

City of Rancho Cordova Roundabout Feasibility Study Community Workshop

October 12, 2022



CityOfRanchoCordova.org

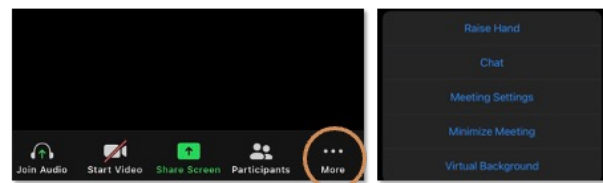
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Zoom Instructions

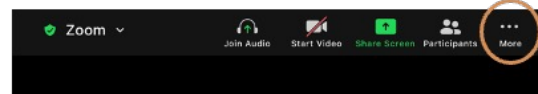
Before we get started...

- Participants will remain muted during the presentation to limit background noise.
- Add any questions or comments to the chat box or use the "Raise Hand" function
- If you're calling in, press *9 to raise your hand. When we call on you and unmute you, then press *6 to begin speaking.

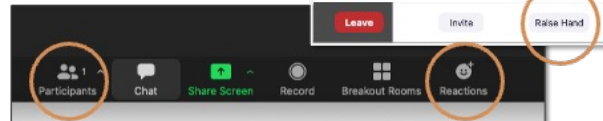
PHONE:



TABLET:



COMPUTER:



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Meeting Goals

- Introductions
- Provide Information on Roundabouts
- Provide Project Overview
- Solicit Community Feedback



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Project Team

FY21/22 Caltrans Sustainable Transportation Planning Grant

Project: Citywide Feasibility Study & Implementation Plan

City of Rancho Cordova (Grant Recipient)

Project Manager = Kristine Courdy
Principal Engineer = Edgar Medina
Senior Transportation Planner = Drew Hart

Kittelson & Associates, Inc. (Project Consultant)

Project Manager = Mike Alston
Principal In-Charge = Wade Scarbrough
Project Planner = Matt Braughton



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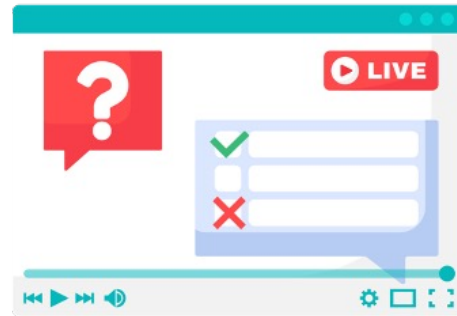
Live Poll #1

Question 1: Identify Purpose In Rancho Cordova

- A. Resident
- B. Work
- C. Recreation
- D. Visit with Friends/Leisure
- E. Other (put in chat)

Question 2: What are your general thoughts/attitude about roundabouts?

- 1 - Very negative
- 2 - Slightly negative
- 3 - Neutral
- 4 - Slightly positive
- 5 - Very positive



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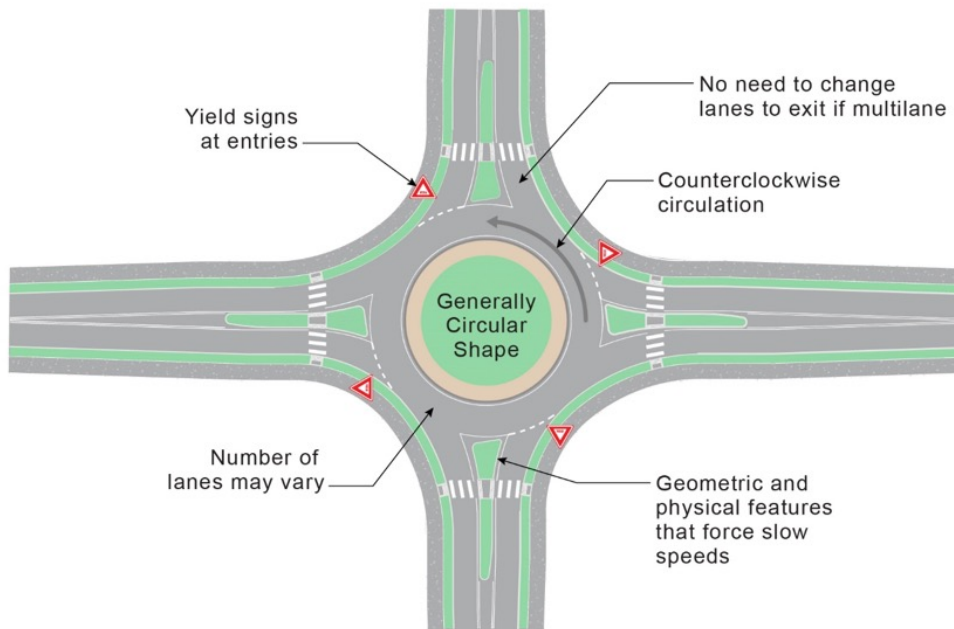
Project Objectives

- Develop the Roundabout Priority Plan for the City
- Utilize Public & Stakeholder Feedback to Develop Project Deliverables
- Prepare Guidelines for Future Guidance about Roundabouts



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What is a Roundabout?



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What is a Roundabout?

Sacramento

West River Dr / Orchard Ln



Source: Google Earth

Roseville

Oak St / Washington Blvd



Source: Google Earth



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Why Build Roundabouts?

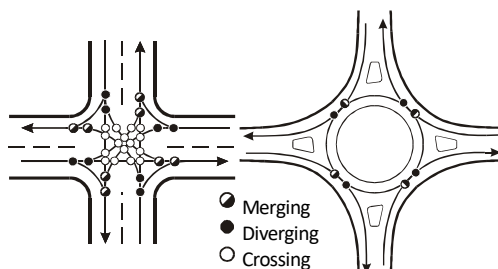
- Roundabouts are being considered for potential benefits:
 - Safety improvements
 - Lower delay
 - Environmental benefits (emissions, fuel savings)
 - Access management
 - Operations and maintenance costs
 - Aesthetics



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Safety Performance

- 90-100% reduction in fatalities
- 75% reduction in injuries
- 35% reduction in total crashes
- Very little reported pedestrian and bicycle crash experience



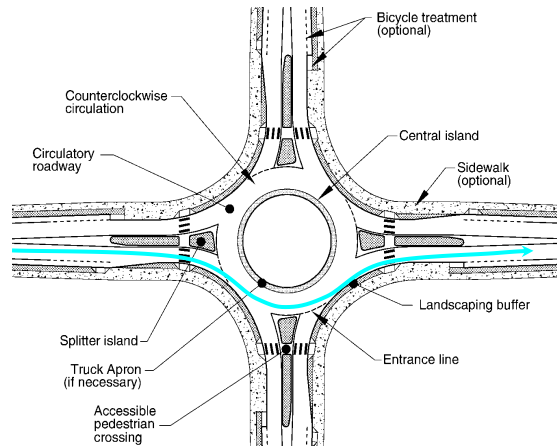
Source: NCHRP Report 572, NCHRP Report 672



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Vehicle Speeds Reduced

- Roundabouts controls vehicle speeds
 - Entry speeds at or less than:
 - 25 mph for single-lane
 - 30 mph for two-lane
 - Circulating speeds: 10 to 12mph
- Slow speeds
 - Increased time for driver reaction
 - Decreased chance for injury or fatality



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Aesthetic & Green Infrastructure Opportunities



Bend, Oregon
Source: Lee Rodegerdts



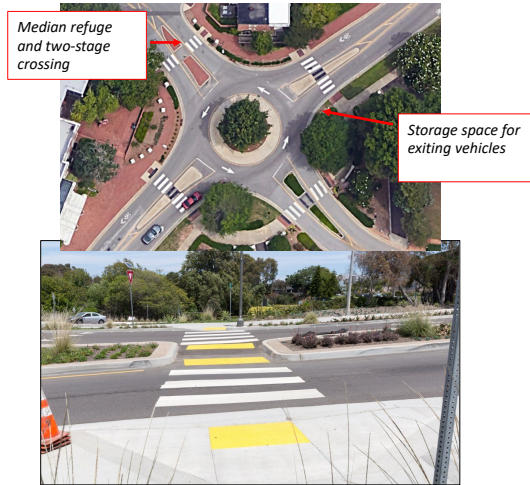
Portland, Oregon
Source: Lee Rodegerdts



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Roundabouts & Pedestrians

- Benefits:
 - Slow vehicle speeds
 - Two-stage crossing
- Considerations:
 - Crosswalk location
 - Space for exiting vehicles to yield to pedestrians
 - Yield-controlled crossings



Sources: Google Earth; Kittelson



Roundabouts & Pedestrians

Considerations for Visually Impaired:

1. Well defined walkway edges
2. Separated walkways
3. Aligned detectable warnings
4. Perpendicular crossings
5. Contrasting crosswalk markings

Performance assessment detailed in NCHRP Report 834

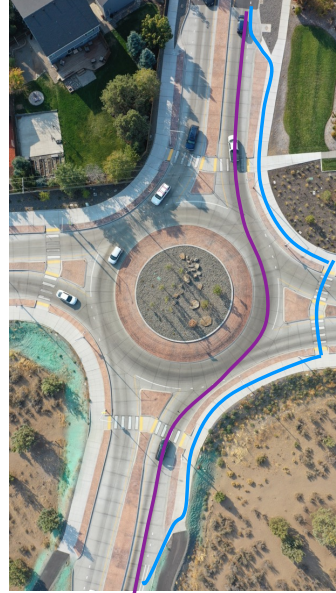


Note presence of push-button for multilane roundabout crossing.
Source: Lee Rodegerdts

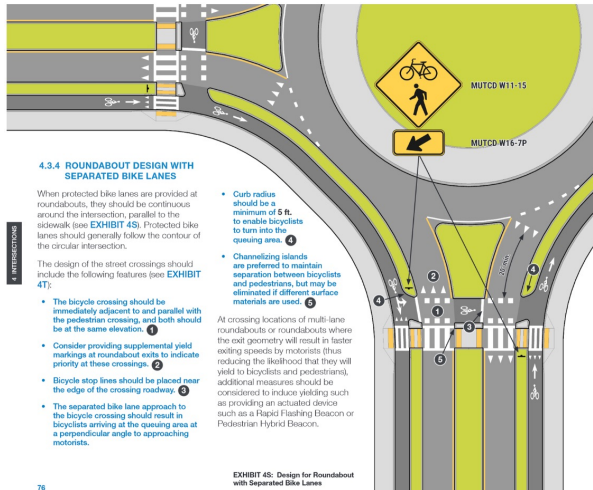


Roundabouts & Bicycles

- Roundabouts slow vehicles to speeds compatible with bicycles
- Bicyclists have option of traveling as **vehicle** or **pedestrian**
 - Serve different users based on their level of comfort
- No bicycle lanes within circulatory roadway
- Guidance for off-street paths is emerging



Separate Bike/Ped Options



San Luis Obispo, California
Source: Brian Ray

Source: Massachusetts DOT Separated Bike Lane Planning and Design Guide



Roundabouts & Larger Vehicles

- Roundabouts can accommodate large vehicles through design:
 - Truck aprons
 - Placement of landscaping
 - Reinforced curbs



RANCHO CORDOVA
CALIFORNIA

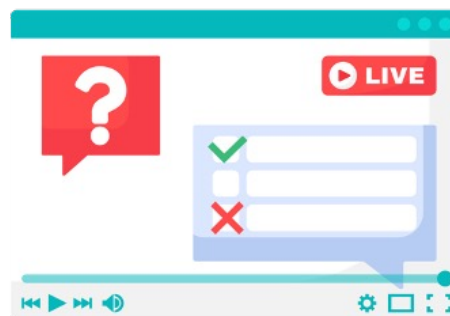


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Live Poll #2

Question 1: Do you feel you have a better understanding of roundabouts?

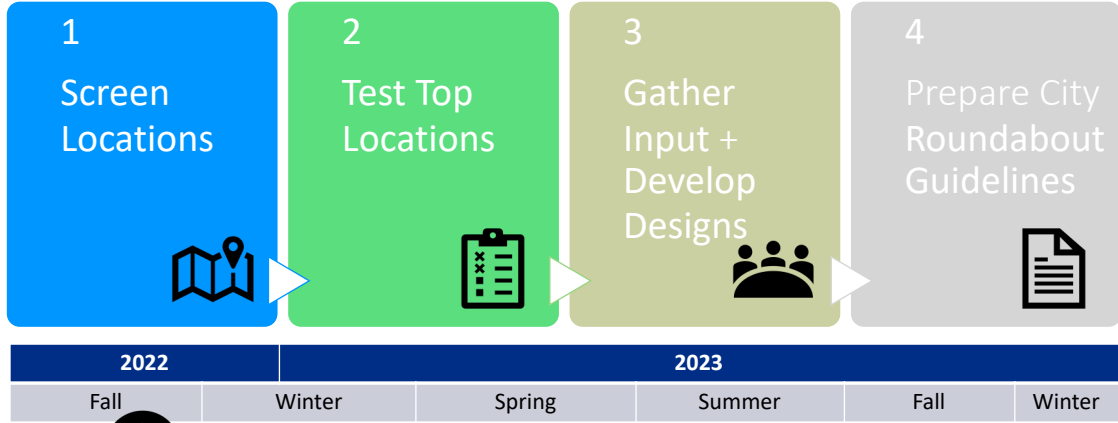
- A. Yes – I understand them better
- B. Unchanged
- C. No – I have more confusion



RANCHO CORDOVA
CALIFORNIA

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Project Overview

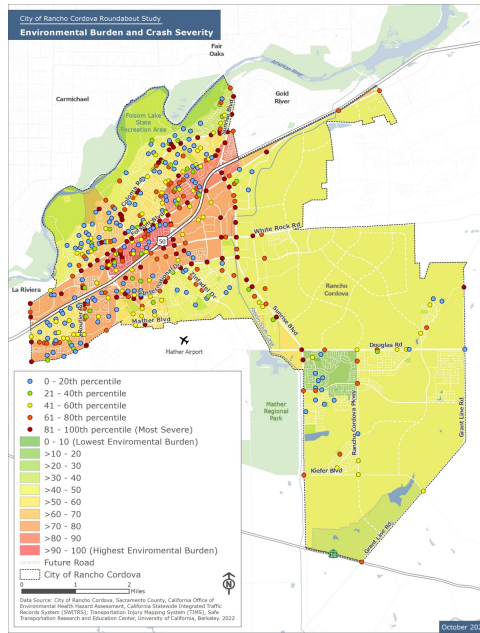


We are here



Project Overview

- Part 1: Screen Locations
 - Filter locations with data
 - Use prioritization scores



Project Overview

Part 2: Test Top Locations

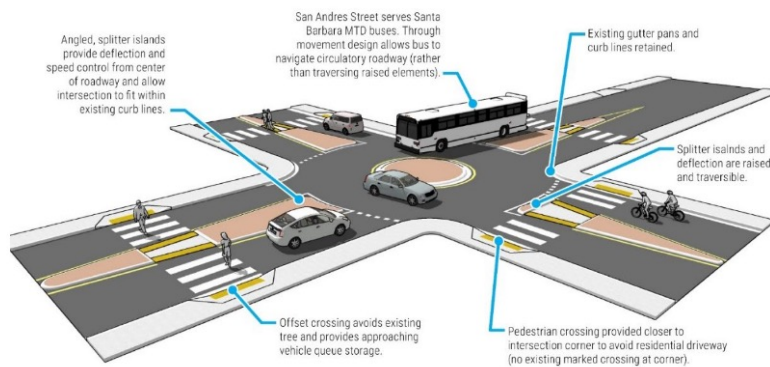


Example feasibility Testing, starting with assumed size and advancing to sketch level concept.



Project Overview

Part 3: Gather Input + Develop Designs

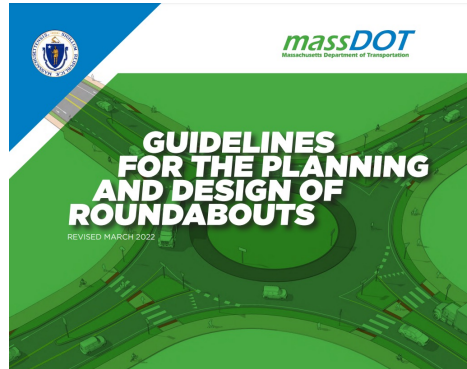
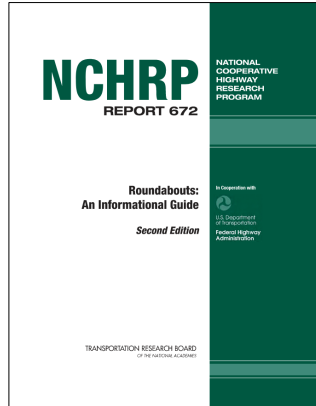


Example rendering of roundabout design concept

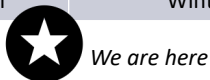
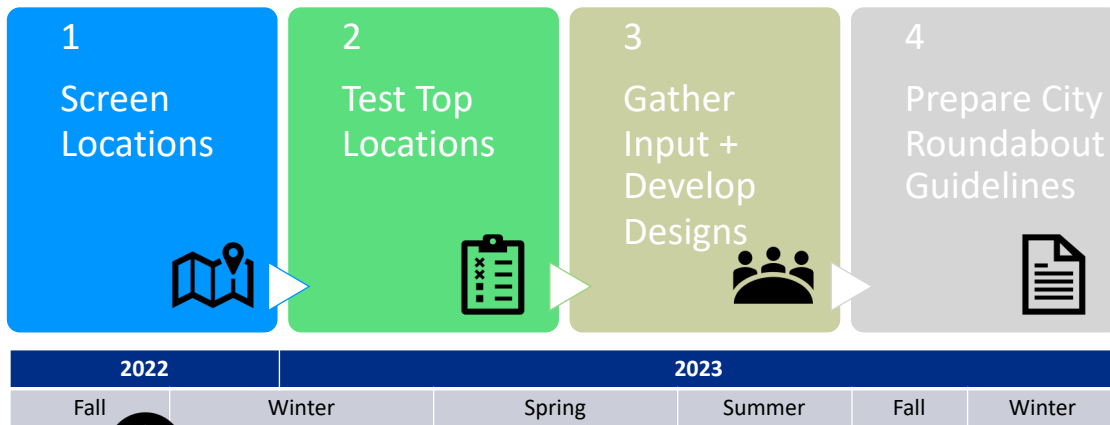


Project Overview

- Part 4: Prepare City Roundabout Guidelines



Project Overview



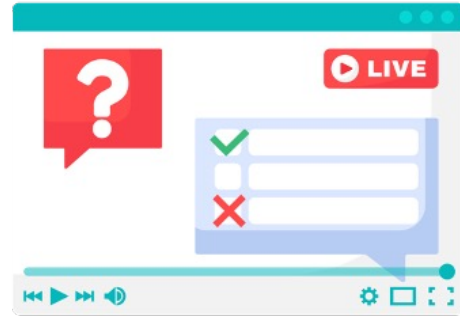
Live Poll #3

Question 1: What is the top priority you would like the City to emphasize for roundabout project opportunities?

- A. Maximum safety benefit
- B. Social equity location emphasis
- C. Bike route locations
- D. Other (tell us your comment in the chat!)

Question 2: Has the information presented today changed your thoughts on roundabouts at all?

- 1 - Significantly less favorable opinion
- 2 - Slightly less favorable opinion
- 3 - Opinion has not changed
- 4 - Slightly more favorable opinion
- 5 - I now have a significantly more favorable opinion



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Questions & Answers

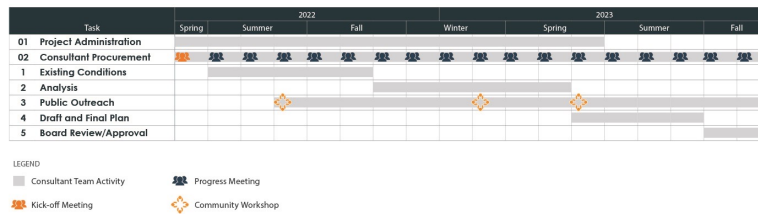
- We want to hear from you:
 - Overall feedback on roundabouts
 - Input on how to prioritize locations
 - Other questions



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Next Steps

- Identify top locations
- Develop Concept Locations
- Document feedback and best practices for City Guidelines
- Next Community Workshop in early 2023



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THANK YOU

Check Web Portal for Project Updates:

www.cityofranhocordova.org/CurrentProjects

If you have additional questions about the project, please reach out to the City's Project Manager:

Kristine Courdy
 (916) 851-8842
kcourdy@cityofranhocordova.org



CityOfRanchoCordova.org

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Question & Answer Session

- We want to hear from you:
 - Overall feedback on Roundabouts
 - Input on how to prioritize locations
 - What questions do you have?

