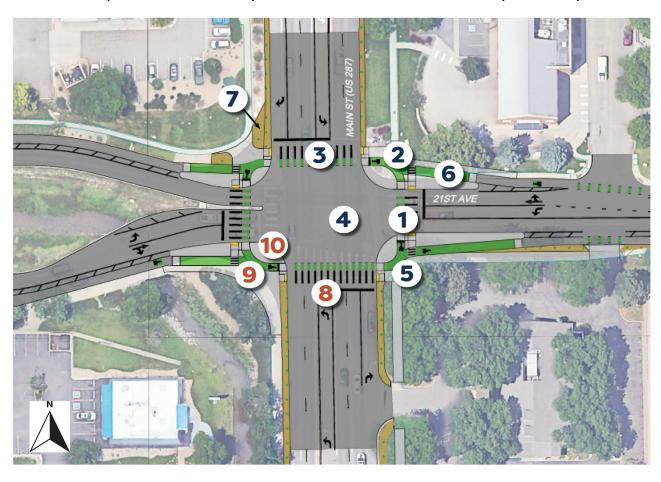
#### **Pros**

- 1. Median provides refuge for pedestrians
- 2. Median reduces left-turn speeds for vehicles
- 3. Bike lanes on 21st Ave. extended through intersection (not shown)

- **4.** Longest crossing distances for pedestrians among all three concepts
- 5. Bicycles share the street with vehicles at the intersection
- No bicycle facilities north and south along Main St. (not shown)
- Lower potential for landscaping to green and cool the street (not shown)

# **CONCEPT 3: PROTECTED INTERSECTION**

Includes protected bicycle movements and improves pedestrian and bicycle safety.



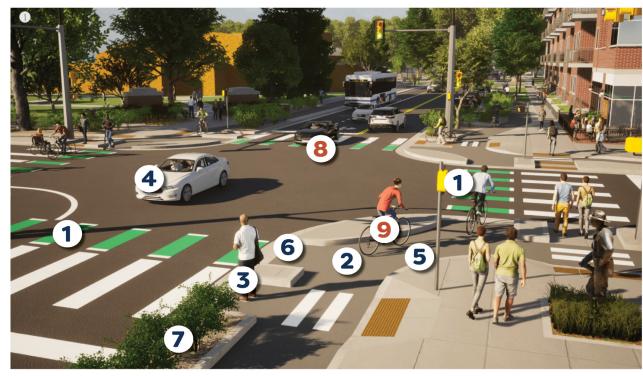
#### **Pros**

- Bicycle crossings across both Main St. and 21st Ave.
- **2.** Bicyclists physically separated from vehicles at the intersection
- **3.** Shortest crossing distances for pedestrians and bicyclists among all three options
- **4.** Drivers can more easily see pedestrians and bicyclists waiting to cross intersection
- 5. Bicyclists can make left turns without riding in vehicle lanes
- **6.** Bicycle ramps at intersection corners smooth bicycle transitions
- **7.** Moderate opportunities for landscaping to green and cool the street

- **8.** Does not reduce left-turn speeds for vehicles as much as raised medians
- Less direct path through the intersection for bicyclists
- **10.** Most complex maintenance and snow removal among all three concepts

# PROTECTED INTERSECTION EXAMPLE

Includes protected bicycle movements and improves pedestrian and bicycle safety.



Under construction: Longs Peak Ave. and Coffman St. (Longmont, CO)

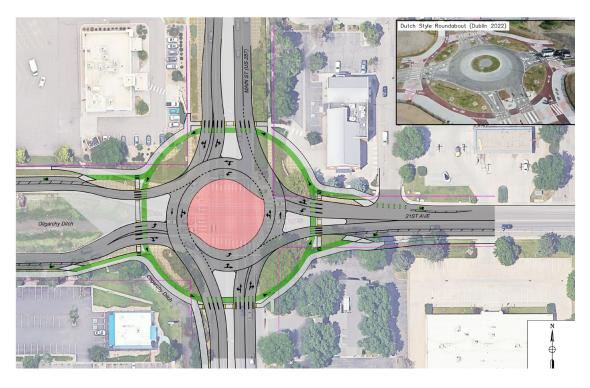
#### **Pros**

- **1.** Bicycle crossings across both Main St. and 21st Ave.
- **2.** Bicyclists physically separated from vehicles at the intersection
- **3.** Shortest crossing distances for pedestrians and bicyclists among all three options
- **4.** Drivers can more easily see pedestrians and bicyclists waiting to cross intersection
- **5.** Bicyclists can make left turns without riding in vehicle lanes
- **6.** Bicycle ramps at intersection corners smooth bicycle transitions
- **7.** Moderate opportunities for landscaping to green and cool the street

- 8. Does not reduce left-turn speeds for vehicles as much as raised medians
- **9.** Less direct path through the intersection for bicyclists
- 10. Most complex maintenance and snow removal among all three concepts (not shown)

# **CONCEPTS UNSUITABLE FOR INTERSECTION**

### Roundabout



# **Grade Separation (Underpass or Overpass)**



# **NEXT STEPS**



# **OPEN HOUSE FORMAT**

Visit the following stations in the back to ask questions and leave comments:

- Station 1: Project overview
- Station 2: Design concepts
- Station 3: Concepts unsuitable for intersection
- Station 4: Time to vote! Put a sticky dot next to the three topics that you think are most important for the City to keep in mind when grading the design concepts

Your input on the concept boards and the voting exercise will help us choose an intersection concept to take to final design!

# **LOOKING FORWARD**

Last opportunity to provide feedback on the designs!
Take the survey: bit.ly/21standMainSurvey2



- Your feedback on the three design concepts will help the City select an intersection concept to take to final design
- The final intersection concept will be shared with the public online through the project webpage, Longmont social media channels and the This Week In Longmont newsletter
- The project will move forward from the planning phase into the design phase

# Q&A

