



Humboldt Region

Walkability Toolbox and Recommendations

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Dec. 2025

December 2025 Walking Audits

This slide deck has 2 parts. Part 1 shares a select menu of walkability, complete streets and safety tools. Each tool set, such as curb extensions, midblock crossings, mini-circles or edge lane roads, helps you see the full value, range and application of that tool. The 2nd part of this document covers what we observed on our 3 days of walking audits, and we note those tools you should consider for achieving greater walkability, more complete streets and a safer street system.



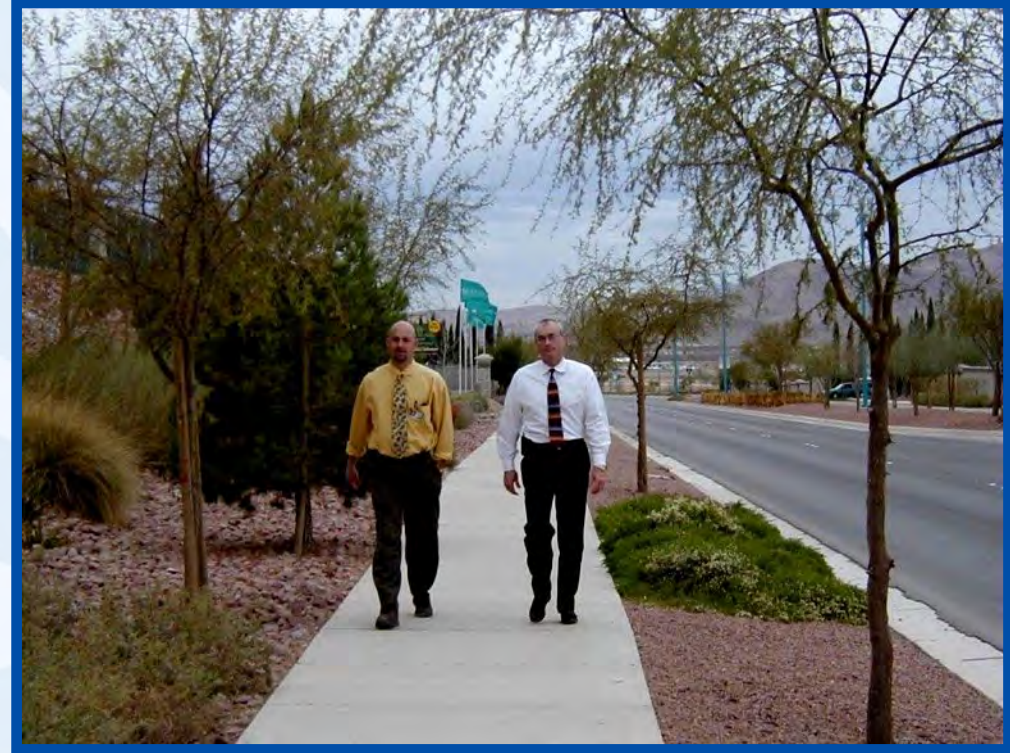
Walkability Tools

- ▣ Sidewalks
- ▣ Crossings
- ▣ Street Design & Traffic Calming
 - Lane Widths
 - Curb Extensions
 - Roundabouts & Mini-Circles
 - Chicanes
- Edge Lane Roads
- Quick-Build Street Changes



Sidewalks

People report that they would not walk in the lower photo unless required by circumstance.

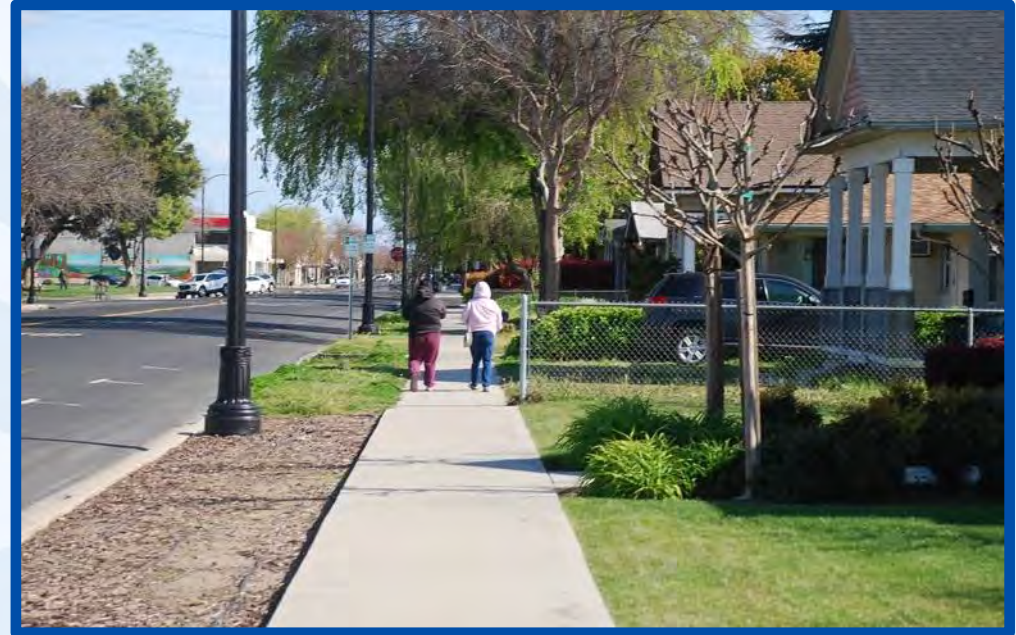


People report that they would walk in the above photo. What are the differences?

Sidewalk Widths



Make at least 5 feet.



5 feet is needed for two people to walk comfortably side by side or to pass each other. 6 feet is preferred.



Valley East Blvd, Arcata

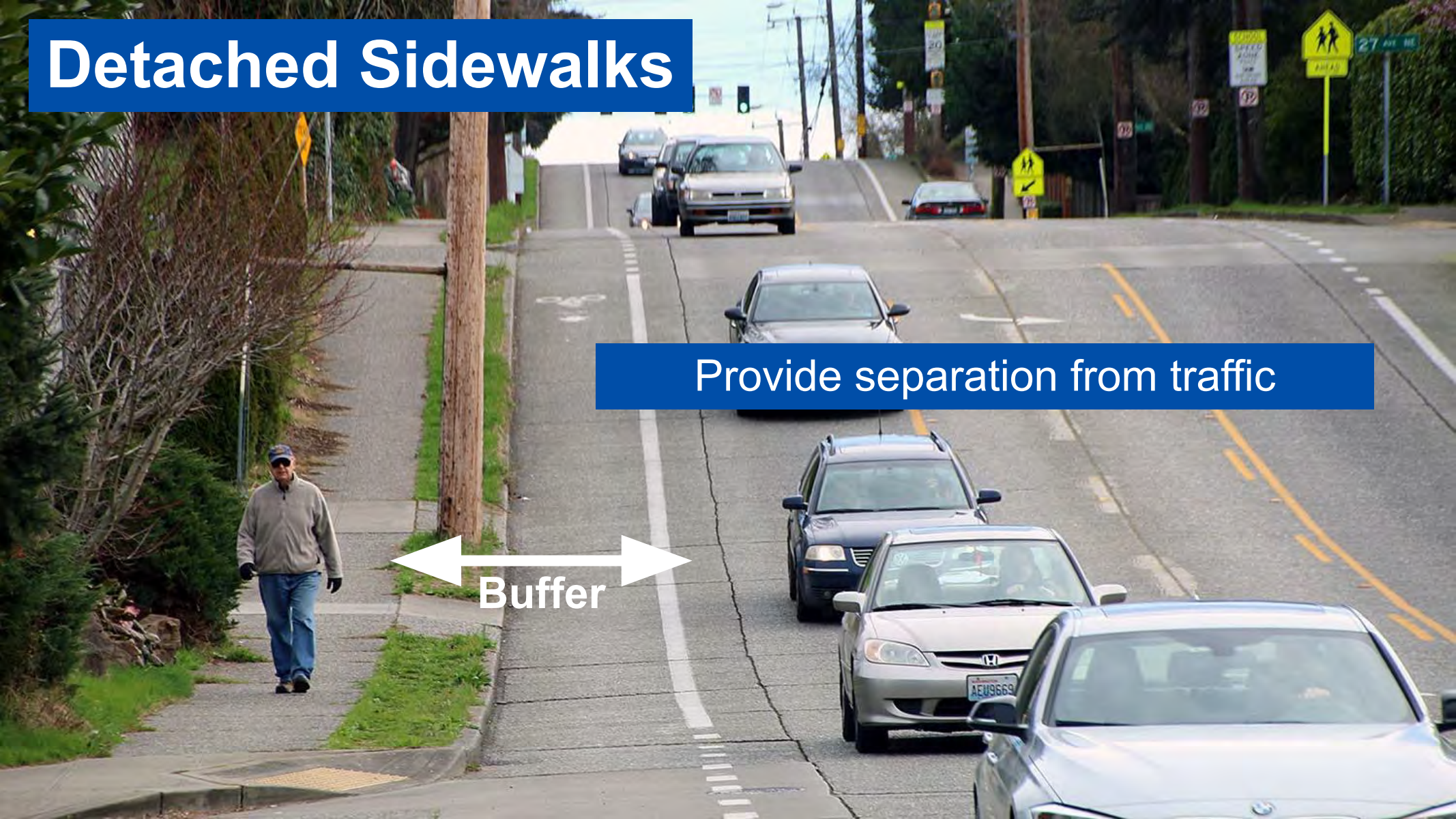
Sidewalks attached to a curb should be 6 feet wide.

← Three Feet →

Detached Sidewalks

Provide separation from traffic

Buffer



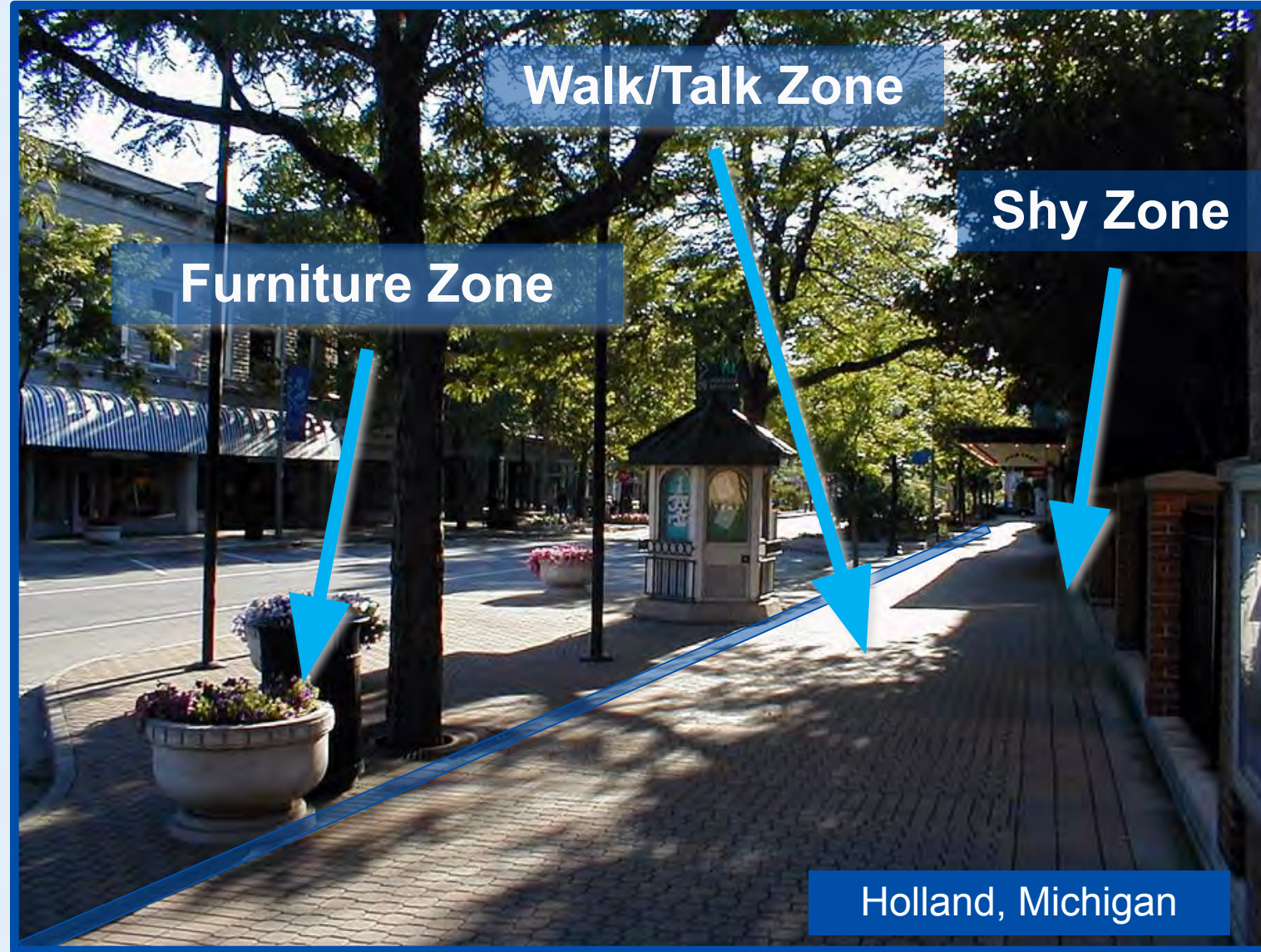


Separation from moving cars is 27 feet

Salt Lake City, Utah

Sidewalk Parts

Organizing sidewalks into three distinct parts makes it easier to see and protect each function. The Walk/Talk Zone should be clear of obstructions, such as utility poles, sandwich boards, trash cans or other interrupting features.



**Four foot maximum
height of fence**

**Five foot minimum
width sidewalk**

**Planter and
furniture zone**

**Added buffer for
shy distance**

Baldwin Park, Orlando, Florida





Shy Zone

Walk/Talk Zone

Furniture Zone

Enclosure



ENCLOSURE is the quality added by framing the sidewalk or street with trees, lamps, awnings, benches, and buildings. Enclosure heightens the feeling of security.

Enclosure

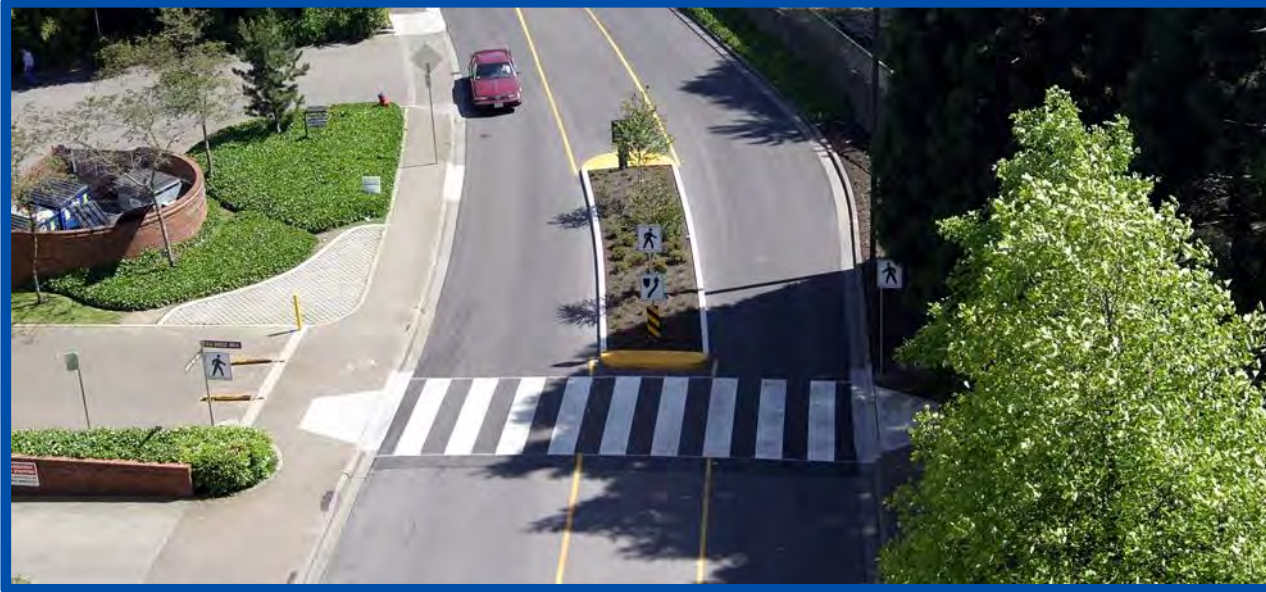


ENCLOSURE is the quality added by framing the sidewalk or street with trees, lamps, awnings, benches, and buildings. Enclosure heightens the feeling of security.



Crosswalks

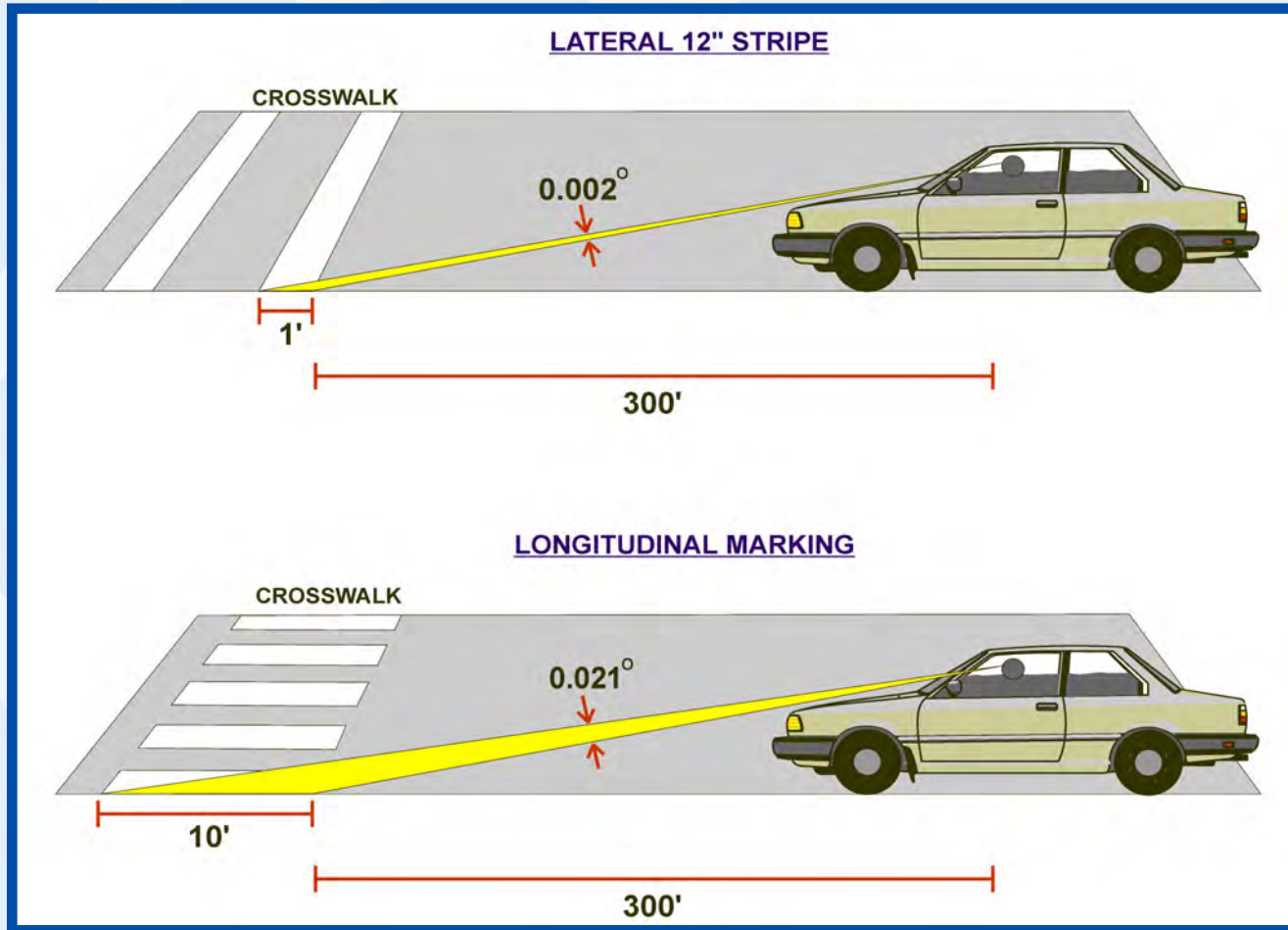
Crosswalk Markings



Communities can benefit from consistent and highly visible street crossings. These “continental” style markings are about 10x more noticeable than two-line crosswalks. At least 10 feet is the recommended width for side and interior streets, and 12 feet or more for main street and at trail crossings.



Crosswalks



Longitudinal lines are more visible at a distance

High Visibility



Fairfield, California

High Visibility

Arcata, California



Midblock Crossings



This midblock crossing on Valley East Blvd in Arcata reduces the exposure of people crossing the street. It can be improved by applying enhancements shown in this section. If low-yielding rates or speeding are an issue, a raised crossing that acts as a speed cushion/table could be considered.

Midblock Crossings



LOW SPEEDS ARE CRITICAL:

20 mph – 25 mph: Studies show drivers are nearly four times more likely to yield at 20 mph compared to 40 mph. One study found a 75% yield rate at 20 mph, which dropped significantly as speeds increased.

Midblock Crossings



Improved Yielding

- **Reaction Time:** Lower speeds provide drivers with more time to notice pedestrians, react, and stop safely.
- **Field of Vision:** At higher speeds, drivers' field of vision narrows, making them less likely to notice pedestrians on the side of the road.
- **Safety Outcomes:** If a collision occurs, a pedestrian has a 90% chance of survival at 20 mph or below, but less than 50% chance at 30 mph or above.

Midblock Crossings



Other Factors Affecting Yielding

- **Signs:** High-visibility, in-street signs (like “Yield to Pedestrians”) can double the likelihood that a driver will yield.
- **Road Infrastructure:** Wider roads and multi-lane roads reduce yielding rates.
- **Pedestrian Behavior:** Assertive pedestrians who make eye contact and walk confidently are more likely to get drivers to yield.

Crosswalk Components

Raised median refuge island angled to orient pedestrians toward oncoming traffic, combined with pedestrian-activated rectangular rapid flashing beacons (RRFBs), enhances crossing safety and increase driver yielding rates.

Tallahassee, Florida





Push button rectangular rapid flash beacons alert drivers to the presence of pedestrians and increase yielding rates.

Wide Crossing With Median



Golden, Colorado



This crossing features curb extension islands on both sides of a central refuge island, a design that maintains uninterrupted drainage. Landscaping enhances visibility, allowing the islands to be seen from 1,000 feet on approach. The 8-foot-wide asphalt section encourages slower vehicle speeds, while the wider curb-to-curb opening accommodates larger vehicles.

Golden, Colorado



8 Feet

The design gives the motorist the impression that the 13-foot-wide lane is only 8 feet wide.

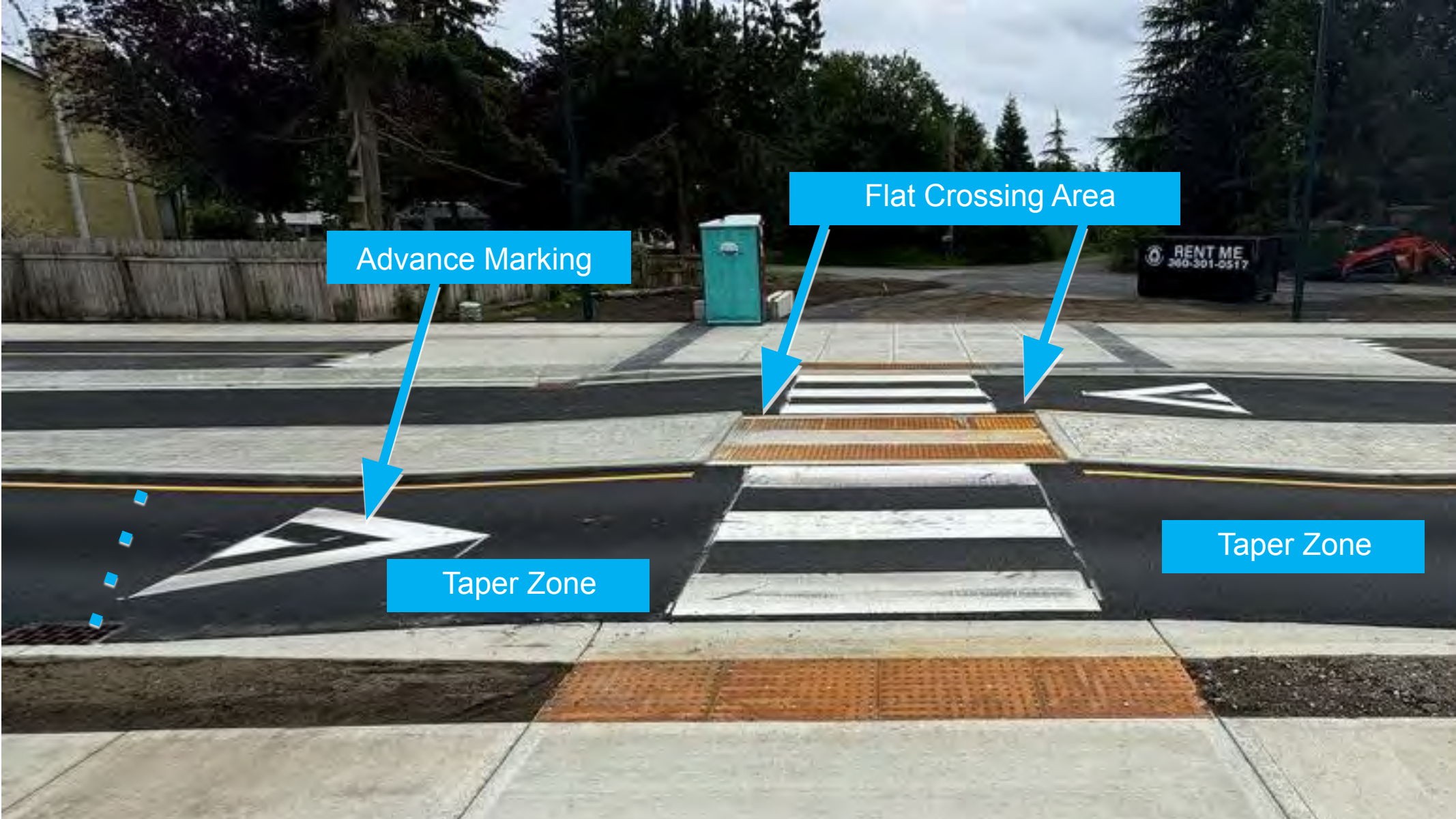
Raised Crossing



Kauai County, Hawaii



This design elevates the crosswalk to the sidewalk level, requiring drivers to slow down while increasing pedestrian visibility and priority.



Advance Marking

Flat Crossing Area

Taper Zone

Taper Zone

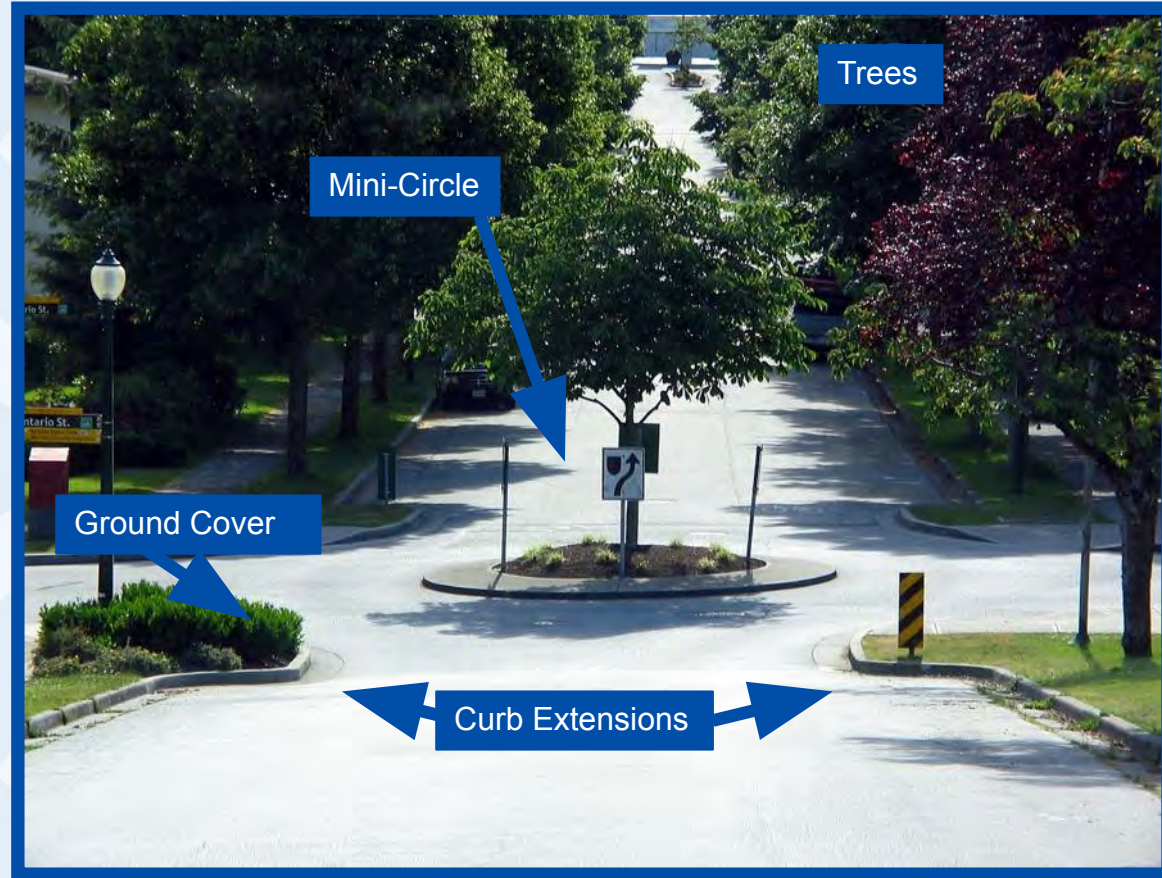
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Traffic Calming & Street Design

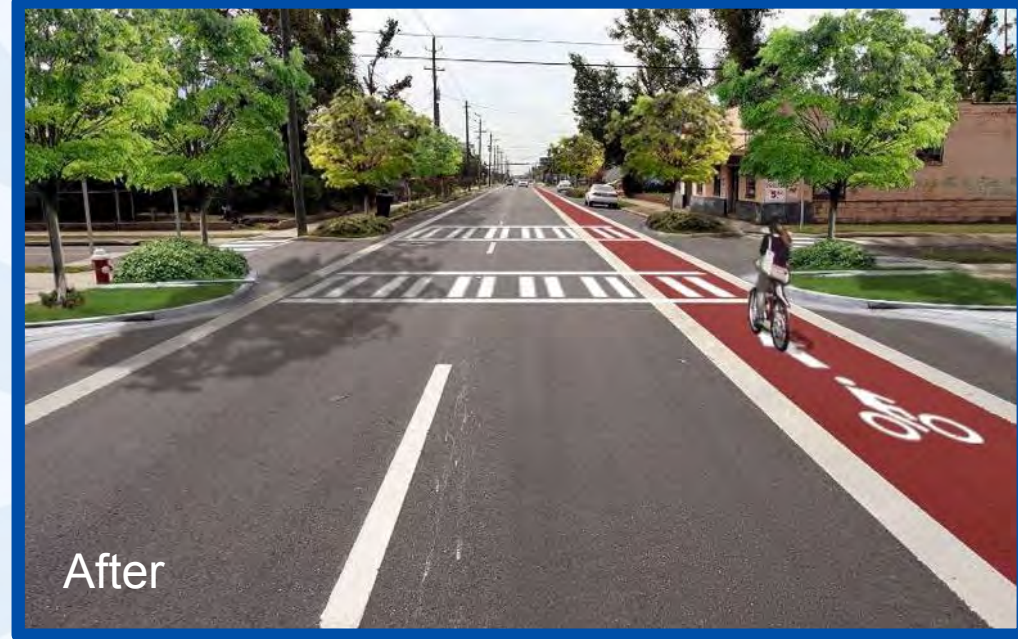
How Does Traffic Calming Work?

- Design local streets that respect their context and encourage safety, livability and choice in transportation.
- Street types that benefit most from traffic calming treatments are residential streets with housing, neighborhood collector streets that connect residential to commercial areas, and low traffic volume arterial streets with destinations that encourage pedestrian movement.
- Traffic calming addresses the desire to keep speeds low and uses design features that work in tandem. The image at right includes curb extensions, a mini-circle, ground cover and trees to slow traffic and establish place.



Vancouver, British Columbia

Narrower Lanes



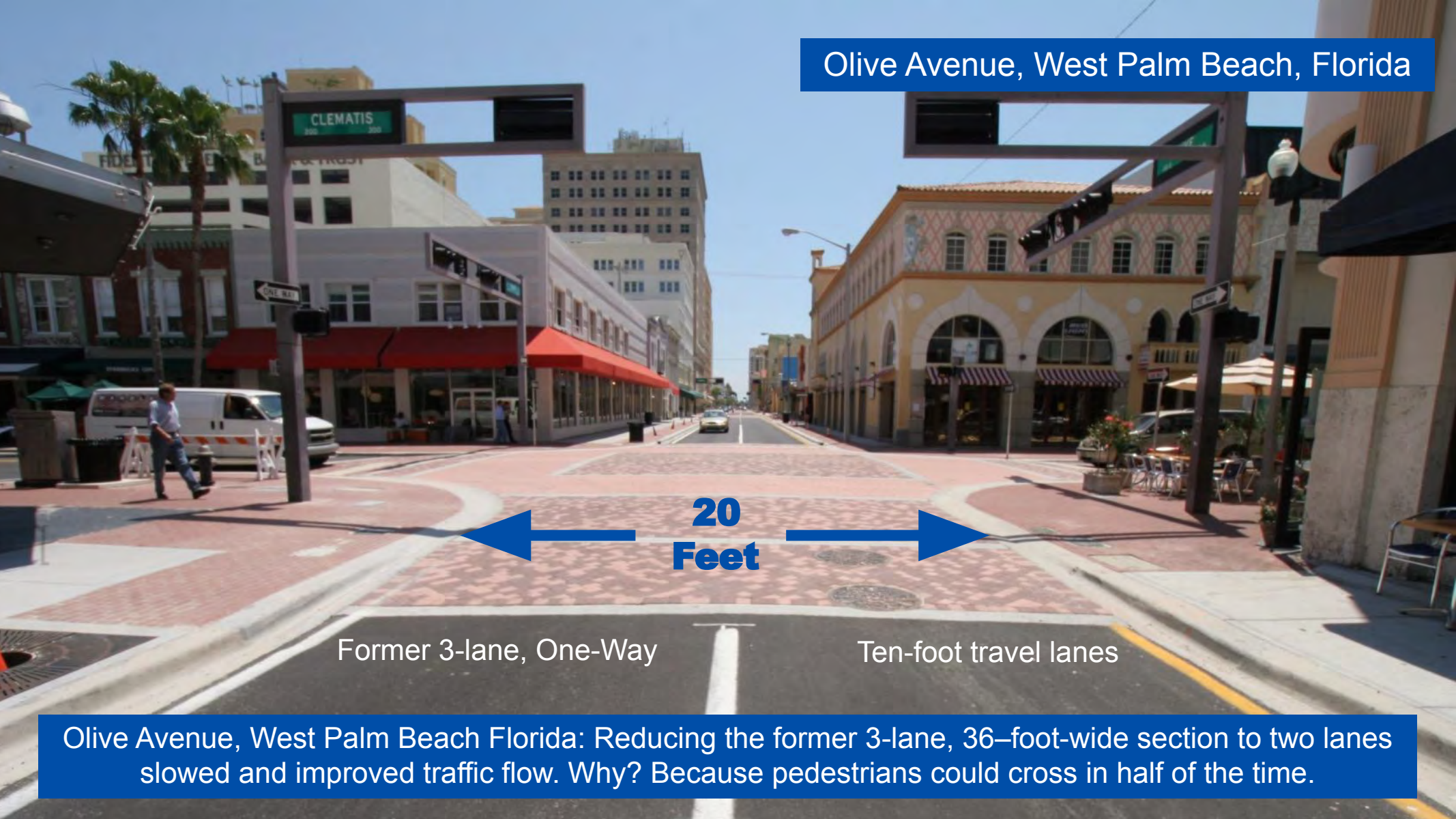
Wider lanes tend to make drivers feel more comfortable going faster, which can increase crash risk and severity. Narrower lanes (9–11 feet) encourage slower speeds, shorten pedestrian crossing distances and exposure to traffic, and reduce crossing times at traffic signals. They also free up space for bike lanes, sidewalks, pedestrian refuge islands, and landscaping.

Lane Width Design Guidance

Context	Lane Width
Low-speed, lower-volume roads with no bike lanes	Consider through lane widths as narrow as 9 feet if feasible. ³⁵
All roads under 35 mph	Use 10 feet (preferred) or 11 feet (maximum) for all through lanes and 9 feet (minimum) for turn lanes. ³⁶ If along a roadway with high truck or transit volumes, provide necessary turn lane and outside through lane widths of 11 feet . ³⁷
Roadways with speeds over 35 mph	Use 11 feet for through lanes and 10 feet for turn lanes if there is minimal truck or transit turning volumes. ³⁸
Parking lanes	Use 7-9 feet depending on the context of the road and typical vehicle type using the parking lane. ³⁹ For accessible parking spaces, use 13 feet per the Public Right-of-Way Accessibility Guidelines (PROWAG) unless providing accessible parking spaces during alterations as outlined in PROWAG. ⁴⁰

Source: Active Transportation Program Design Guide, Washington State Department of Transportation February 2024.

Olive Avenue, West Palm Beach, Florida



**20
Feet**

Former 3-lane, One-Way

Ten-foot travel lanes

Olive Avenue, West Palm Beach Florida: Reducing the former 3-lane, 36-foot-wide section to two lanes slowed and improved traffic flow. Why? Because pedestrians could cross in half of the time.

Narrow travel and center lanes shown on the right create space for the bike lane with buffered striping.



Atlanta, Georgia

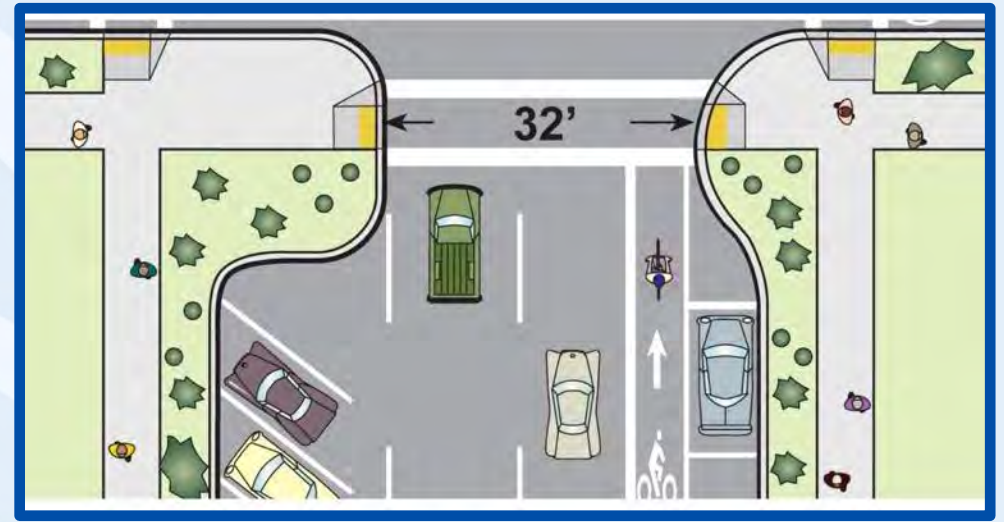
Curb Extensions

Curb extensions physically narrow the roadway, creating safer and shorter crossings for pedestrians, while increasing space for street furniture, benches, plantings, ground cover and street trees.

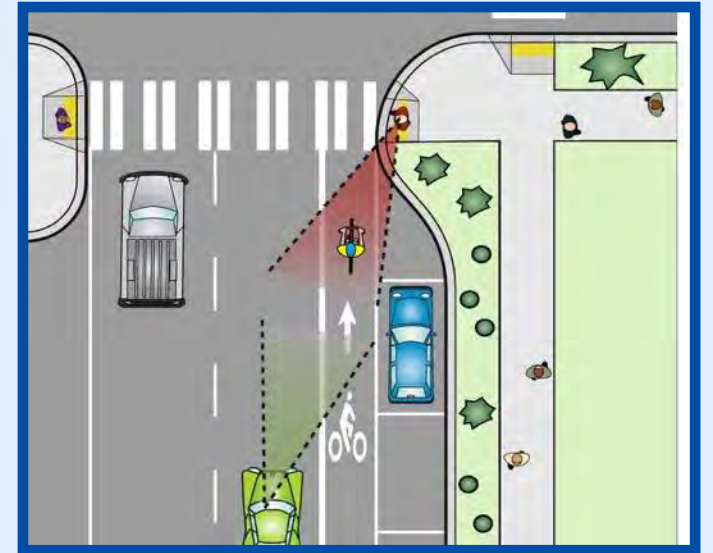
They encourage safer speeds, slow down turning movements, and make pedestrians and motorists more noticeable to each other.



Upper Left and Right: Edmonton, Canada and Eugene, Oregon
Lower Left and Right: Davis, California and Jackson Hole, Wyoming



- Reduced crossing distance
- Pedestrians are more visible and have clearer view of oncoming traffic
- Motorists can pull forward to see past parked cars







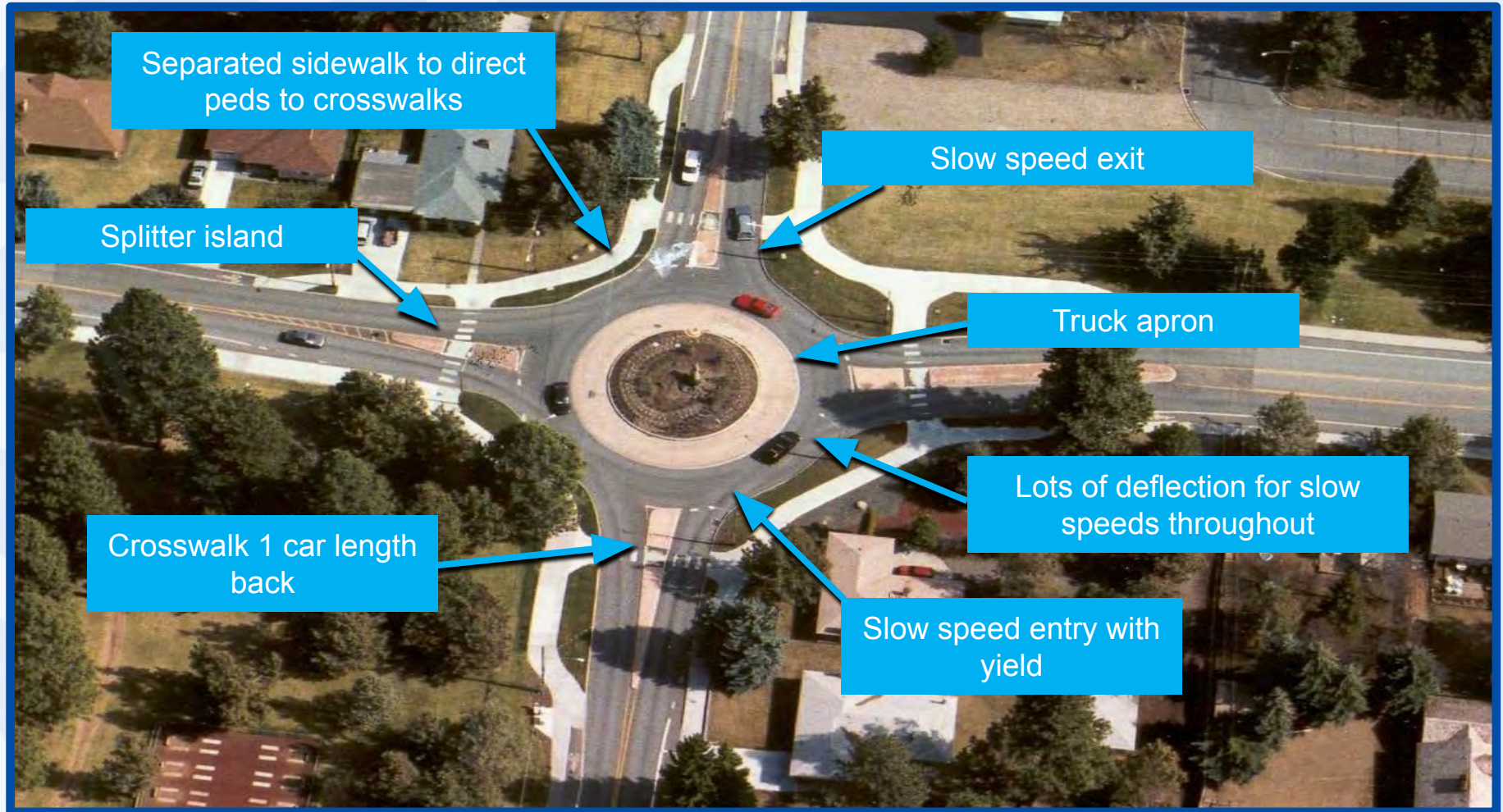
Davis, California

Roundabouts



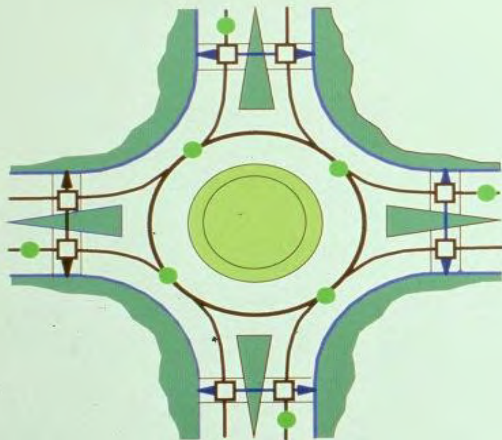
Roundabouts create great gateways, reduce vehicle speeds and move traffic safely and smoothly.

Roundabout Design Features



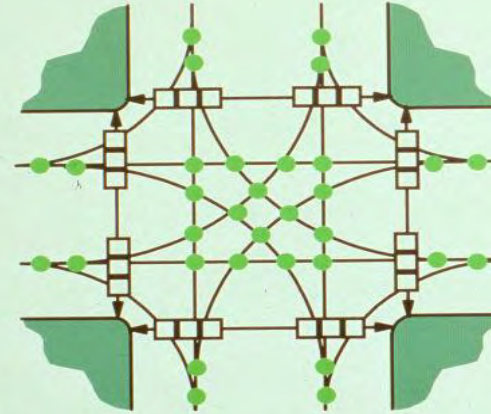
Roundabouts and Safety

Conflicts at roundabouts



- 8 vehicle to vehicle
- 8 vehicle to pedestrians

Conflicts at a 4-way intersection



- 32 vehicle to vehicle
- 24 vehicle to pedestrians

“Results of this study indicate that converting conventional intersections from stop sign or traffic signal control can produce substantial reductions in motor vehicle crashes.”

*March 2000 Study by the
Insurance Institute for Highway Safety*

Neighbourhood Mini-Circles

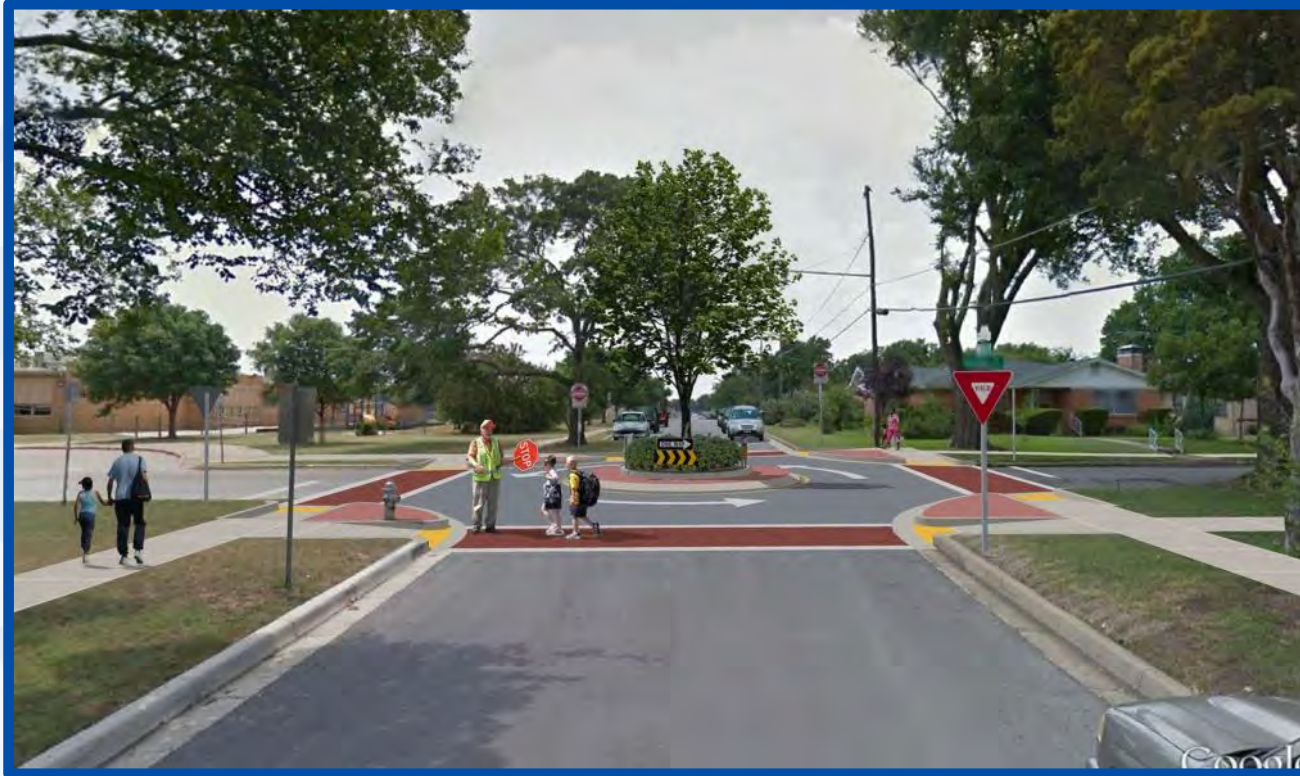


Photo Vision: Fort Worth, Texas

- Mini-circles are raised circular islands constructed in the center of residential street intersections, often used in place of stop signs.
- They encourage reduced vehicle speeds and have been found to reduce motor vehicle crashes in some locations, such as Seattle, Washington.
- Abundant public space on a street system can be found at intersections. It is here where low-cost circles slow traffic and reinforce neighborhood character.

Mini-Circle Design Features

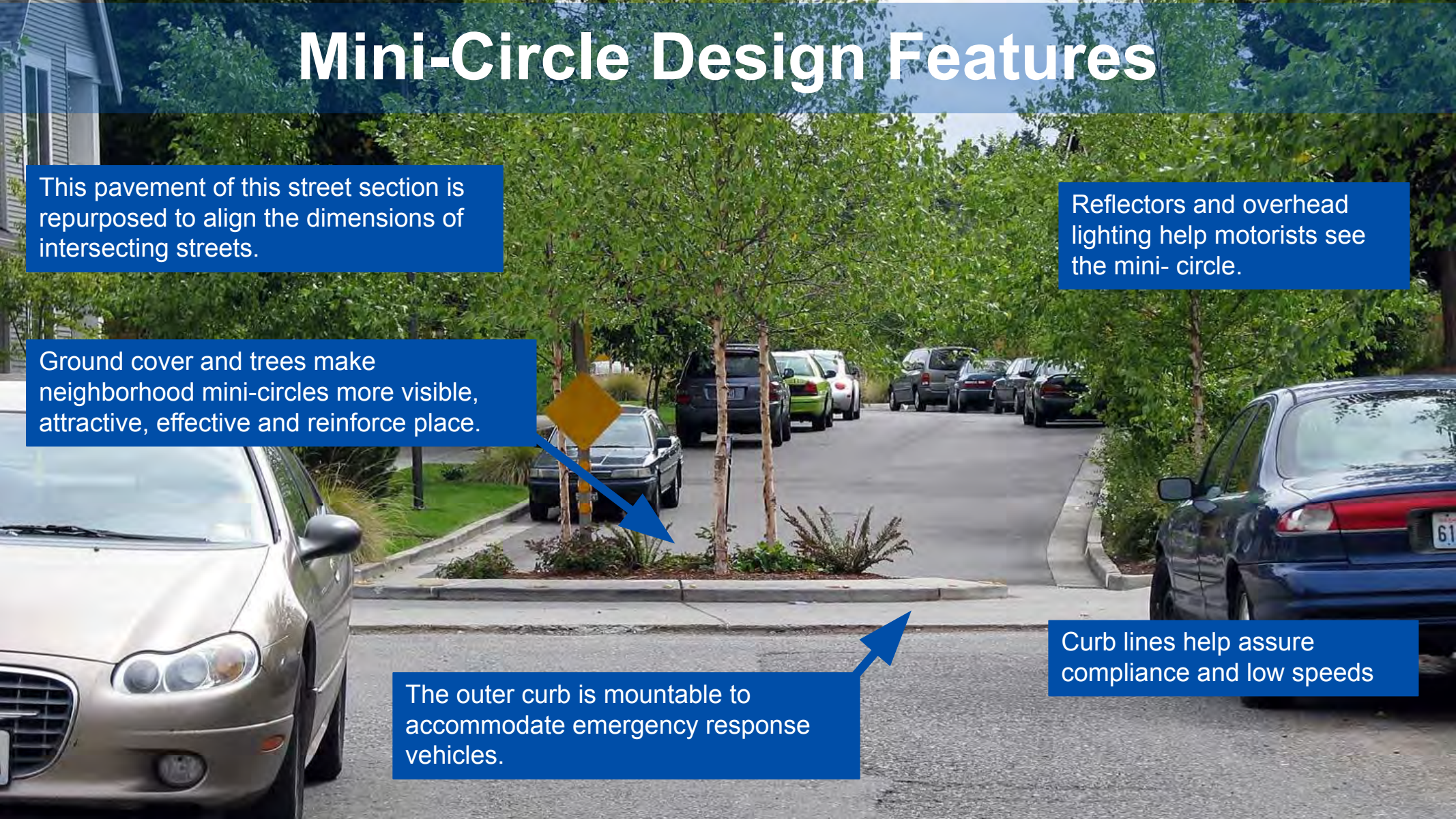
This pavement of this street section is repurposed to align the dimensions of intersecting streets.

Reflectors and overhead lighting help motorists see the mini- circle.

Ground cover and trees make neighborhood mini-circles more visible, attractive, effective and reinforce place.

The outer curb is mountable to accommodate emergency response vehicles.

Curb lines help assure compliance and low speeds



Mini-Circles and Safety



Mini-circles resulted in a 77% reduction in crashes in Seattle, WA

Source: PedSafe, Pedestrian Safety Guide and Countermeasure Selection Guide, FHWA; Traffic Circle Program, City of Seattle, WA. www.seattle.gov/transportation/trafficcircles.htm;

Landscaping

Although it is possible to forgo landscaping, neighborhood mini-circles work best by including attractive ground cover, lighting and trees. These features help motorists in detecting, responding, and slowing their travel. Seattle keeps almost all local streets to 18-20 mph through a regular series of attractive neighborhood mini-circles. For neighborhood acceptance, favor landscaping over signs and designs that reinforce neighborhood beauty and pride.



Seattle, WA



Lower-Cost Designs



Port Townsend, WA



Pittsford, NY

The design and construction of neighborhood mini-circles are generally low cost. Seattle produces their average size mini-circle for \$15,000-25,000. Meanwhile, effective mini-circles can be quite small when streets are narrow, such as the example (left) in Port Townsend, Washington, which cost less than \$100 to construct. Features can include rural gardens when neighbors agree to converting pavement to parks.

Lower-Cost Designs



Davis, California



Arcata, California



Sacramento, California



Pittsford, New York

Mountable Raised Dome Mini-Circle



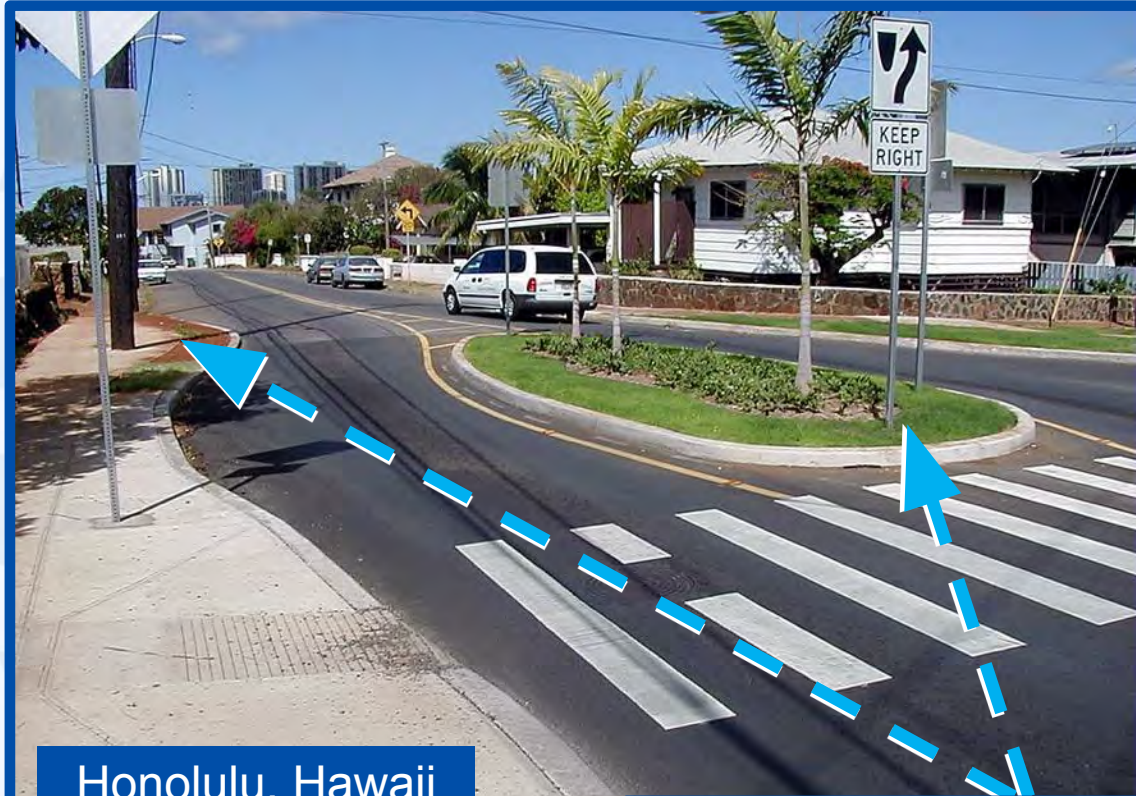
Manitou Springs, Colorado

Mountable Raised Dome Mini-Circle



Arcata, California

Chicanes



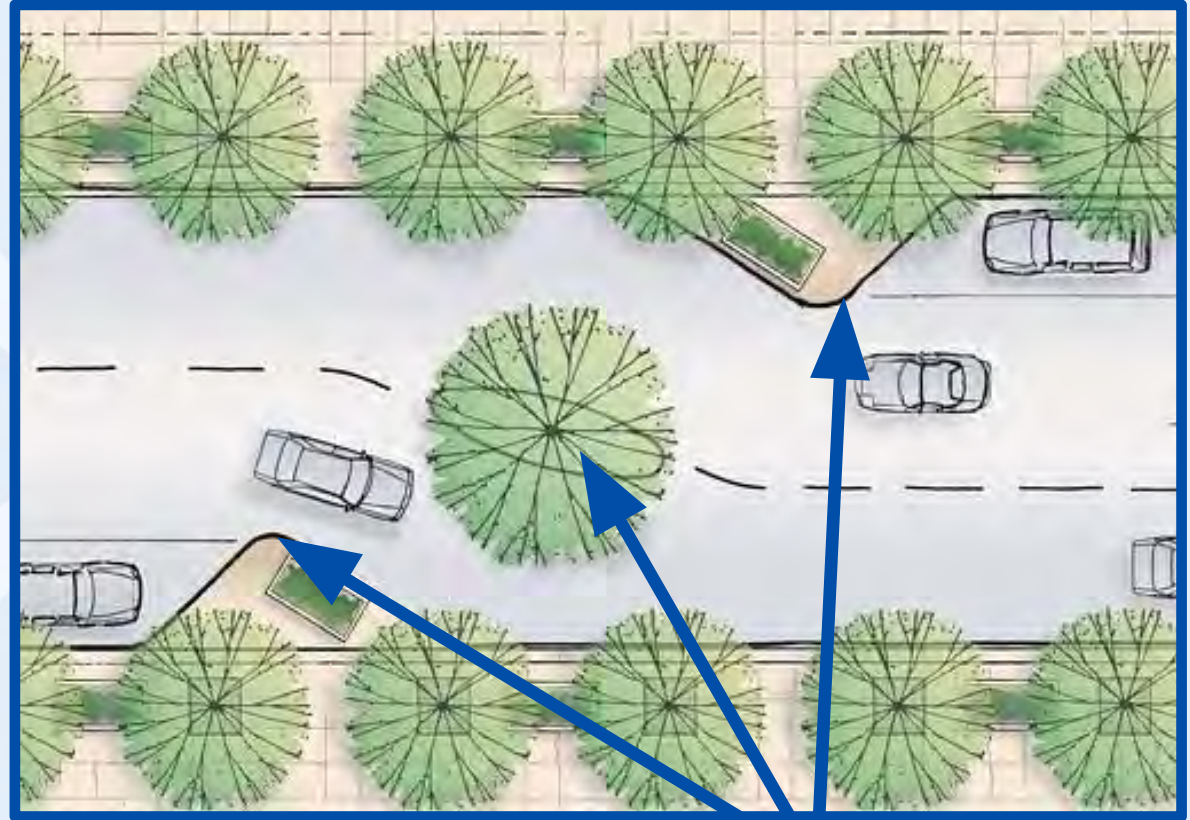
Honolulu, Hawaii

The curb extension and median create a deflection path helping reduce speeds

- Chicanes are street elements such as curb extensions and medians that create deflection paths.
- These narrow, curving sections of roadway slow speeds and require more attentive driving.
- They are typically applied to roads with 30 mph or less posted speeds.
- Low ground cover and plantings, as well as rain gardens, can be used to green streets and create gateway features.

Chicane Design Features

- Chicanes create a horizontal deflection that shifts the travel lane. When designed correctly, the shift reduces speeds.
- An ideal design achieves speeds of 14-18 mph. Lighting, signage and greenery features can be used to improve visibility and contribute to lower speeds.
- Chicanes are used midblock on blocks generally more than 500 feet where speeding is a documented problem but can also be used at intersections and serve as gateways.



The deflection path is set for 14-18 mph

Speed Reduction and Flow

- Where blocks are long, speeding is encouraged. Traffic calming chicanes help keep speeds at safer levels by setting expectations for driver behavior.
- These can be implemented as a system and spaced every 400-500 feet for speed moderation.
- The goal is to encourage consistent speeds of 14-18 mph rather than high speeds or frequent stopping.



Deflection Path

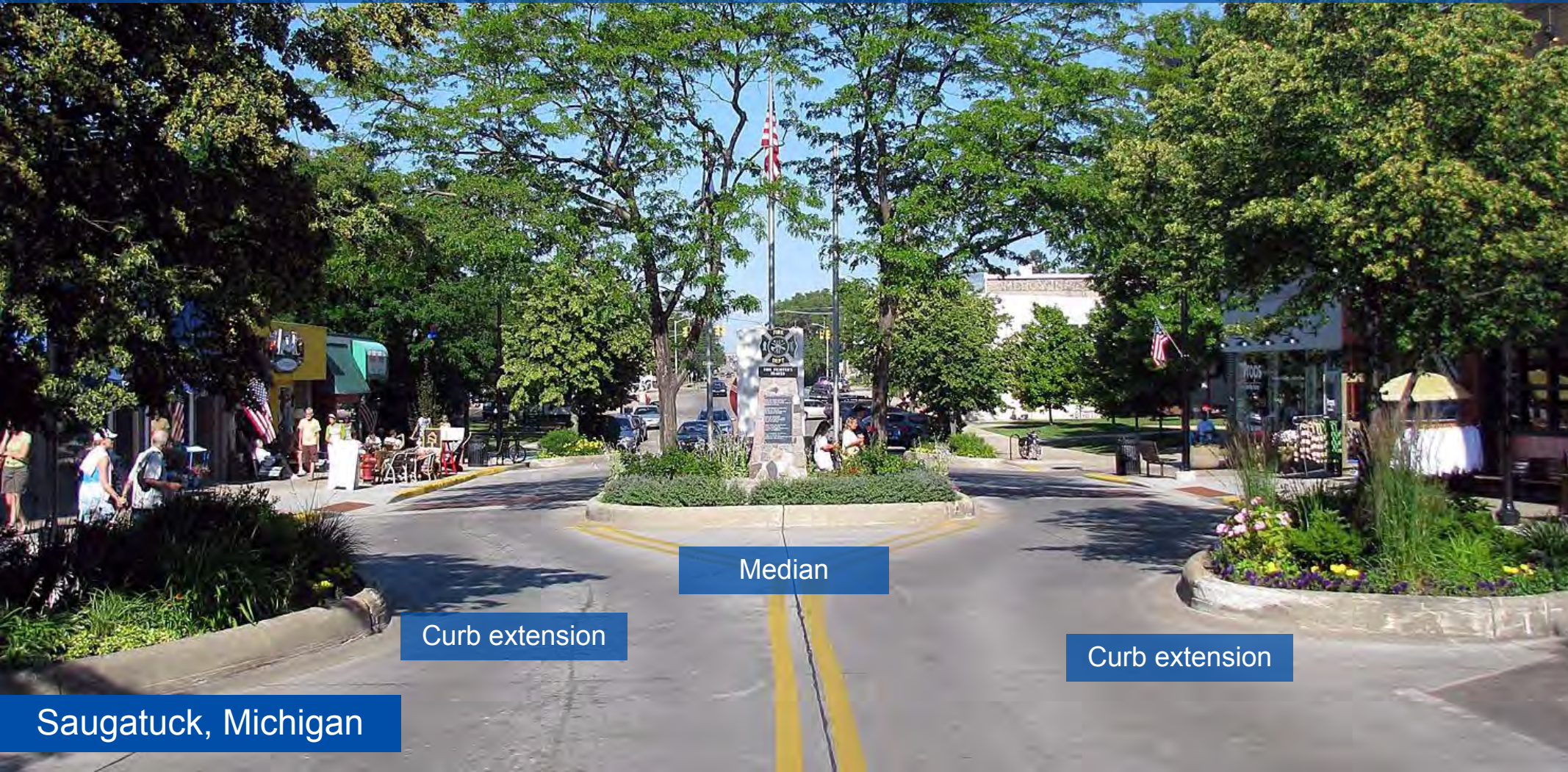


- In the image to the left, tire wear shows how the desired deflection path has reduced speeds.
- The curb extension sets up the first chicane deflection point, moving motorists outward.
- The island sets the second deflection point.
- Together, they require motorists to slow, thereby controlling speeds.
- Landscaping adds aesthetics and visibility.



Santa Barbara, CA

Chicane As Gateway



Median

Curb extension

Curb extension

Saugatuck, Michigan

Edge Lane Roads



Edge lane roads (or advisory bike lanes) are low-volume, low-speed roads designed for shared use, featuring a single, central lane for two-way vehicle traffic and dotted white lines creating "edge lanes" on both sides for bicyclists and pedestrians. Motorists use the center, only entering edge lanes to pass, while yielding to pedestrians/cyclists.





Port Townsend, Washington, has seven Edge Lane Roads. In general, they reduce all crashes, reduce speeds, open up sight lines, make it easier and safer to exit driveways, and create low-cost paths to walk and bicycle with greater safety.



Matthews, North Carolina

Edge lane roads can also be placed to one side of the road to allow a wider bicycling and walking pathway. If desired, portions can also be colorized.



Kilauea, Hawaii



Detroit, Oregon

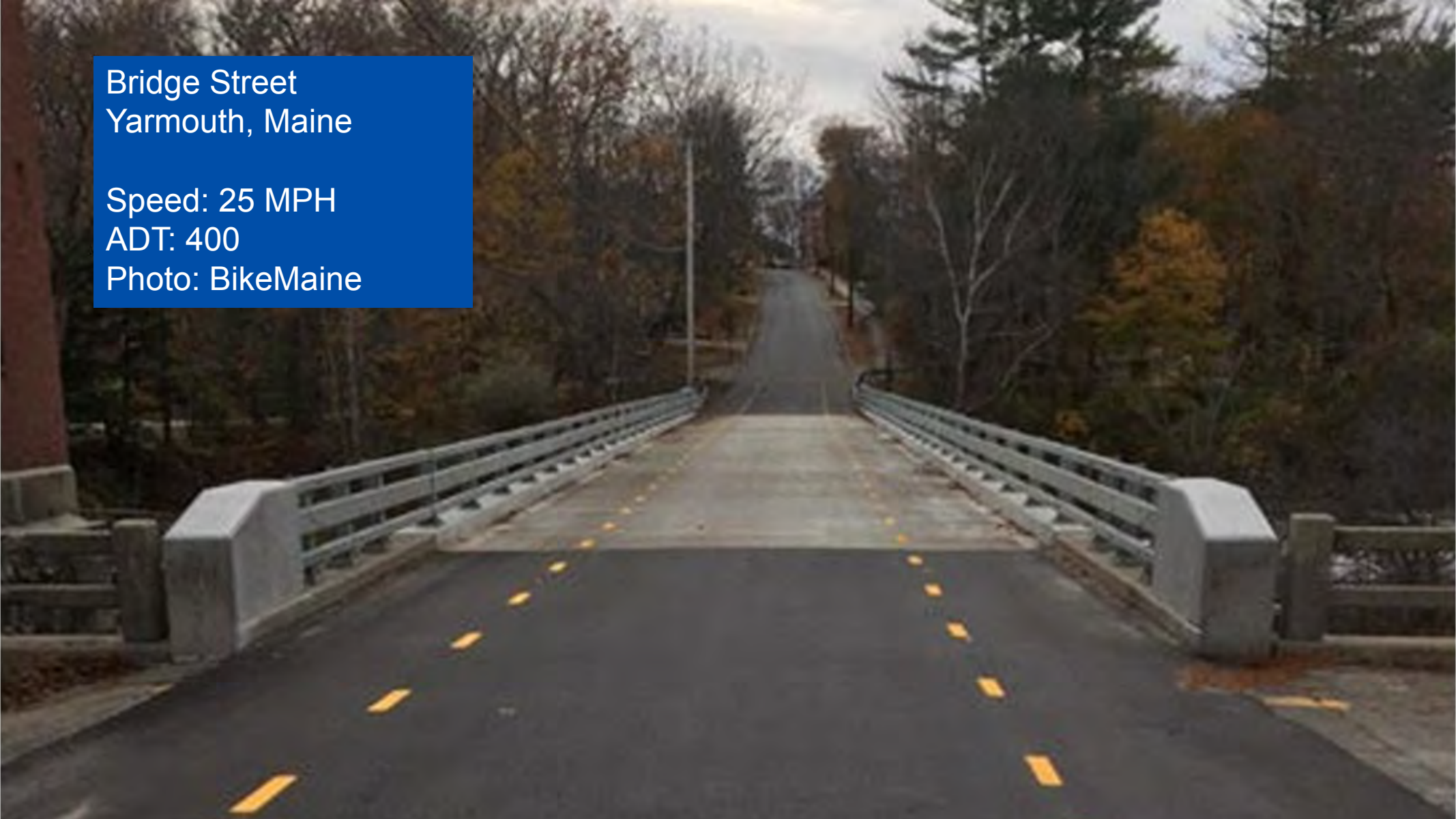
U.S. Eastern Trail

- Rural Maine
- Approximately 800 vehicles per day
- Posted speed is 25 mph, actual speeds are higher
- Provides access to dispersed, small clusters of affluent homes



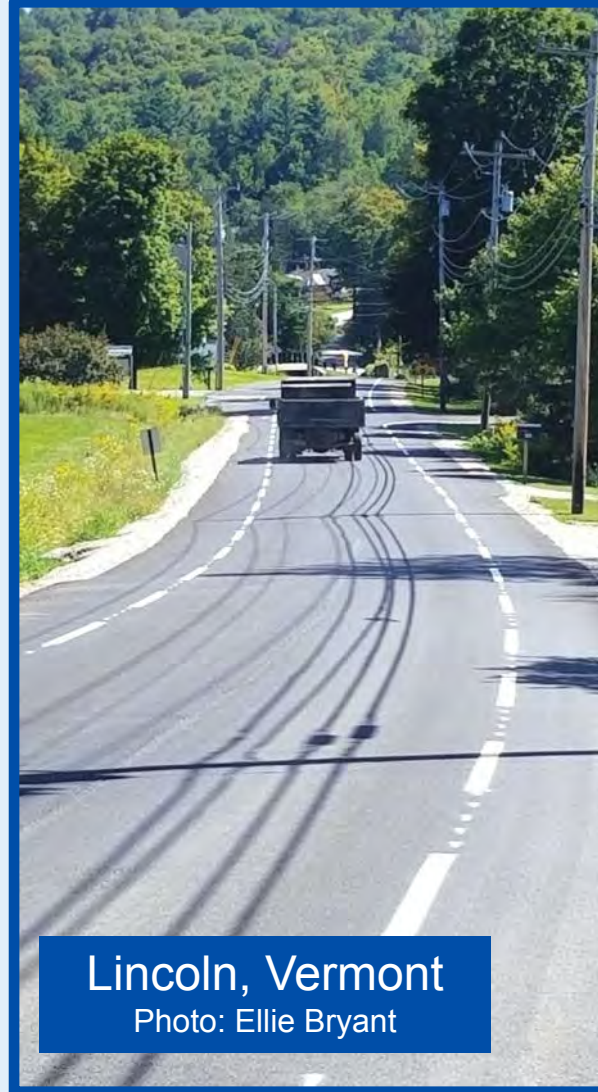
Bridge Street
Yarmouth, Maine

Speed: 25 MPH
ADT: 400
Photo: BikeMaine



Yarmouth, Maine

Photo: David Loutzenheiser



Lincoln, Vermont

Photo: Ellie Bryant

San Francisco, California





Alexandria, Virginia

Hanover, New Hampshire

Photo: David Loutzenheiser

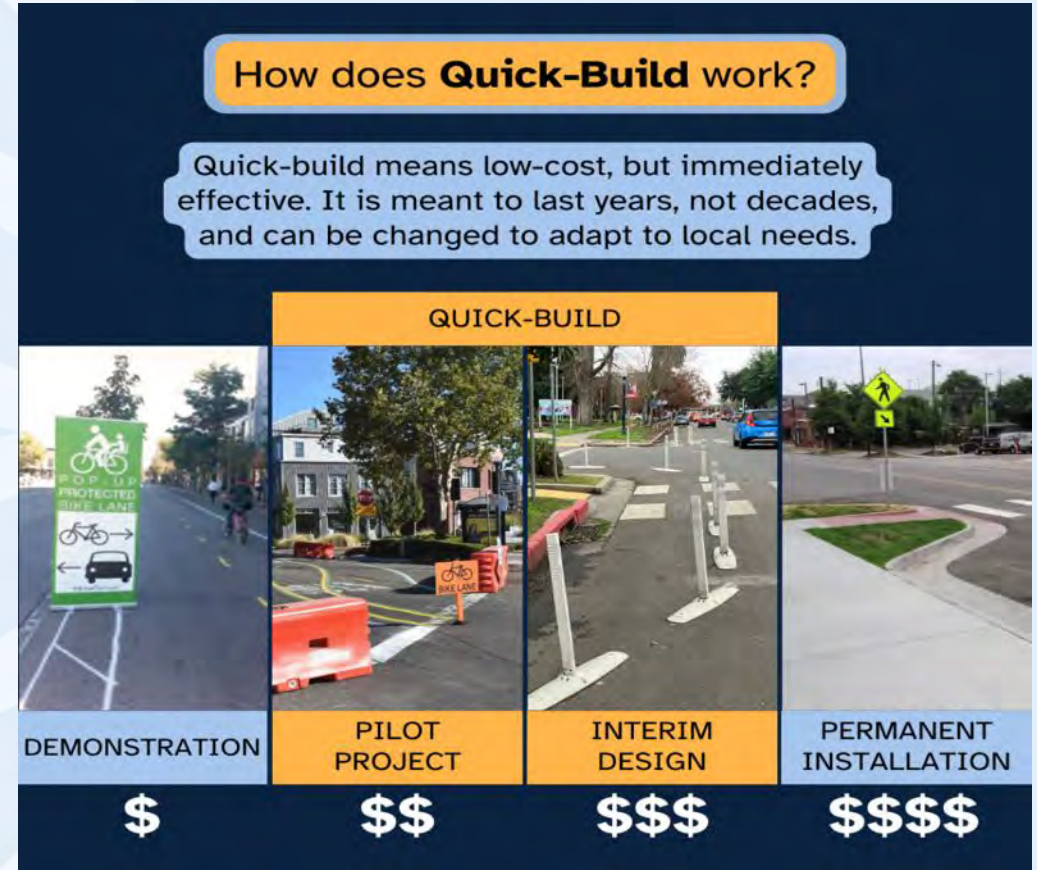


The background is a photograph of a street scene, possibly in a tropical or coastal area, featuring palm trees, parked cars, and a person walking. The entire image is covered with a semi-transparent blue filter. Overlaid on the left side are several large, white, concentric circular arcs that partially obscure the background and the text.

Quick Build Street Changes

Demonstration Projects & Quick Builds

- Use materials which can be designed and installed in a matter of hours or days – such as paint, barriers, signs, planters, and posts.
- Less permanent than concrete, but immediately effective.
- More easily changed to adapt to local and emerging needs, or usage patterns.
- Are much lower cost than permanent infrastructure changes and allow a community to test, or pilot, new ideas.



Demonstration Project



Many communities begin with low-cost, temporary painted curb extensions. After a trial period of no less than six months, a permanent installation can be installed as a durable solution with any needed adjustments.

Residents in Hamilton, Ontario, painted and marked this intersection with delineators, as a low-cost solution.

If paint and raised delineators are not enough, the test period allows residents to observe then vote for a lasting, attractive curb extension design.

JC Walks Pedestrian Enhancement Plan



Jersey City, NJ
Credit: streets-plan.com



Longer Duration/ Hybrid

Parking lane and posts provide buffer

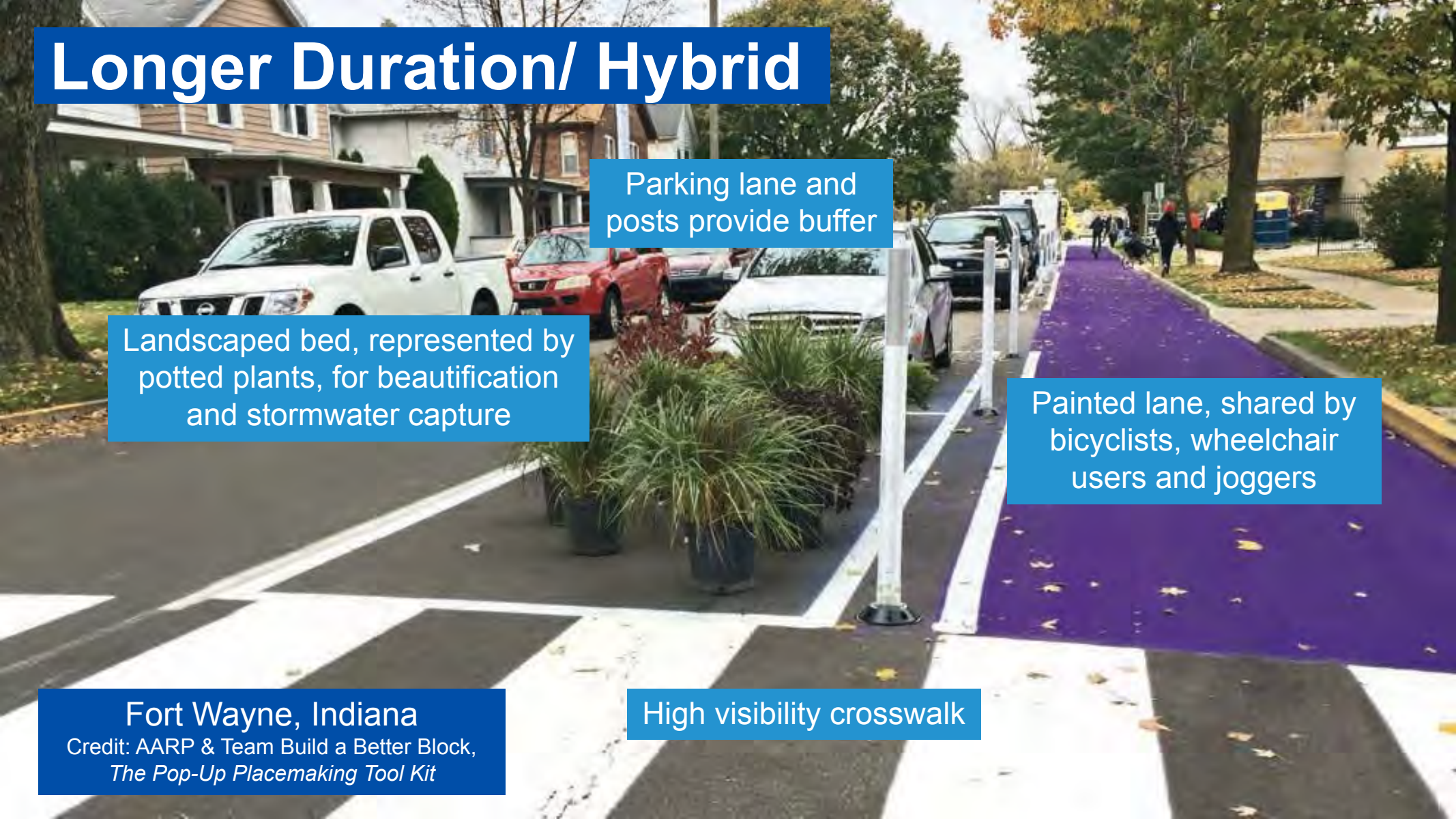
Landscaped bed, represented by potted plants, for beautification and stormwater capture

Painted lane, shared by bicyclists, wheelchair users and joggers

Fort Wayne, Indiana

Credit: AARP & Team Build a Better Block,
The Pop-Up Placemaking Tool Kit

High visibility crosswalk



Vision Zero

- Pilot to improve safety and access on a high injury corridor served by transit.
- Quick-Build refuge islands that enhance safety by allowing pedestrians to cross one direction of traffic at a time and a place to pause in between.
- Faster, cheaper solution while the city explores permanent infrastructure improvements.

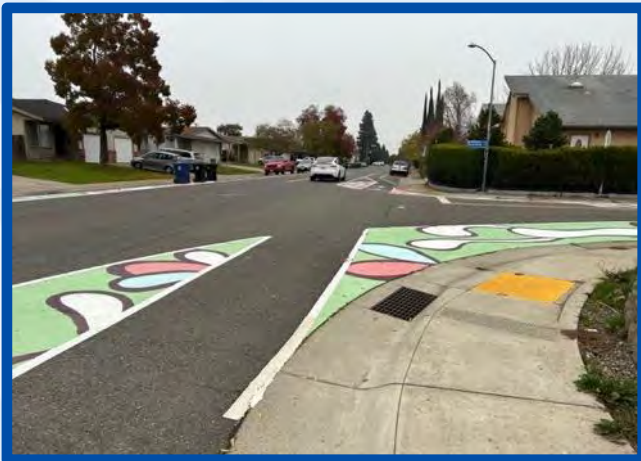
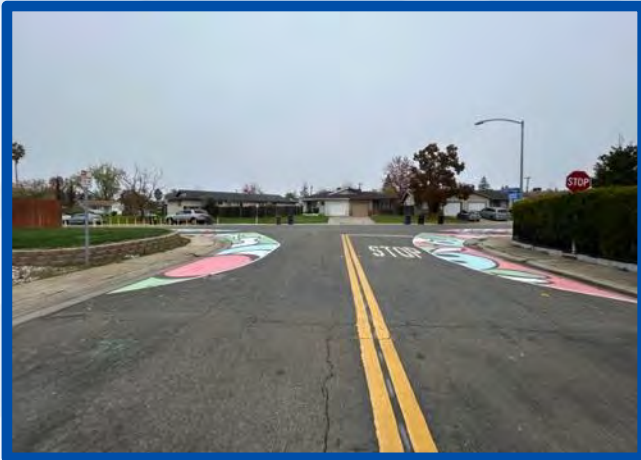
Omaha, Nebraska





Rancho Cordova, California

Rancho Cordova, California



Quick Build Roundabouts

Presidio, San Francisco



Sarasota County, Florida

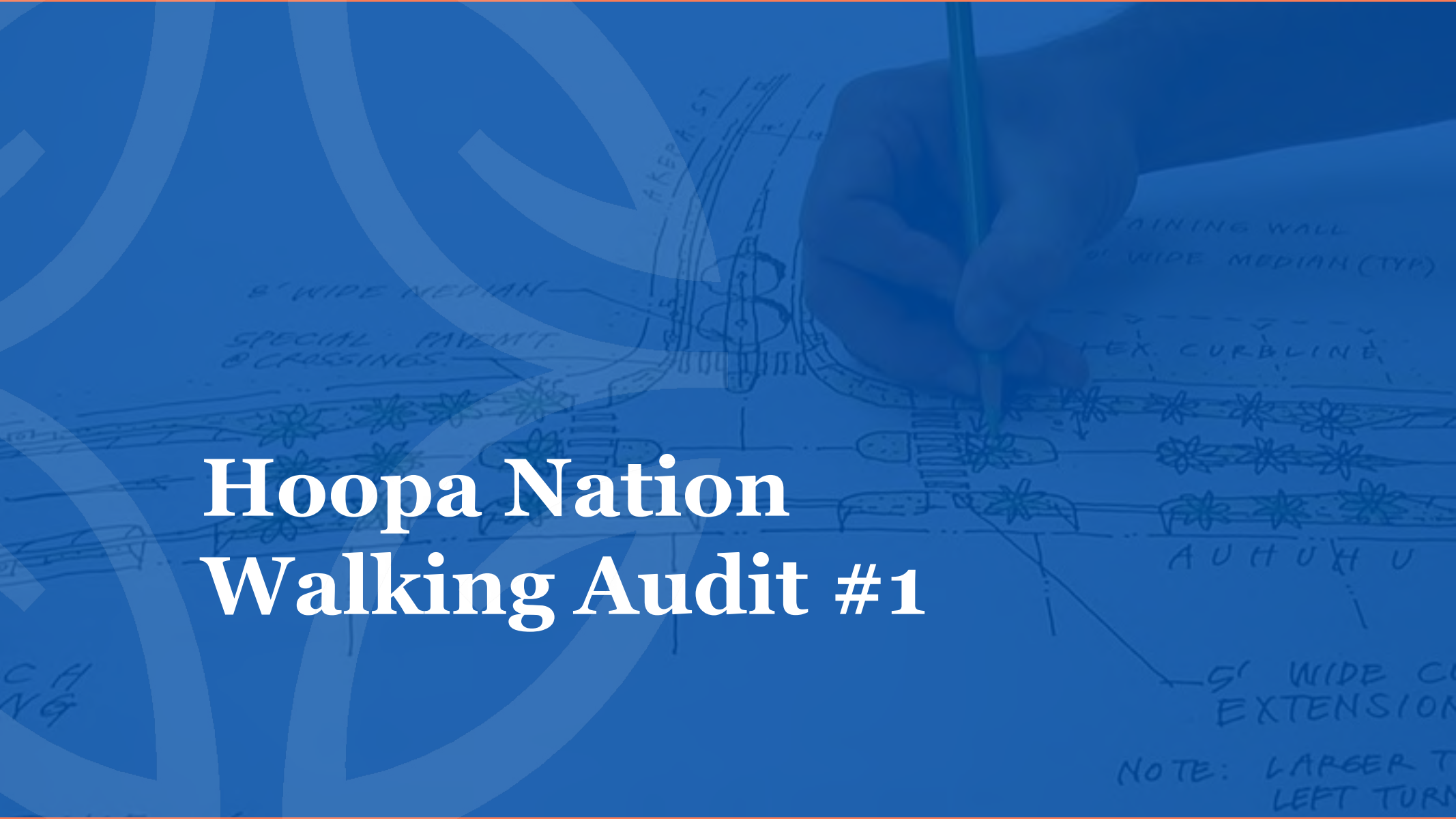




Example of quick-build and mountable small roundabout.



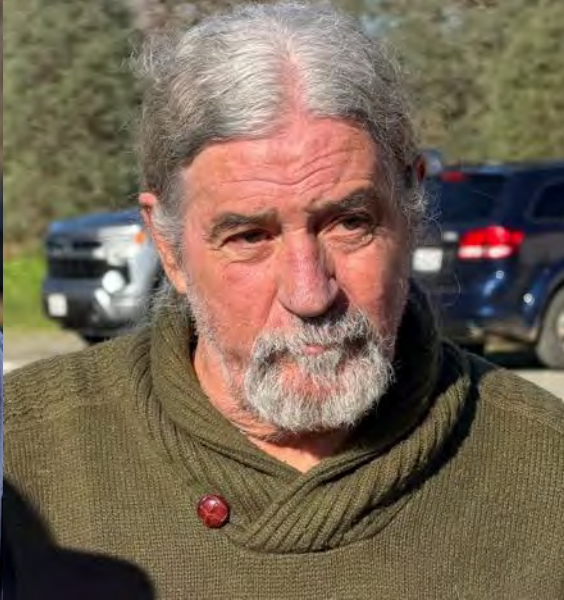
This SRTS quick-build roundabout was installed at the intersection of Arlen Drive and Almond Street in Rohnert Park (2024). Quick build roundabouts cost about a quarter the cost of a regular roundabout. Installation takes days or weeks, compared to months or a year. They are built with prefabricated modular materials and can be tested, modified, removed or replaced with permanent pavement and landscaping.

A hand-drawn sketch of a road layout, overlaid with a blue semi-transparent background. The sketch shows a road with a median, a curb line, and a crosswalk. Annotations include "8' WIDE MEDIAN", "SPECIAL PAVEMENT @ CROSSINGS", "KEEP ST", "RETAINING WALL", "6' WIDE MEDIAN (TYP)", "LEX CURB LINE", "A U H U H U", "5' WIDE CROSSWALK EXTENSION", and "NOTE: LARGER TURN LEFT TURN". The text "CHANG" is also visible in the bottom left corner.

Hoopla Nation Walking Audit #1









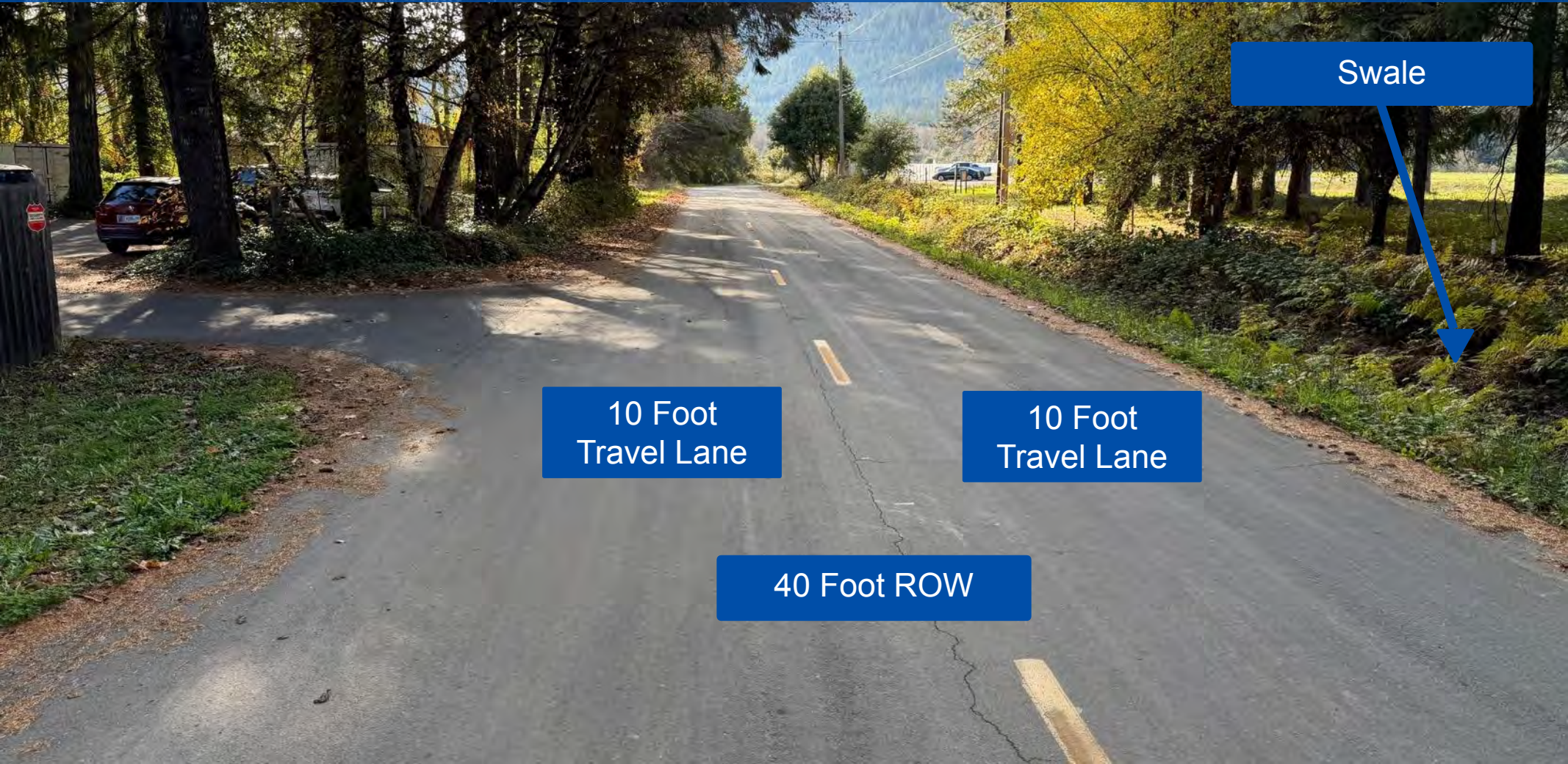
Airport Road

Swale

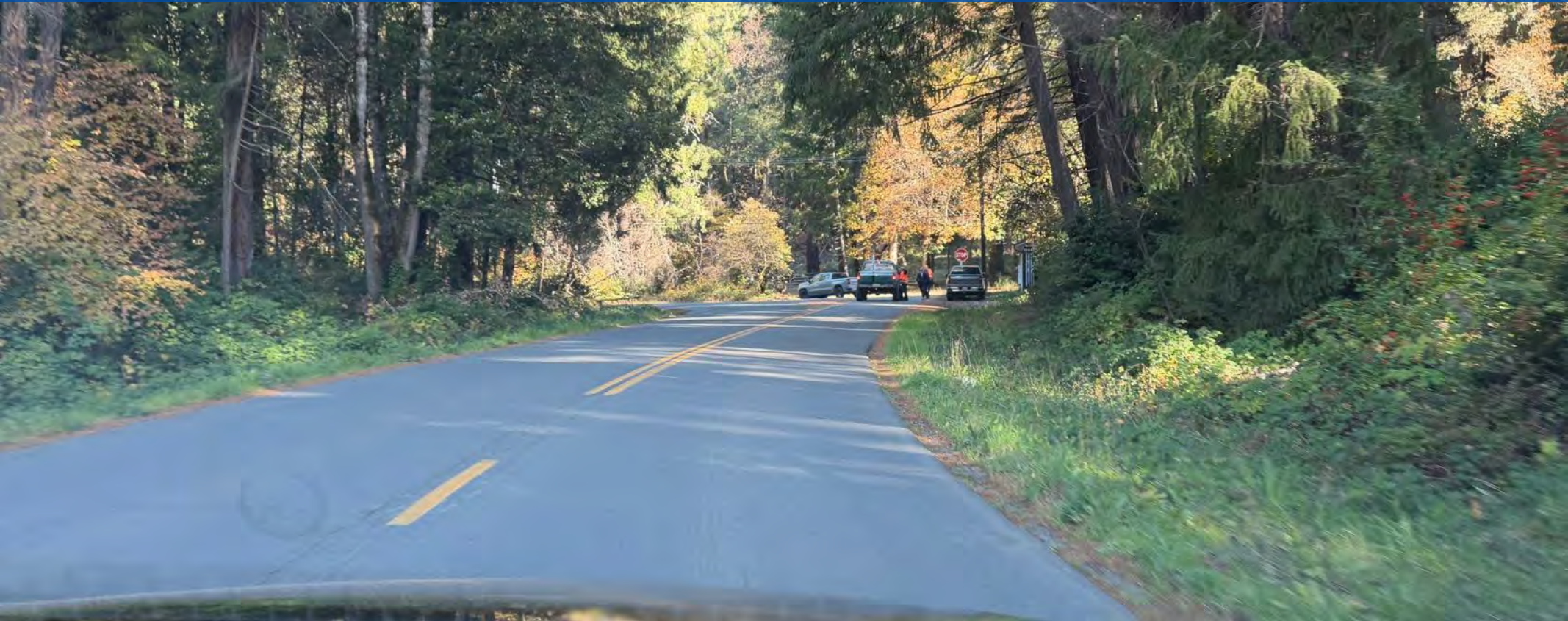
10 Foot
Travel Lane

10 Foot
Travel Lane

40 Foot ROW



Airport Road

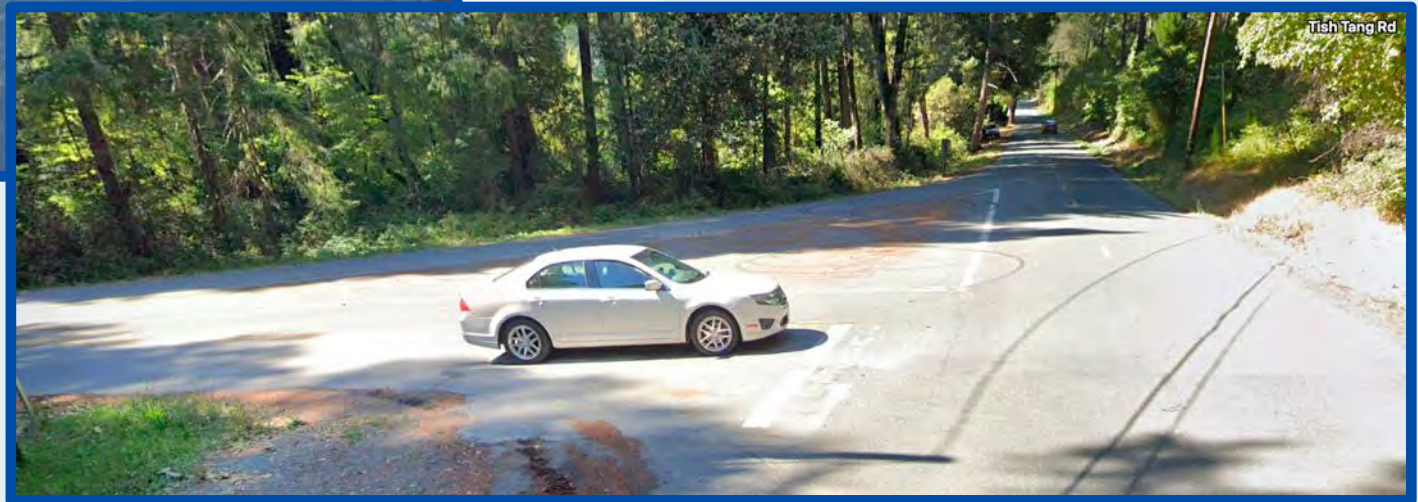


Conditions: Forested sections with no lighting or space for safe walking or bicycling. Traffic volumes are low. Studies are needed, but short-term, low-cost solutions include adding bold edge stripes, eliminating the center lane markings, and piloting an Edge Lane Road as a model project.

Tish Tang Road & Airport Road Intersection



Conditions: One-way stop control, and a very wide, high-speed right turn lane onto Airport Road. This intersection deserves study and is a good candidate for a mini-roundabout.



Tish Tang Road



40 Foot ROW

10 Foot
Travel Lane

10 Foot
Travel Lane

Swale

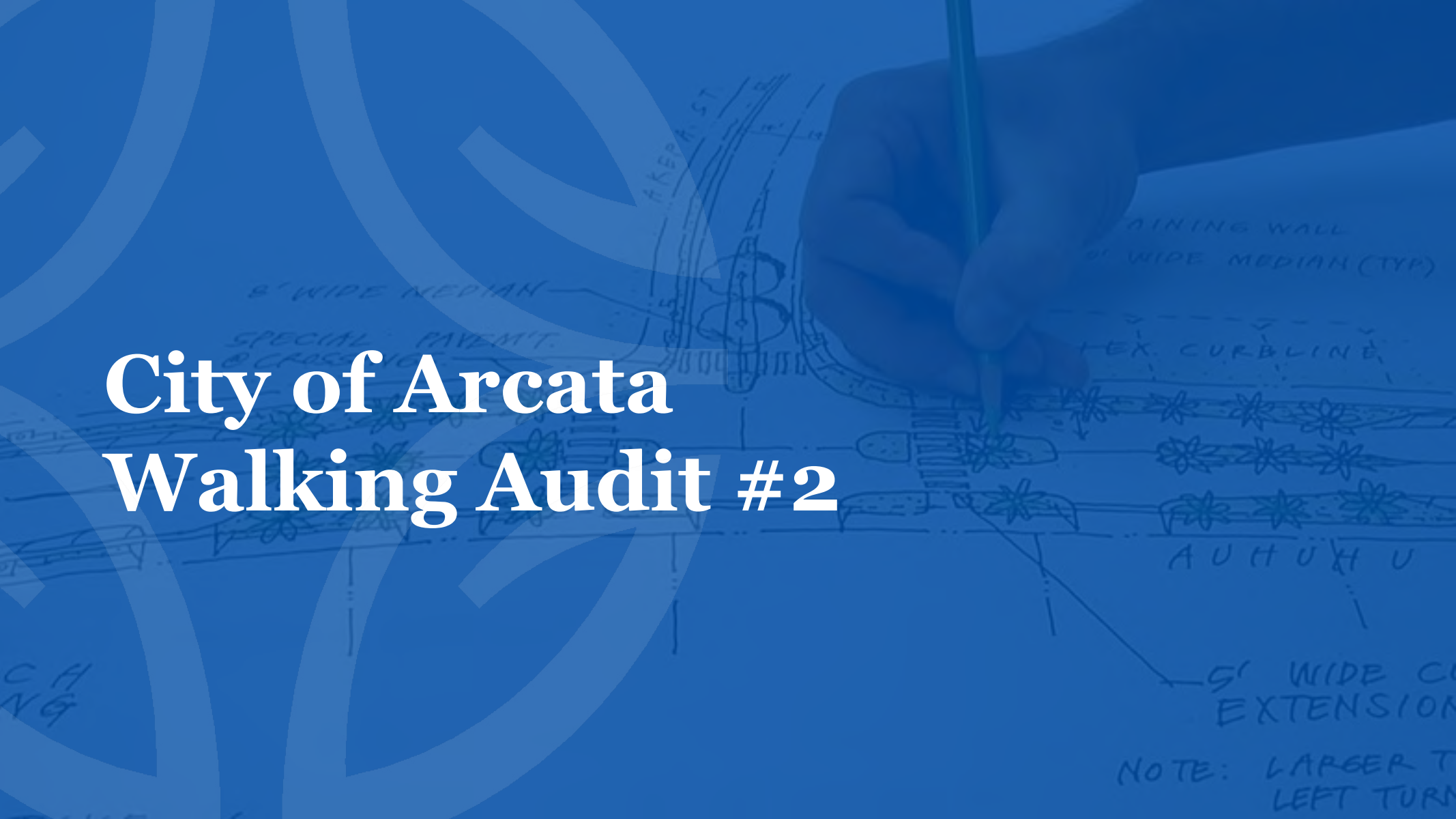
The corridor lacks paved shoulders, and features like side slopes, drop-offs, drainage ditches, poles and mature trees make it very difficult and expensive (\$2–\$4 million per mile) to add paved areas for walking or biking. Installation of an Edge Lane Road could be achieved at or under \$200,000, provide demarcated space for non-motorists, and improve safety for all modes.

Tish Tang Road



Conditions: Forested sections with no lighting or safe walking and bicycling conditions. Speeds are posted at 35 mph, but observed speeds are in the high 40s and low 50s. Traffic volumes are low.

Studies are needed, but short-term, low-cost solutions include adding bold edge stripes, eliminating the center lane markings, and piloting an Edge Lane Road as a model project. Longer term, seek funding for a path, ideally along the Trinity River side.



City of Arcata Walking Audit #2

The background image is a blue-tinted photograph of a hand holding a pen, drawing a street plan on a piece of paper. The drawing includes various annotations and symbols. Visible text includes: 'KEEP ST' (partially visible), '8' WIDE MEDIAN', 'SPECIAL PAVEMENT CROSSING', 'RETAINING WALL', '8' WIDE MEDIAN (TYP)', 'LEX CURBLINE', 'A U H U H U', '5' WIDE CO EXTENSION', and 'NOTE: LARGER T LEFT TURN'. There are also symbols like stars and dashed lines representing a street layout.





Valley East Blvd



Valley East Blvd

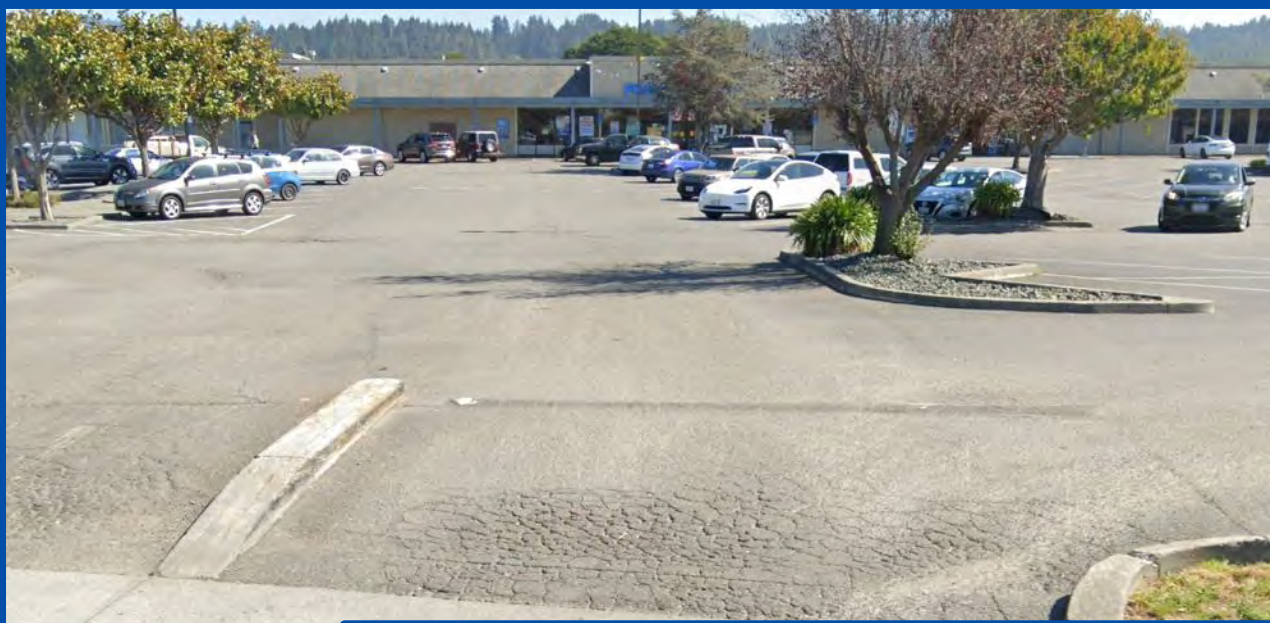
Within the approximate 70-foot right-of-way, there are narrow attached sidewalks, on-street parking, buffered bike lanes, and two 13-foot-wide travel lanes.



This midblock crossing on Valley East Blvd reduces the exposure of people crossing the street. It can be improved by applying enhancements shown in the Midblock crossing tools section. If low-yielding rates or speeding are an issue, a raised crossing could be considered.



The attached sidewalks are only 4 feet wide and are interrupted by streetlight poles. An attempt to build a bypass paths at each obstacle was made. As a retrofit, extending the sidewalk 2-3 feet into the roadway is worth exploring. Future standards for six-foot-wide sidewalks were discussed.



Strip commercial shopping centers were designed primarily to attract people driving cars. The placement of buildings on long blocks behind vast expanses of asphalt pavement are uncomfortable to reach by walking, bicycling and transit.





On Valley West Blvd, the lack of sidewalks into the shopping mall increases exposure to conflicts for all modes. Safe, more comfortable entries, and lower speed driveways are appropriate.



This pedestrian connection from the street to stores is incomplete. An improved pathway would help invite people walking, bicycling and using transit to the stores.



Example of a more inviting, comfortable and safer pedestrian pathway from the street.

Columbus, Ohio

Santa Rosa, California



Example of an inviting and fully protected walkway

LaJolla, California



Example of an inviting, comfortable and safe walkway

Frontage and Security



Activity increases where places feel interesting, safe and watched – not when just sidewalks exist.



Credit: Steve Price, Urban Advantage

Transparency



TRANSPARENCY Is the quality added by being watched over. The buildings front this street and sidewalk with window and door glazing covering 70% or more of the face.

Before

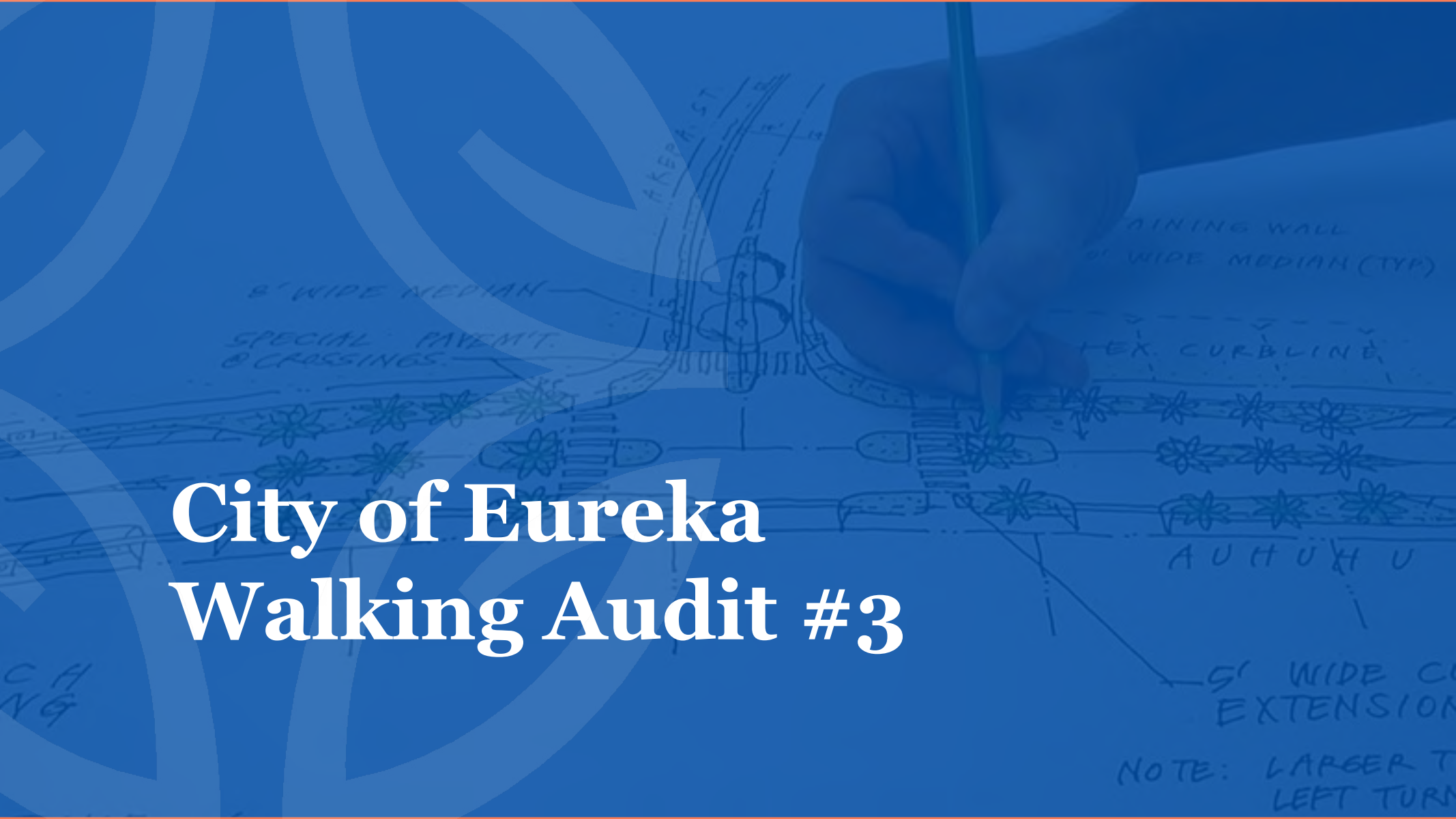


Transforming a car-oriented shopping center to create an inviting sense of place.

After



Transforming a car-oriented shopping center to create an inviting sense of place.

A hand-drawn sketch of a street layout, overlaid with a blue semi-transparent background. The sketch shows a street with a median, sidewalks, and a crosswalk. Annotations include "8' WIDE MEDIAN", "SPECIAL PAVEMENT @ CROSSINGS", "KEEP ST", "RETAINING WALL", "8' WIDE MEDIAN (TYP)", "LEX CURBLINE", "A U H U H U", "5' WIDE CO EXTENSION", and "NOTE: LARGER T LEFT TURN". The text "C H N G" is also visible in the bottom left corner.

City of Eureka Walking Audit #3









Example of new buffered bike lanes in Eureka.



Example of new curb extensions in Eureka.



During the walking audit, the group discussed raised intersections with tight corner radii.



The value of curb extensions to provide improved sight lines is evident at this corner.



New two-way bicycle boulevards have been introduced to the neighborhood.



Participants discussed the value of curb extensions to improve street crossings.



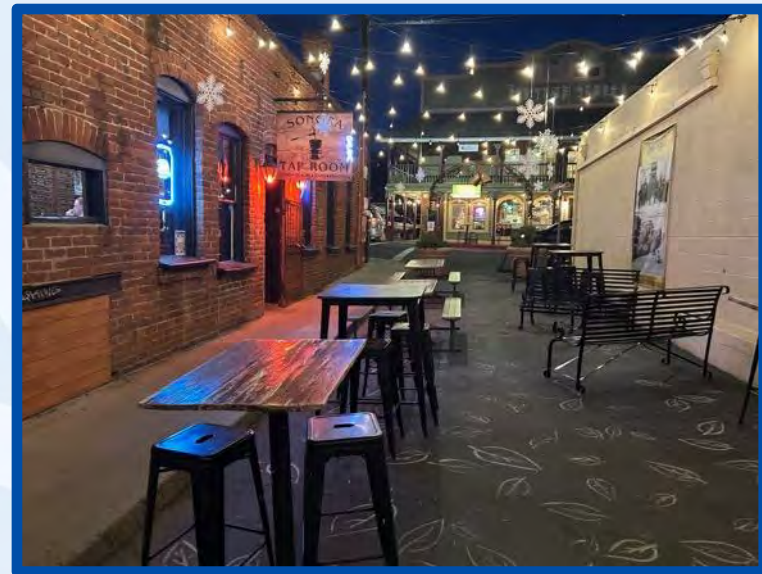
Participants discussed alley benefits and ways to boost their use and vibrancy.



Alley improvements before and after, Victoria, Canada



Asheville, North Carolina



Sonora, California





Improvements before and after
Richmond, California



Sacramento, California

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