Po‘ipū Road

A Vision for the Corridor

Training & Community Design Workshop

Kaua‘i, HI

CONTENTS

I. Poipu Community Design Workshop

What is a Community Design Workshop?

Meet the Team










Meet the Team



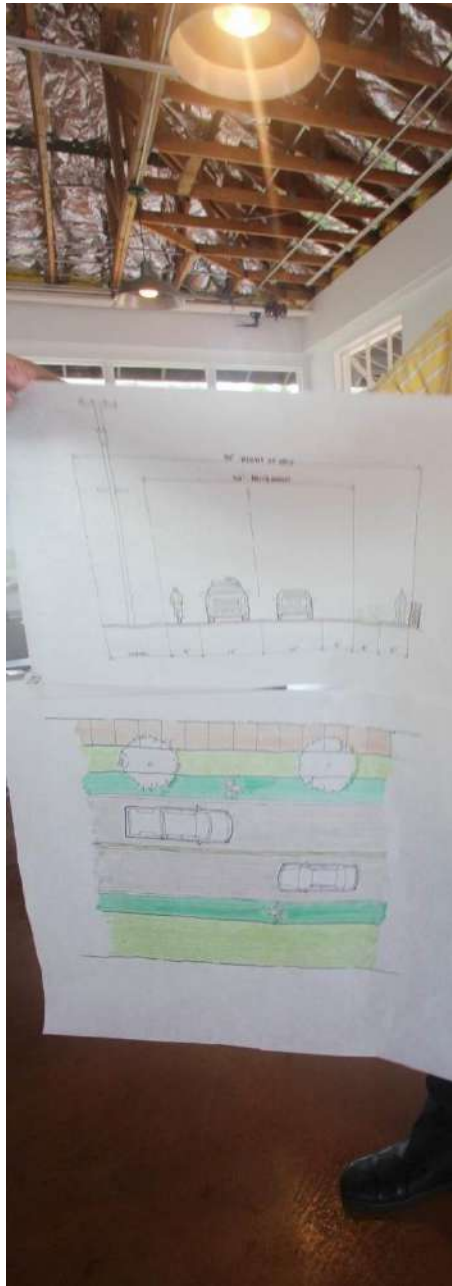
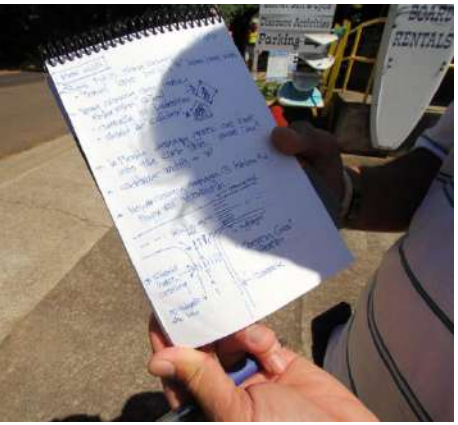







Design Team






Focus Group Meetings

Po'ipū Beach Resort Association

Focus Group Meetings

Kōloa School & Community Association

Focus Group Meetings

Hawaiian Cultural Group

Focus Group Meetings

Property Owners

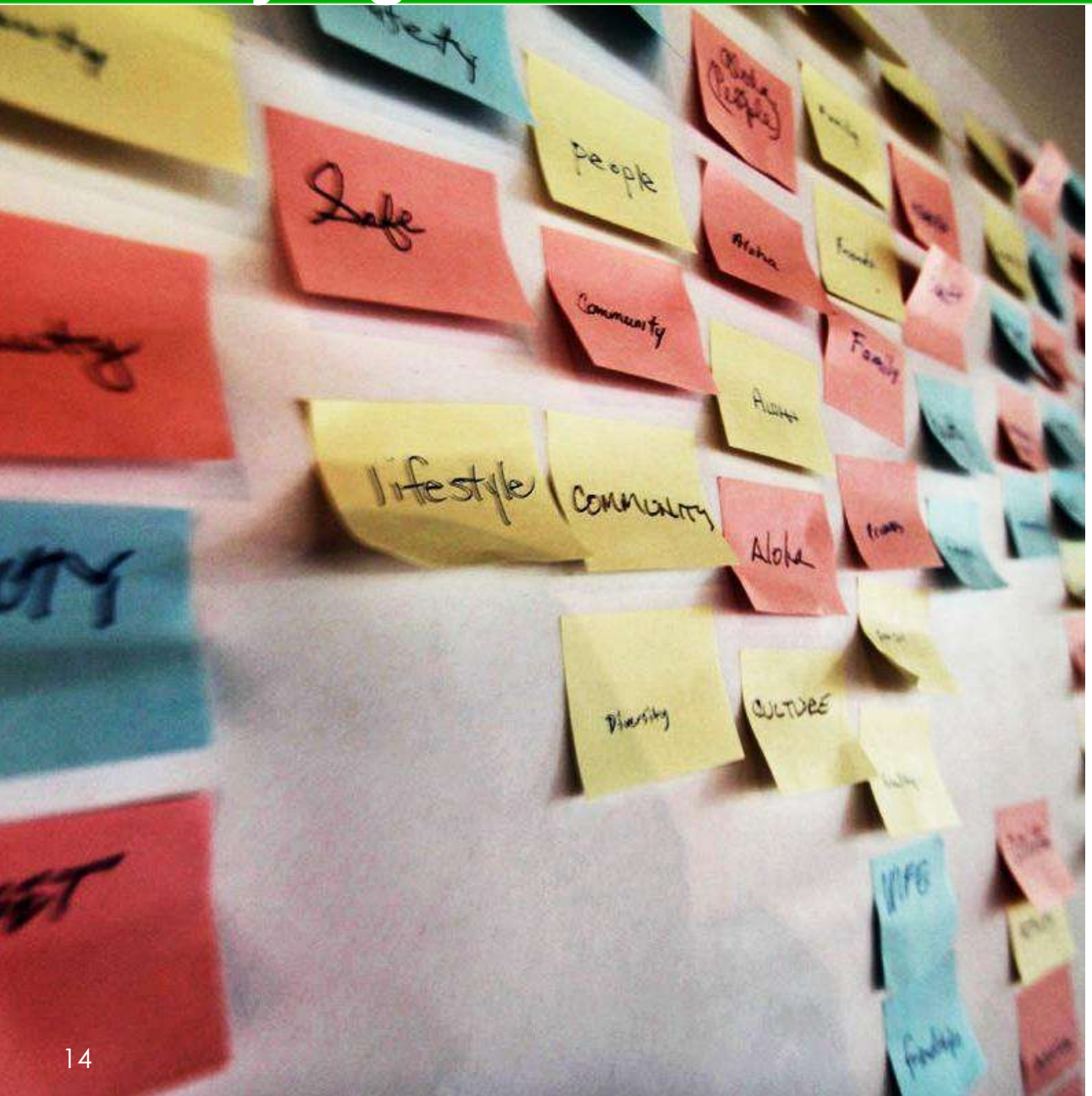
Walking Audit

Poʻipū Shopping Center towards Hyatt

Walking Audit

Opening Workshop

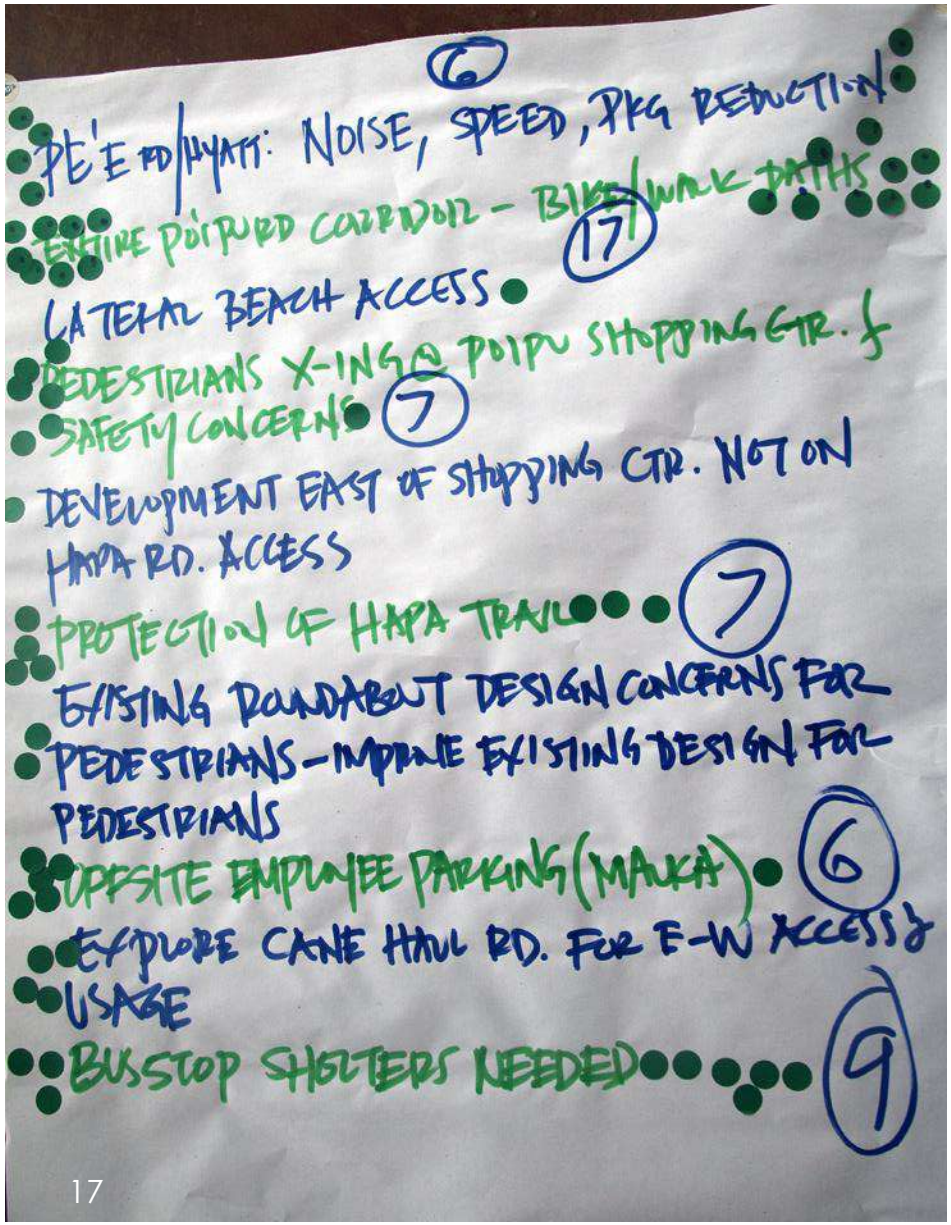
Identifying Values

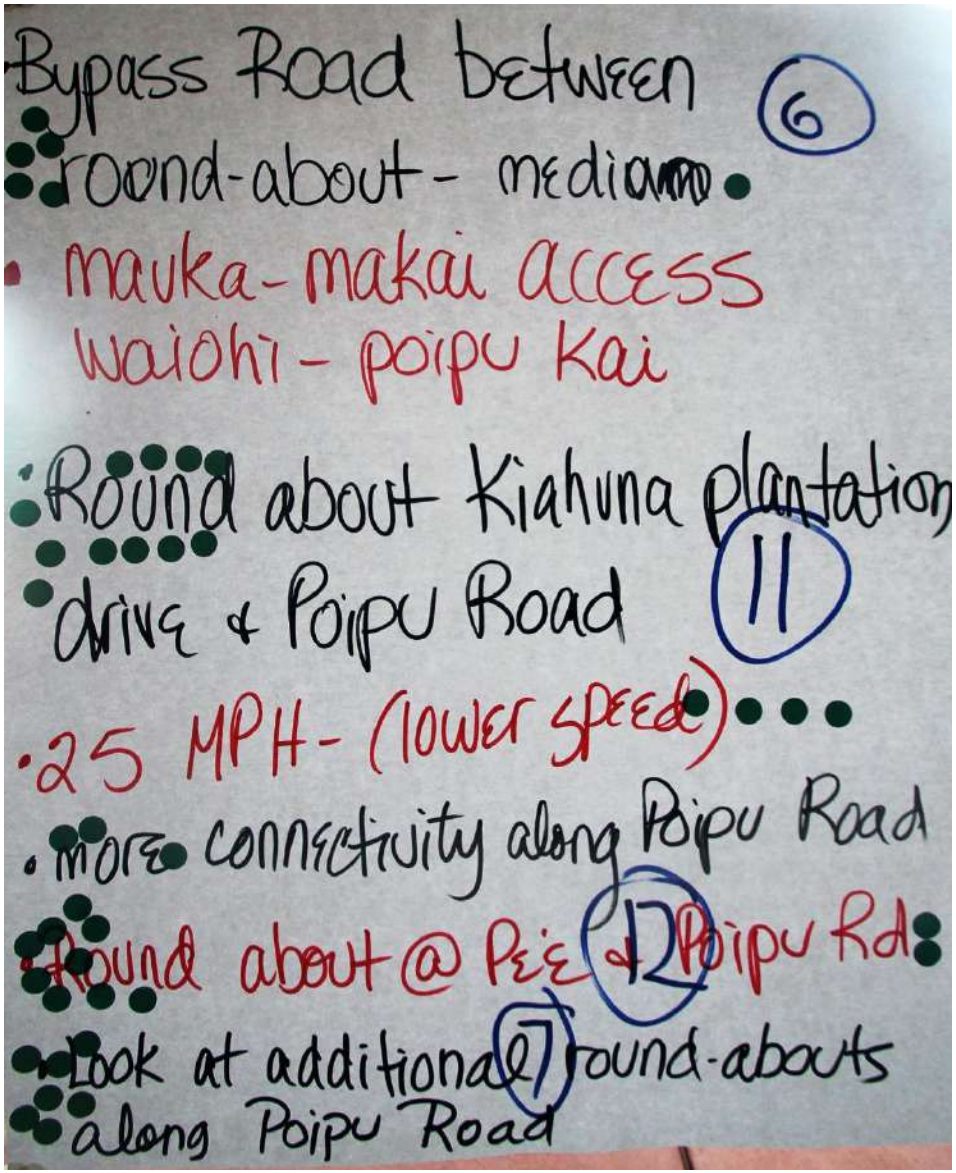


Identifying Values

Opening Workshop

Identifying Priorities





Top Priorities

- BUILD Additional Roundabouts along Po‘ipū Road
  - Roundabout at Pee & Po‘ipū Road
  - Roundabout at Kiahuna Plantation Drive & Po‘ipū Road
- COMPLETE Walk/Bike Paths along Both Sides of Poipu Road
- ENHANCE Bus Stop Shelters
- Manage Parking along Po‘ipū Road
- ADDRESS, IMPROVE, & ENHANCE Pedestrian Crossings
- PROTECT Hapa Trail
- IMPROVE Connectivity

Community Design Workshop

Closing Workshop

Map of Po‘ipū


Roundabout
Gateway
Bike Lane
Sidewalk
School Zone
Potential Formalized Parking
Bus Shelters
Gateway/ New Signage
Striped Pedestrian Path to Big Save
Potential Connection to Western Bypass
Bike/Ped. Connection to Western Bypass
Potential Connection to Western Bypass
Potential Future Roundabout
Potential Trail Connection To Western Bypass
Improved Pedestrian Crossings
Feet

Map of Po‘ipū

Roundabout

Intersection/Crossing Enhancements

Bike Lane

Sidewalk

Median

Potential Formalized Parking

Bus Shelters

II. Overarching Improvements

① **ADDRESS Design, Posted & Target Speed**

② **NARROW Travel Lanes**

③ **BUILD Additional Roundabouts**

④ **ADD Medians**

⑤ **ENHANCE Mid-block Crossings**

⑥ **COMPLETE Pedestrian & Bicycle Paths & Systems**

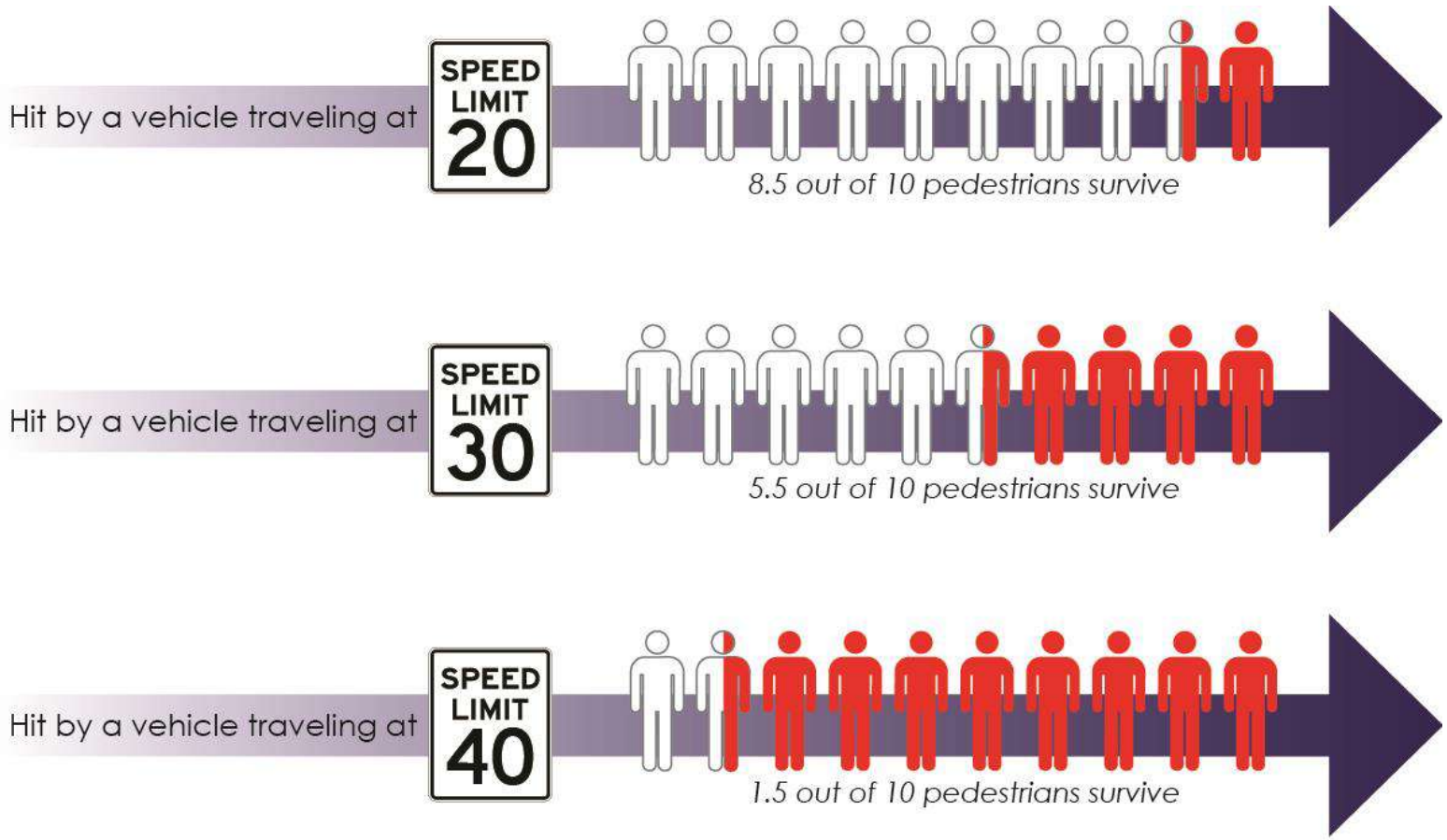
⑦ **ADDRESS Parking**

⑧ **IMPROVE Connectivity**

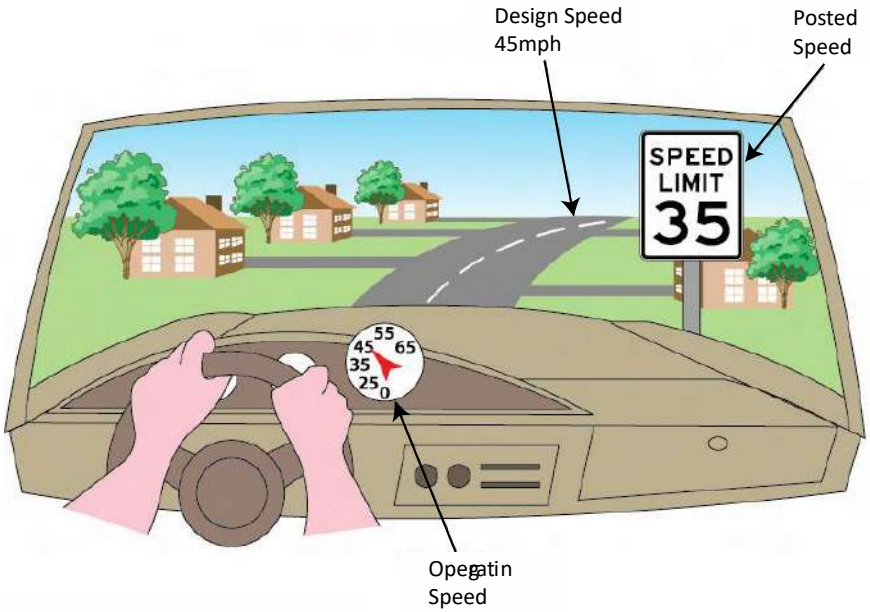
① ADDRESS Design, Posted & Target Speed

Vehicle Speeds are Too Fast

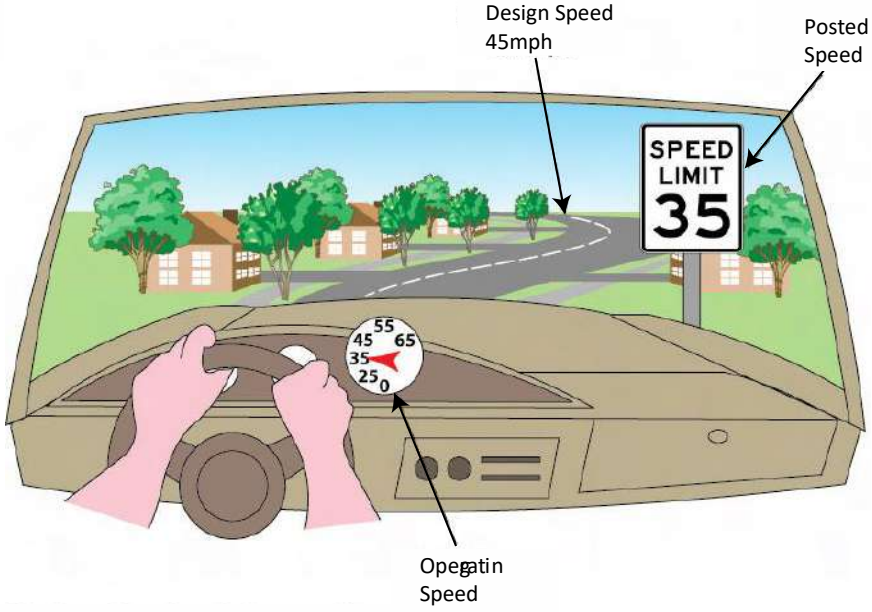
① ADDRESS Design, Posted & Target Speed



① ADDRESS Design, Posted & Target Speed



Conventional Design



Designing for Desired Operating Speed

① ADDRESS Design, Posted & Target Speed

The design of this roadway is consistent with the target speed desired. Note the treatments utilized:

- Sight distance
- Street trees
- Lane Widths
- Access density
- Median
- On-street Parking

① ADDRESS Design, Posted & Target Speed

Example: Nord Avenue, Chico, CA

① ADDRESS Design, Posted & Target Speed

Example: Nord Avenue, Chico, CA

① ADDRESS Design, Posted & Target Speed

Example: Nord Avenue, Chico, CA

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① ADDRESS Design, Posted & Target Speed

Example: Nord Avenue, Chico, CA

① ADDRESS Design, Posted & Target Speed

Example: Nord Avenue, Chico, CA


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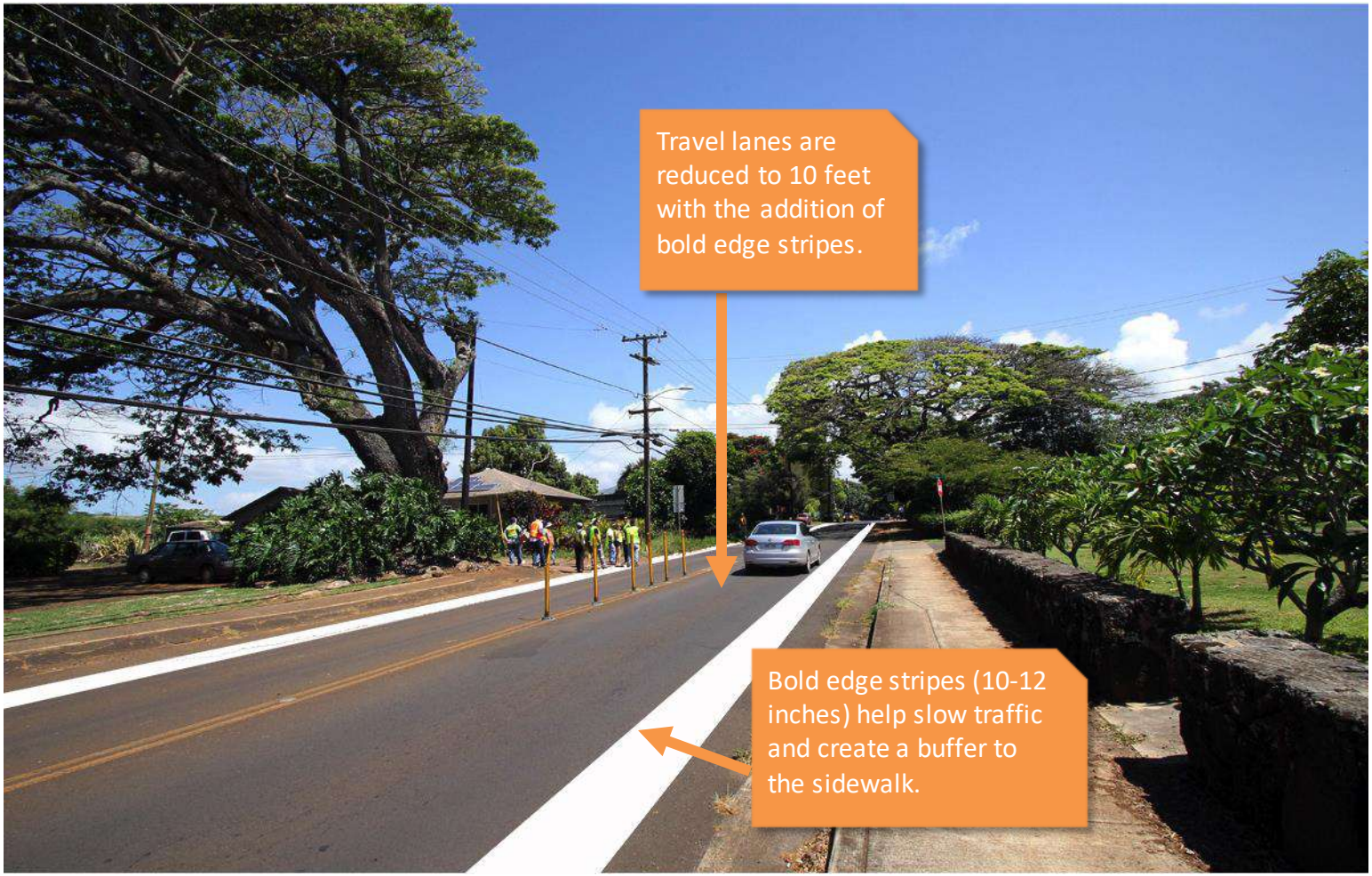
② NARROW Travel Lanes

Travel Lanes are Wide

② NARROW Travel Lanes



Bold Edge Stripes

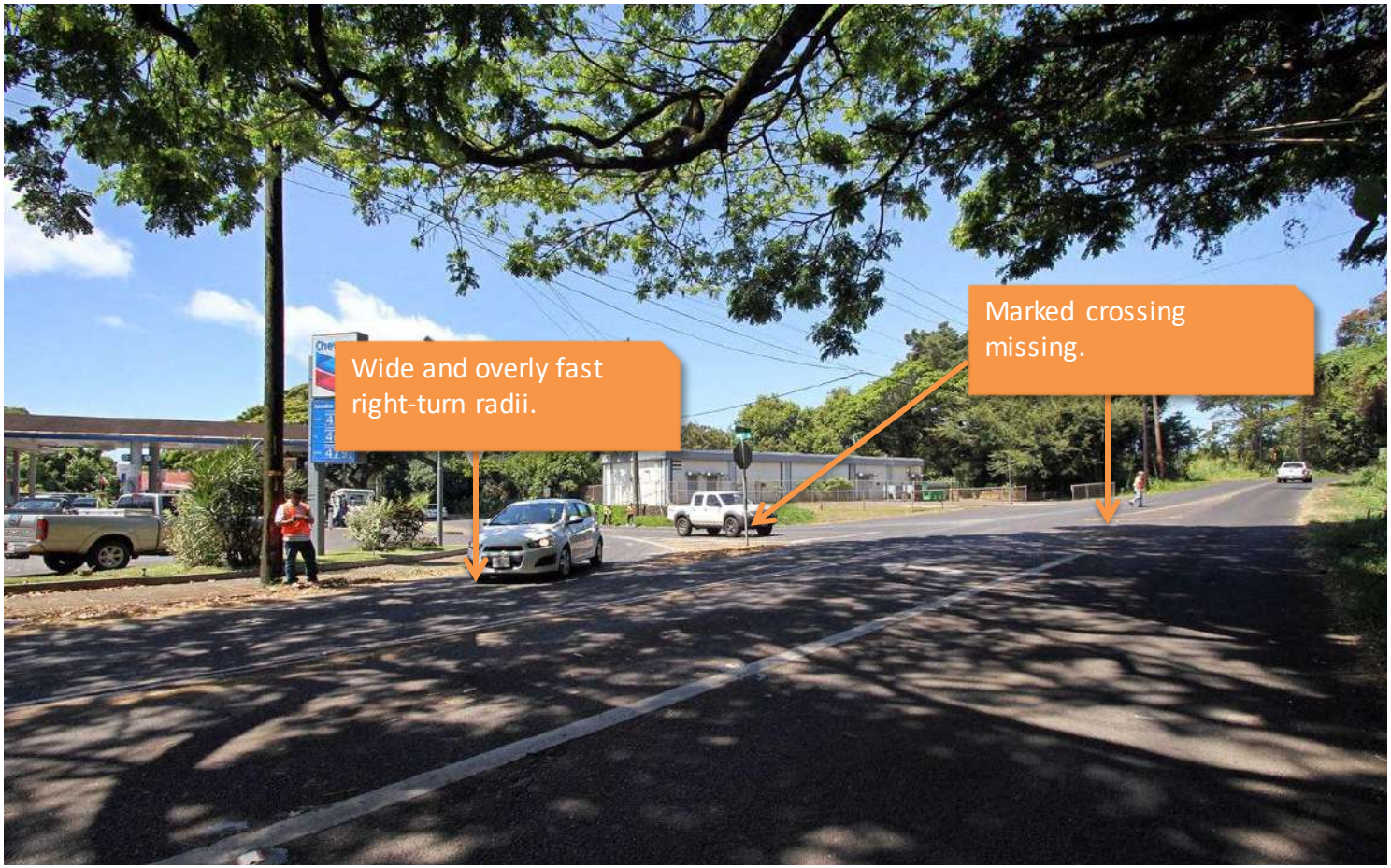
② NARROW Travel Lanes

Use Bold Edge Stripes

② NARROW Travel Lanes

Use Bold Edge Stripes

③ BUILD Additional Roundabouts

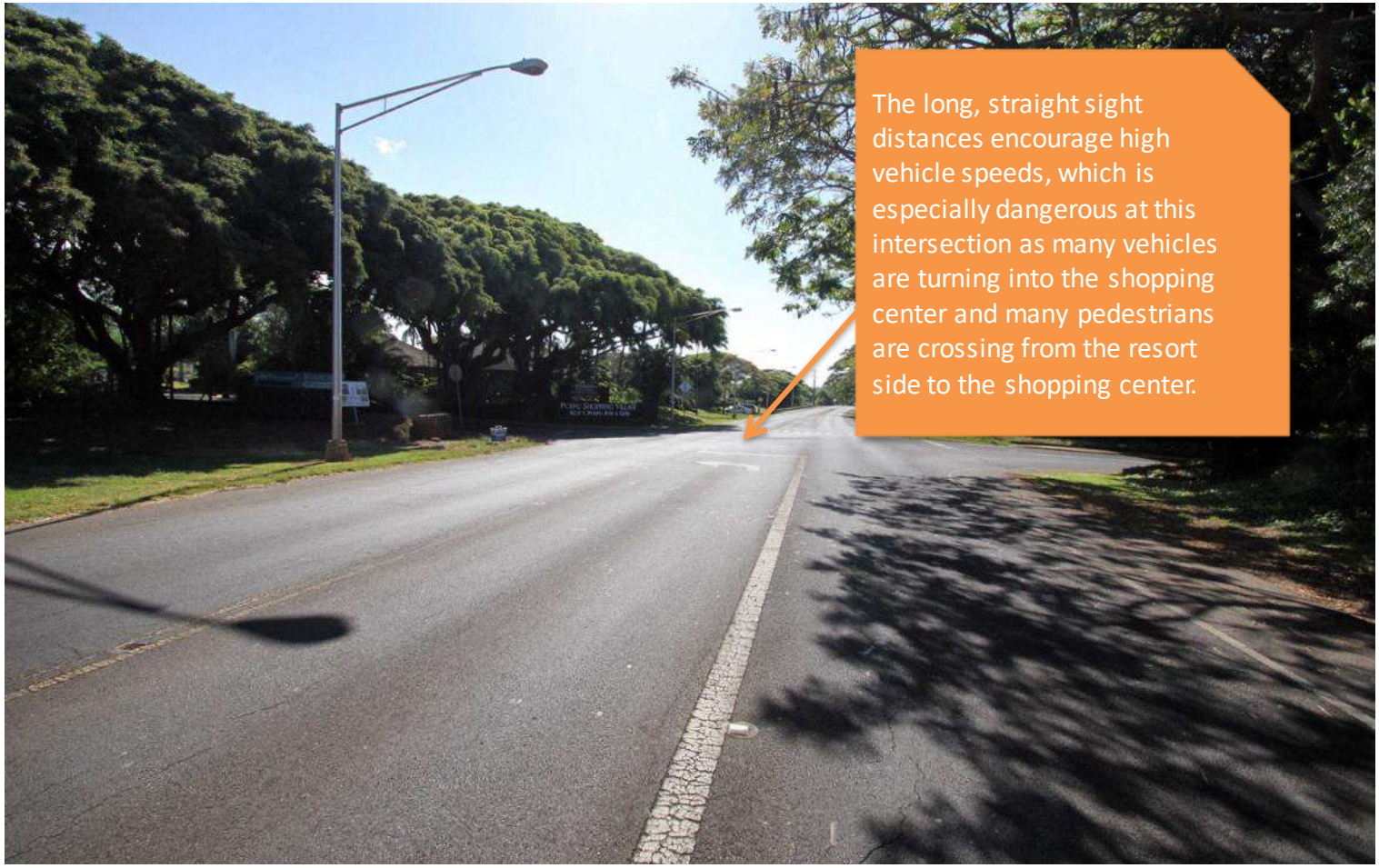


Complex Intersection at Po‘ipū Road & Kōloa Road

③ BUILD Additional Roundabouts

Missing Pedestrian Crossings at the Roundabout on Po'ipū Road

③ BUILD Additional Roundabouts



Complex Intersection at Po'ipū Road & Po'ipū Shopping Village

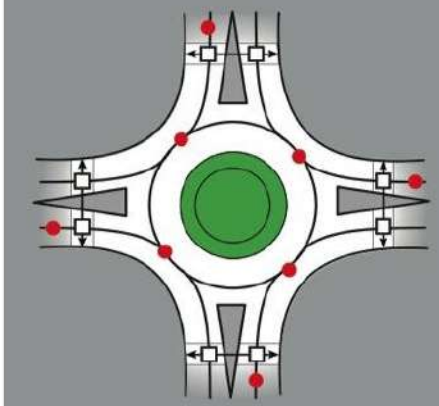
③ BUILD Additional Roundabouts

Complex Intersection at Po'ipū Road & Koa Kea Hotel

③ BUILD Additional Roundabouts

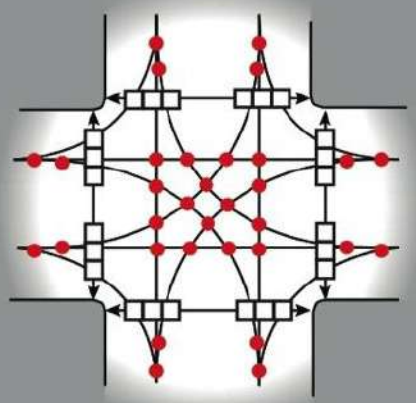
Complex Intersection at Po'ipū Road & Ala Kinoikii

③ BUILD Additional Roundabouts



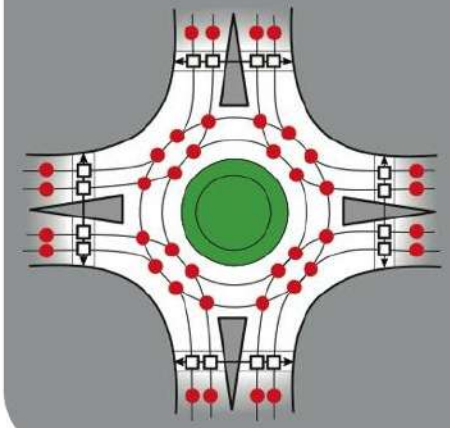
Conflicts at a single-lane, modern roundabout

- ● 8 vehicle-to-vehicle conflicts
- □ 8 vehicle-to-person conflicts



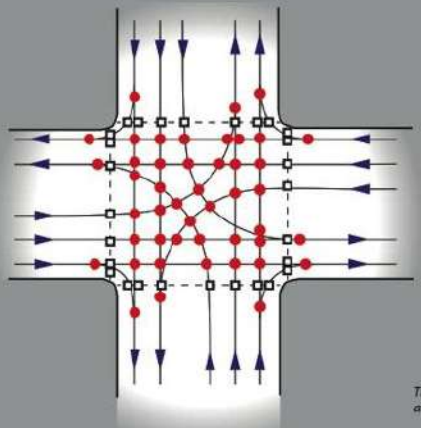
Conflicts at a conventional intersection with single lanes in each direction

- ● 32 vehicle-to-vehicle conflicts
- □ 24 vehicle-to-person conflicts



Conflicts at a double-lane, modern roundabout

- ● 24 vehicle-to-vehicle conflicts
- □ 16 vehicle-to-person conflicts



Conflicts at a conventional intersection with double-lanes and left-turn lane in each directionn

- ● 46 vehicle-to-vehicle conflicts
- □ 28 vehicle-to-person conflicts

The Walkable and Livable Communities Institute and Alternate Street Design

③ BUILD Additional Roundabouts

Studies show that roundabouts provide:

- *90% reduction in fatal crashes*
- *75% reduction in injury crashes*
- *30-40% reduction in pedestrian crashes*
- *10% reduction in bicycle crashes*

Increased capacity & reduced delay:

- *30-50% increase in traffic capacity*
- *Because drivers can take advantage of any gaps in traffic flow, there is less overall delay*
- *No signal equipment to install, repair and rebuild, which has a saving of $13,000 to $20,000 per year for every signalized intersection*
- *When storms or human error cause power outages, roundabouts still function*

Environmental benefits:

- *There is a reduction in pollution and fuel use*
- *There is less noise due to fewer stops and starts*

Aesthetics:

- *Roundabouts improve the visual quality and character through landscaping, sculptures and other celebrate place*

Vehicle speeds (under 25mph):

- *Drivers have more time to judge and react to other vehicles and pedestrians*
- *Conditions are easier for older and novice drivers*
- *Businesses have more exposure*
- *There is a reduction in the severity of accidents if they do occur*
- *All modes are safer and integrate better*
- *A gateway is formed which establishes place and provides traffic calming benefits*

③ BUILD Additional Roundabouts

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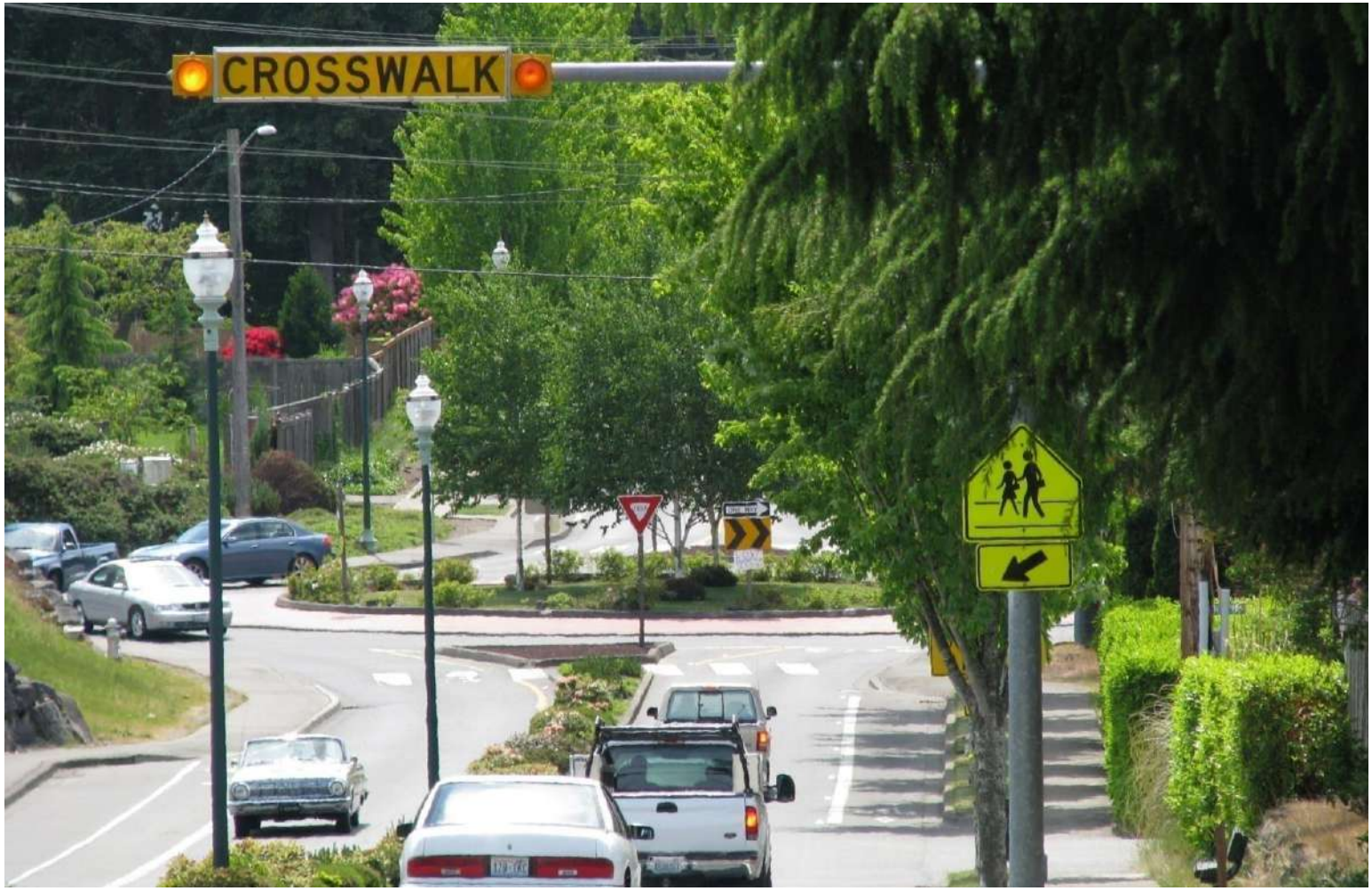
Best Practice: Bradenton Beach, FL

③ BUILD Additional Roundabouts



Best Practice: University Place, WA

③ BUILD Additional Roundabouts

Best Practice: Maui, HI

③ BUILD Additional Roundabouts

Best Practice: Maui County

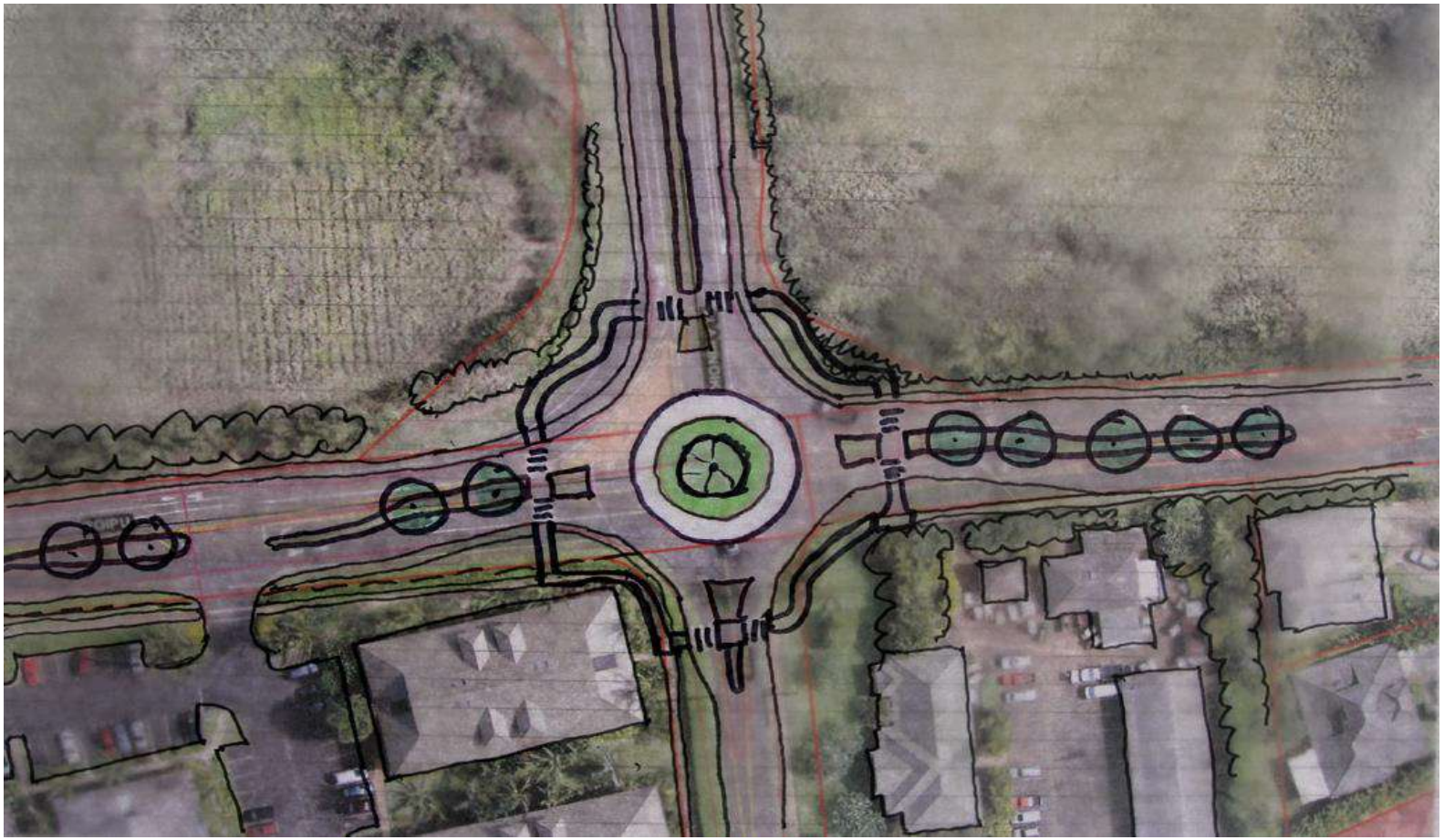
③ BUILD Additional Roundabouts

Crossings at Roundabouts

③ BUILD Additional Roundabouts

Crossings at Roundabouts

③ BUILD Additional Roundabouts



Vision for a Roundabout at the Intersection of Po'ipū Road & Ala Kinoikii

④ ADD Medians

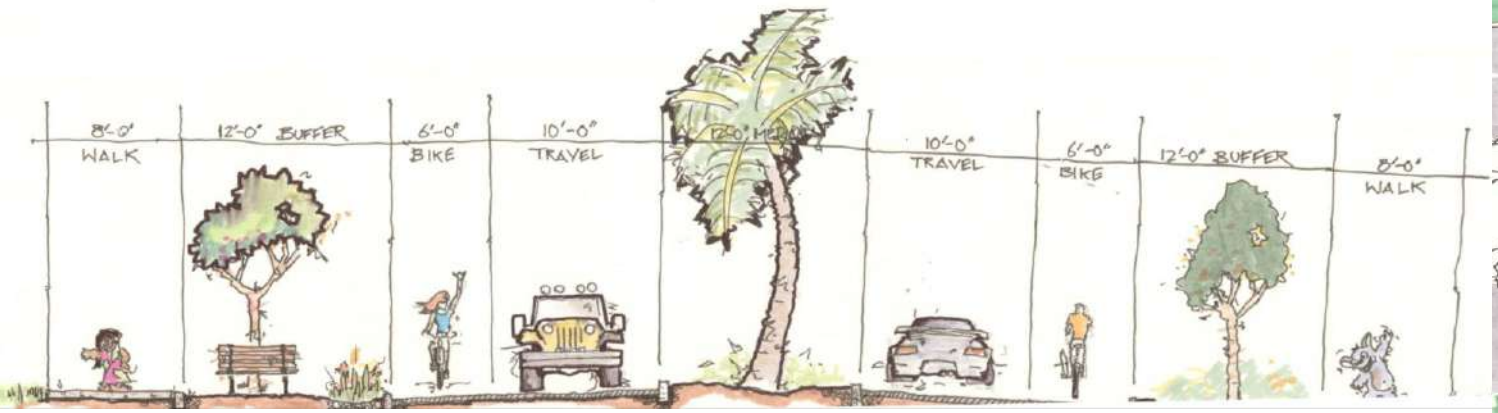
④ ADD Medians

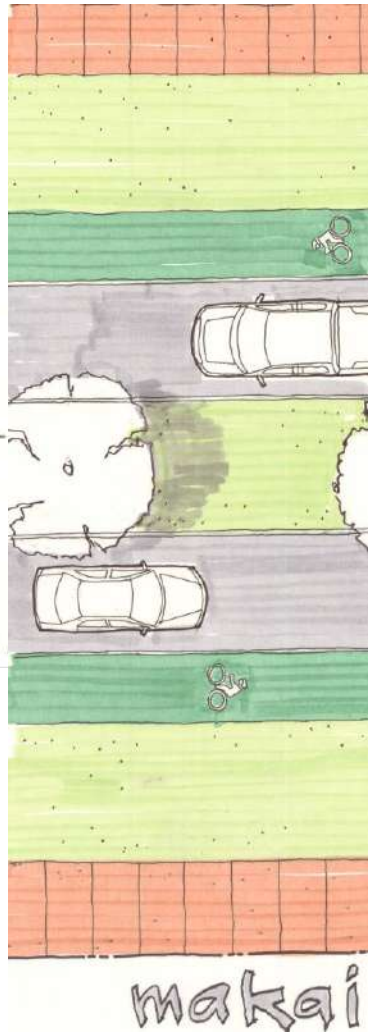
Landscaped Medians

④ ADD Medians

Short Medians

④ ADD Medians





Create Landscaped Medians

④ ADD Medians

Tree-lined Median

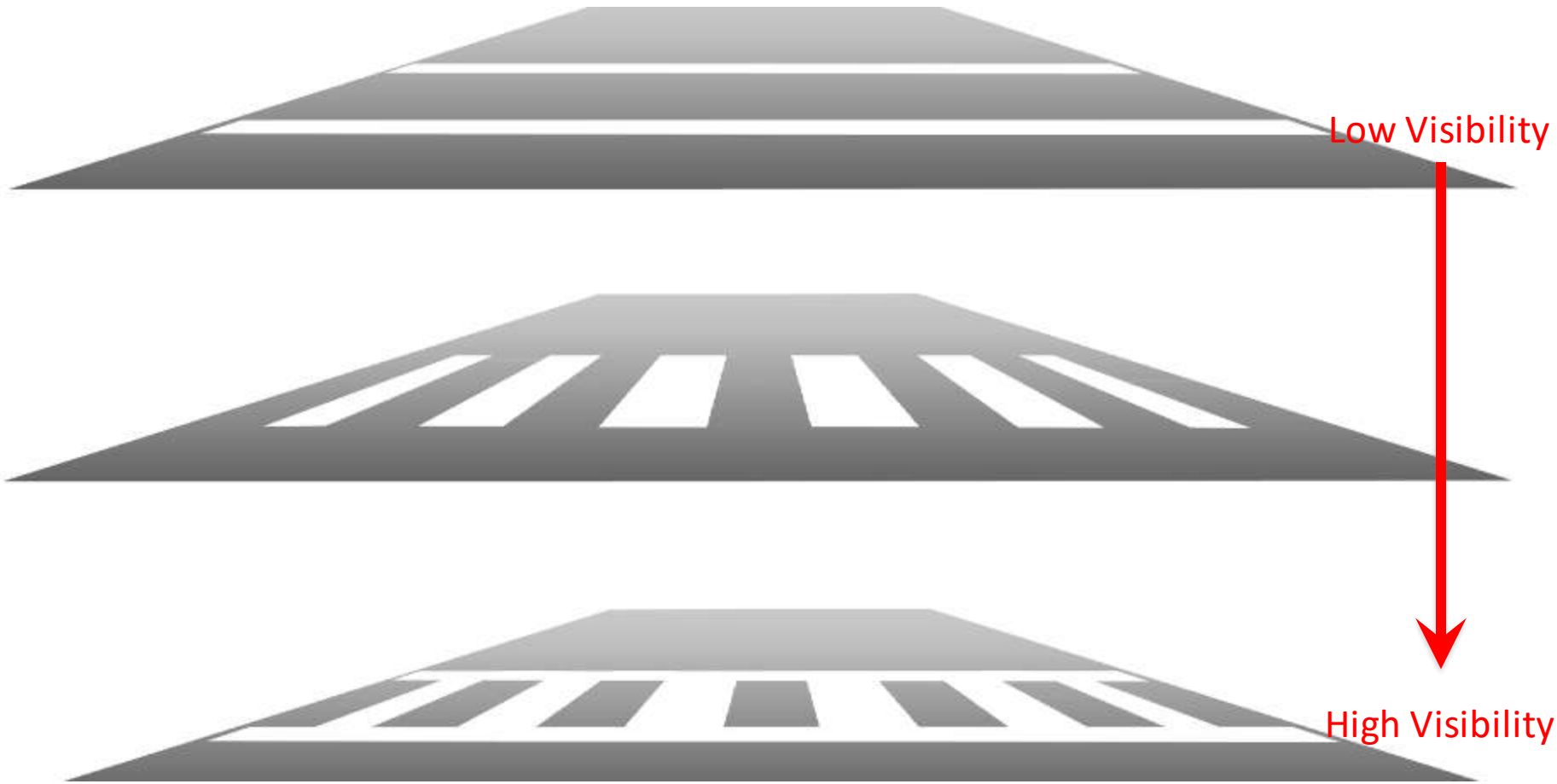
⑤ IMPROVE Crossings

Need for Midblock Crossing

⑤ IMPROVE Crossings

Enhanced Crossing Needed

⑤ IMPROVE Crossings



Crosswalk Marking Types

⑤ IMPROVE Crossings

Best Practice: El Cajon, CA

⑤ IMPROVE Crossings

Rectangular Rapid Flash Beacons (RRFB)

⑤ IMPROVE Crossings

Pedestrian Crossings Island

⑤ IMPROVE Crossings

Best Practice: Golden, CO

⑤ IMPROVE Crossings

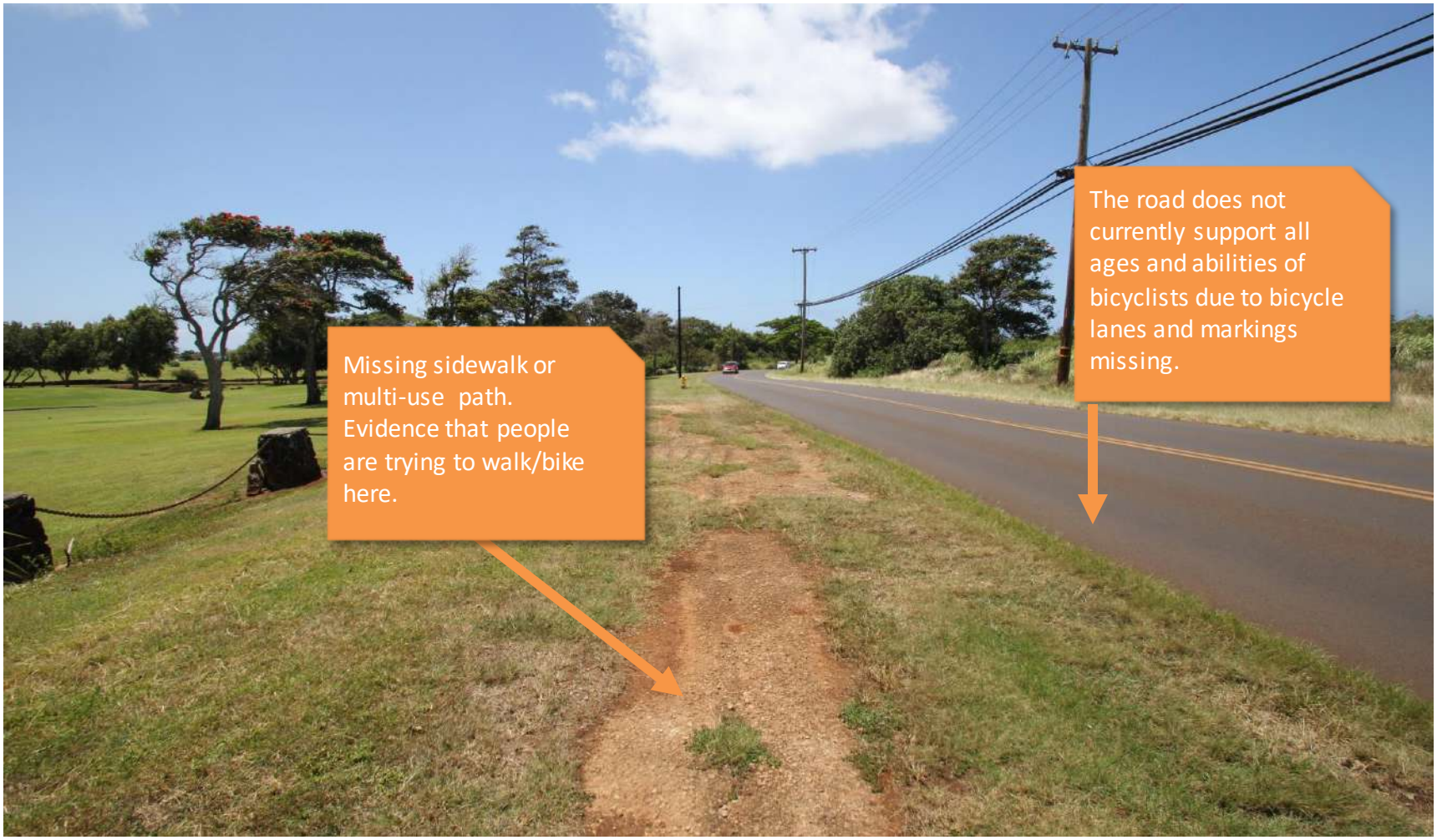
⑤ IMPROVE Crossings

Enhanced Midblock Crossing in Honolulu, HI

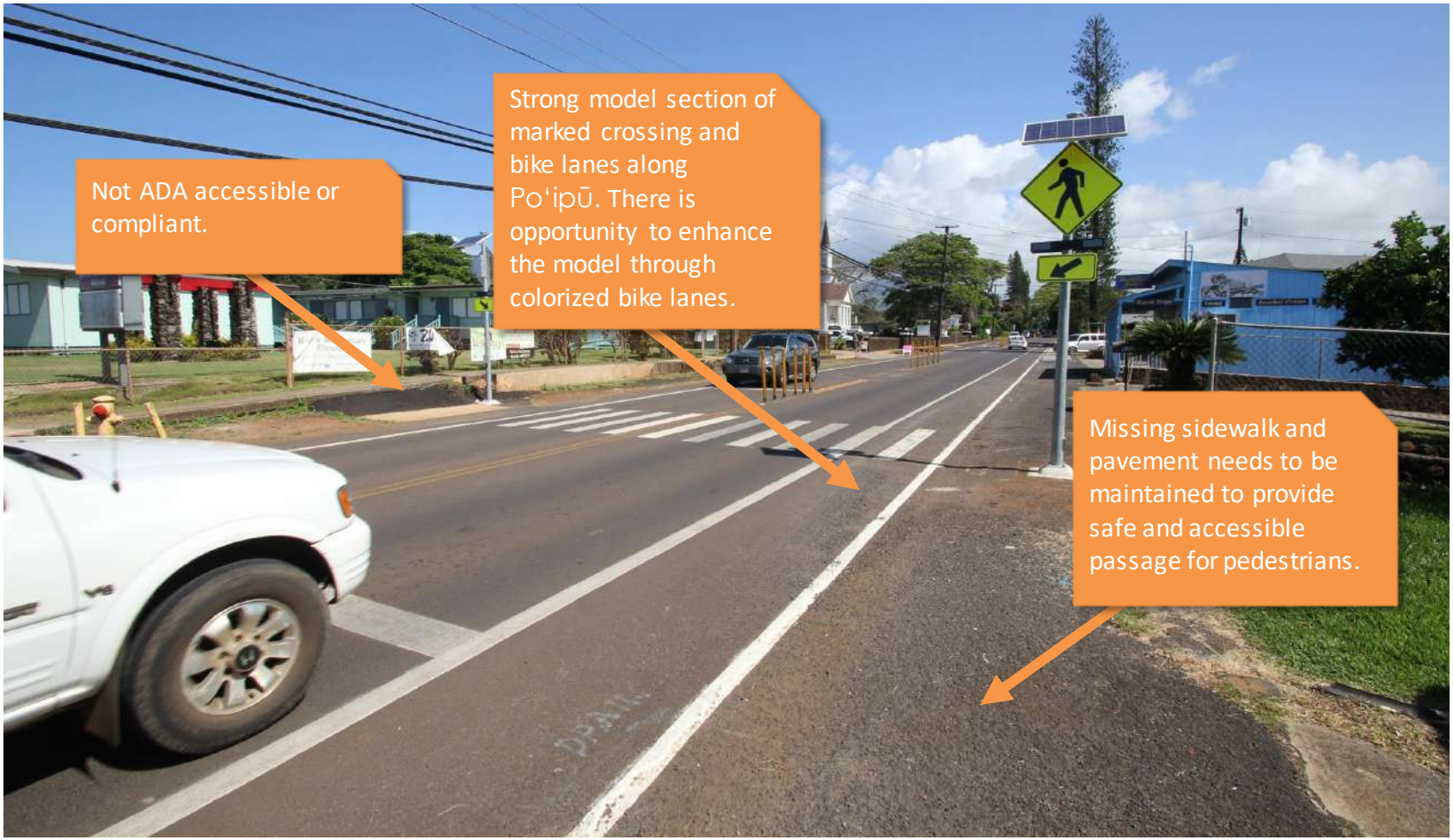
⑤ IMPROVE Crossings

Create a Midblock Crossing at the Intersection of Po'ipū Rd & Kipuka Rd

⑥ COMPLETE Pedestrian & Bicycle Paths & Systems



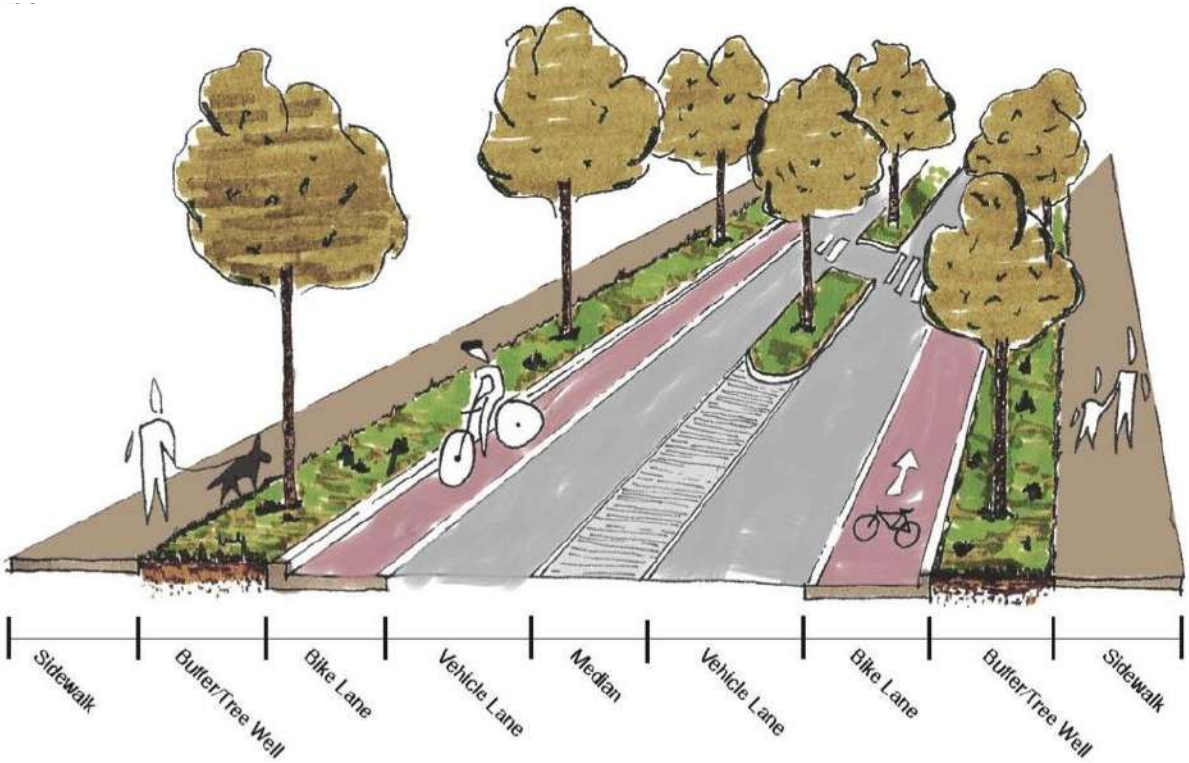
⑥ COMPLETE Pedestrian & Bicycle Paths & Systems



⑥ COMPLETE Pedestrian & Bicycle Paths & Systems

⑥ COMPLETE Pedestrian & Bicycle Paths & Systems

A Complete Street is a street designed for safe, comfortable and convenient travel for all users, whether they choose to travel by car, bicycle, public transportation, or on foot.



Trees: Tall trees of a species appropriate for the area are spaced 15 to 25 feet apart. The vertical wall helps calm traffic and encourages lower vehicle speeds.

Buffer: If the buffer includes trees, they should be set back from the curb at least four feet and the total buffer should be at least six feet.

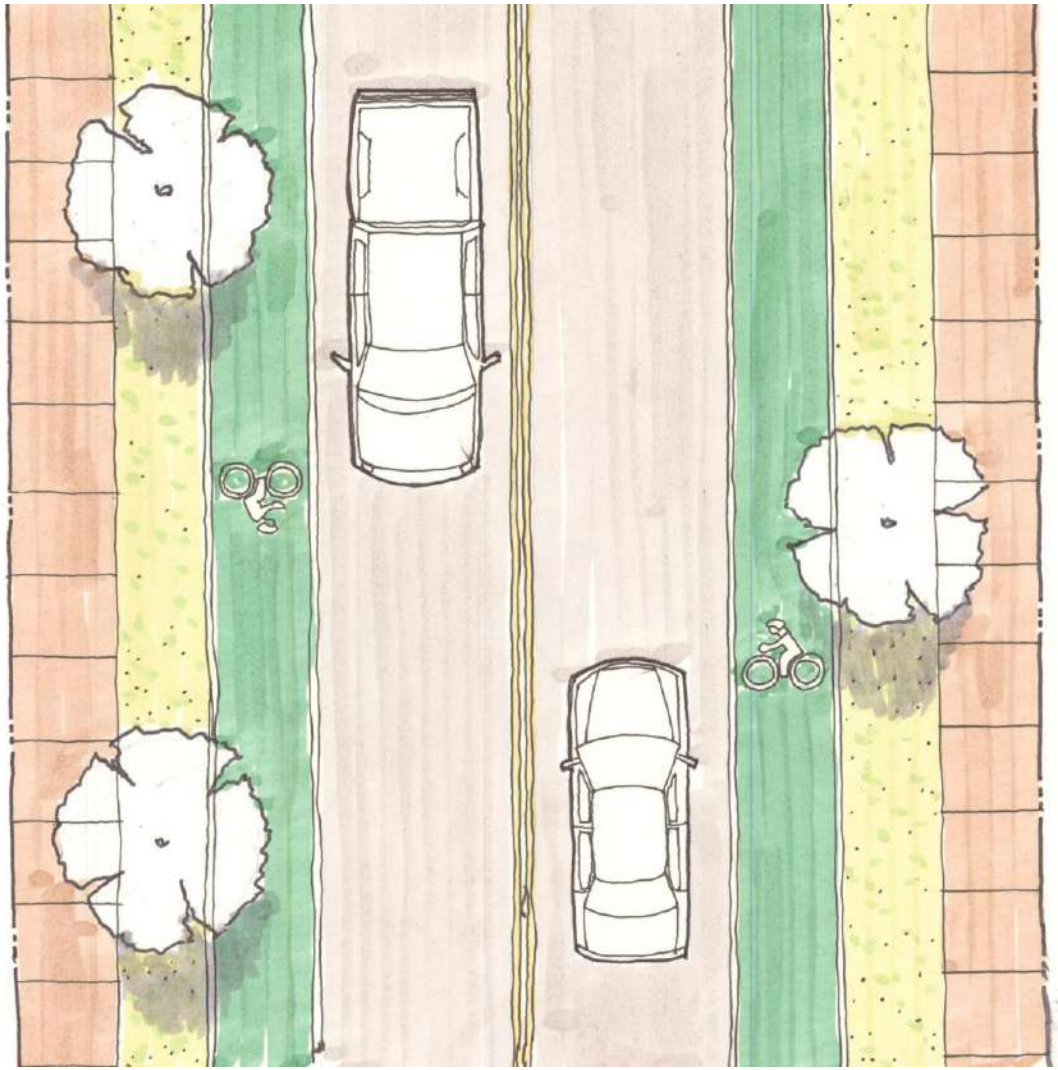
Bike lane: To function well, bike lanes should be at least six feet wide.

Wide stripes: Mark bike lanes with thermoplastic stripes eight to twelve inches wide.

Median widths: Medians typically are six to eight feet wide, but can vary to allow for landscaping, maintenance and adequate "refuge" for pedestrians crossing.

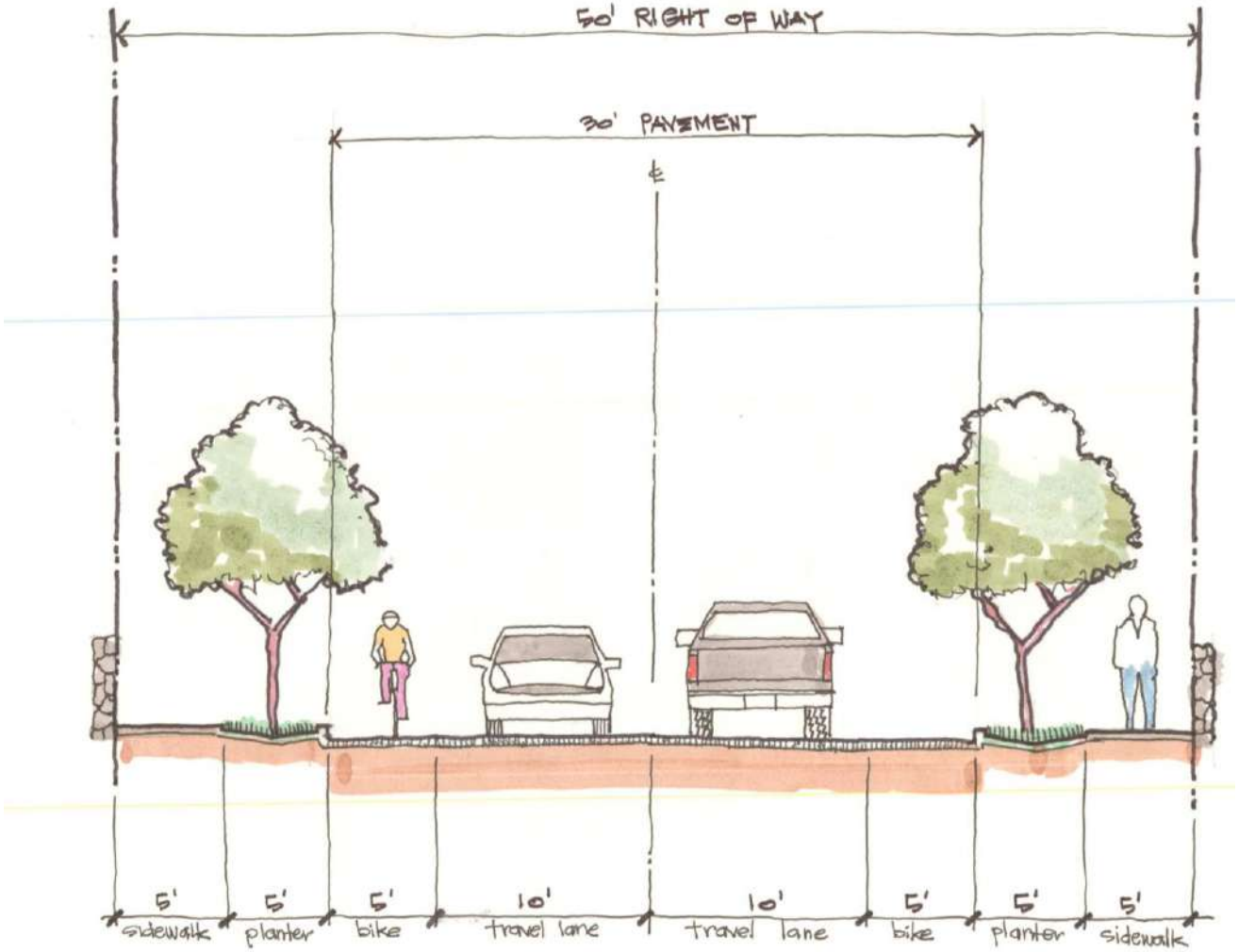
Vehicle lanes: Lane width analysis indicates that narrower lanes are associated with lower crash frequencies. Ten foot travel lanes reinforce a 25-35 mph design speed.

⑥ COMPLETE Pedestrian & Bicycle Paths & Systems



Create Colorized Bike Lanes and Sidewalks along Po'ipū Road from Kōloa Town to the Roundabout

⑥ COMPLETE Pedestrian & Bicycle Paths & Systems



⑥ COMPLETE Pedestrian & Bicycle Paths & Systems

⑥ COMPLETE Pedestrian & Bicycle Paths & Systems

Paint Colorized Bike Lanes

⑥ COMPLETE Pedestrian & Bicycle Paths & Systems

Paint Colorized Bike Lanes & Pave Pedestrian Path

⑥ COMPLETE Pedestrian & Bicycle Paths & Systems

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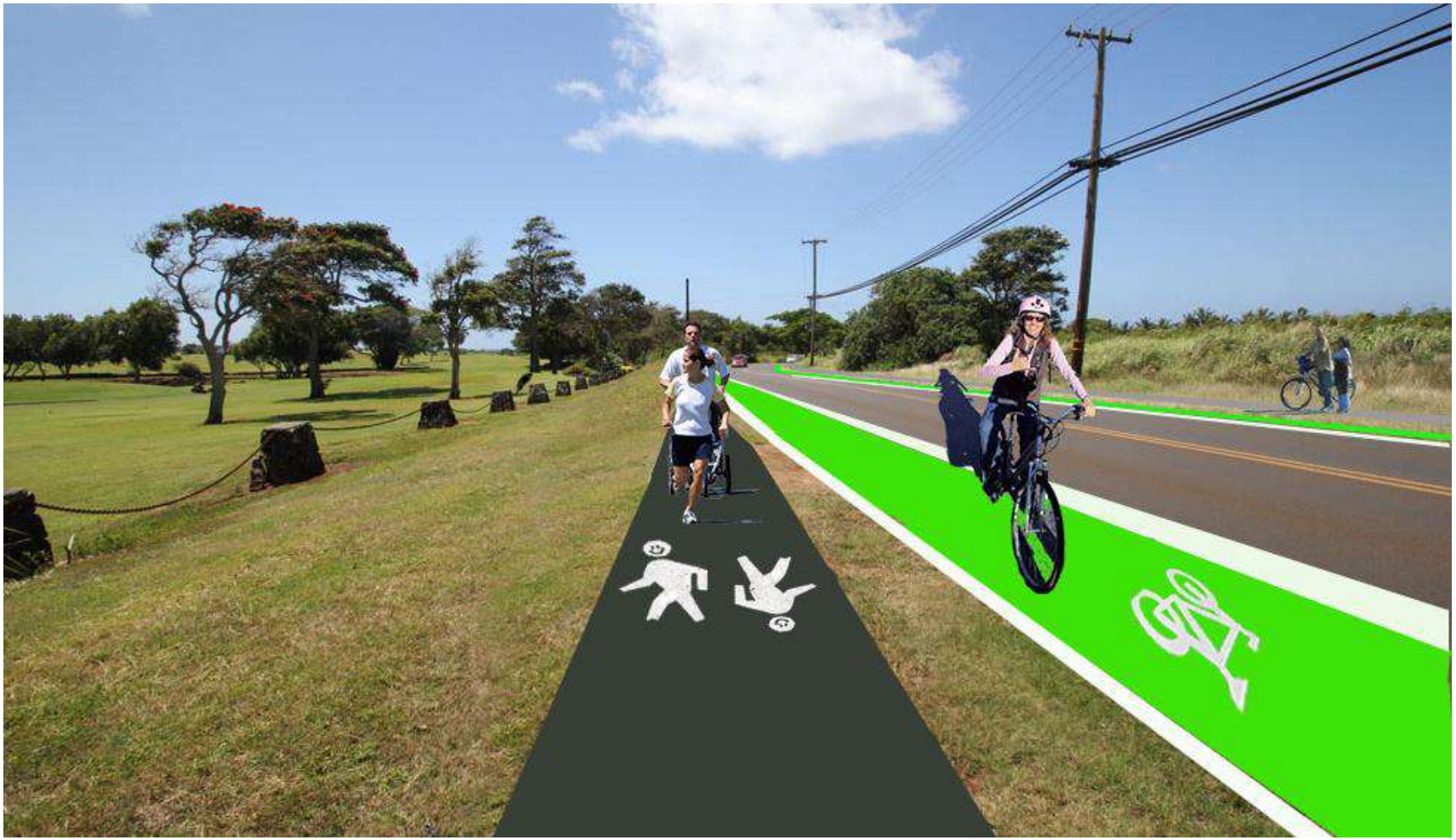

⑦ ADDRESS Parking

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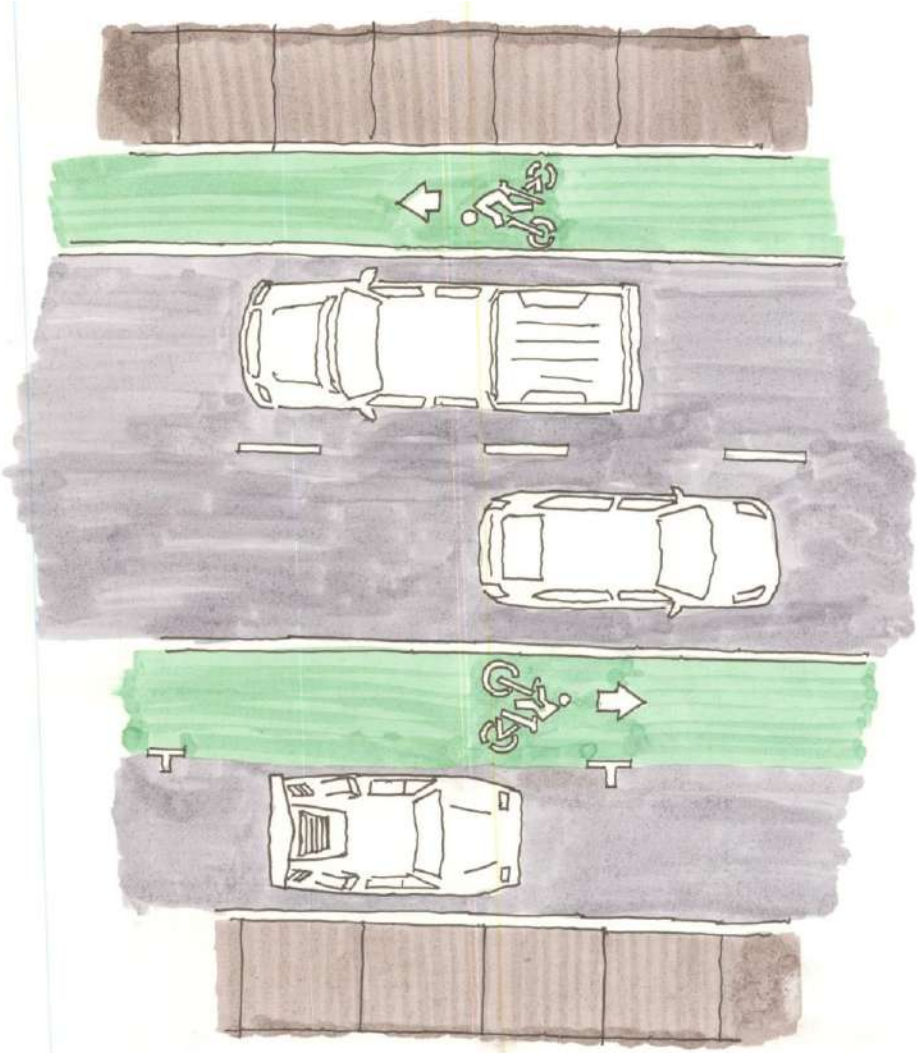
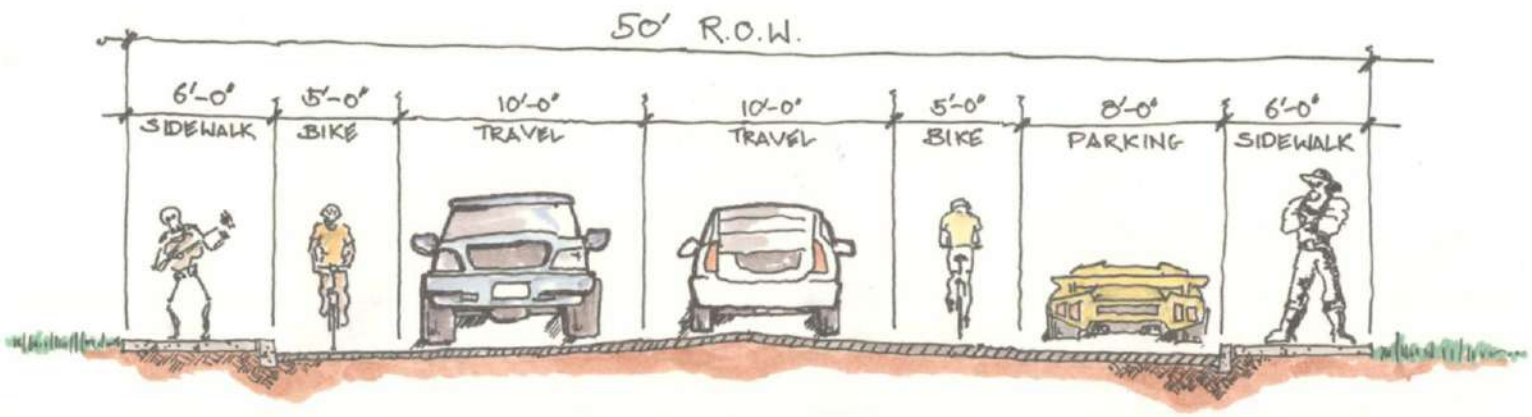
On-Street Parking with Tree Wells

⑦ ADDRESS Parking



On-street Parallel Parking on one side of Po'ipū Road near Kōloa Town

⑦ ADDRESS Parking



PO'IPU ROAD
AT MORTUARY

⑧ IMPROVE Connectivity

Opportunity to Convert Closed Road to a Ped/Bike Path

⑧ IMPROVE Connectivity

Opportunity to Convert Closed Road to a Ped/Bike Path

⑧ IMPROVE Connectivity

Best Practice: Multi-Use Path Humboldt County, CA

⑧ IMPROVE Connectivity

Best Practice: Multi-Use Path Humboldt County, CA

⑧ IMPROVE Connectivity

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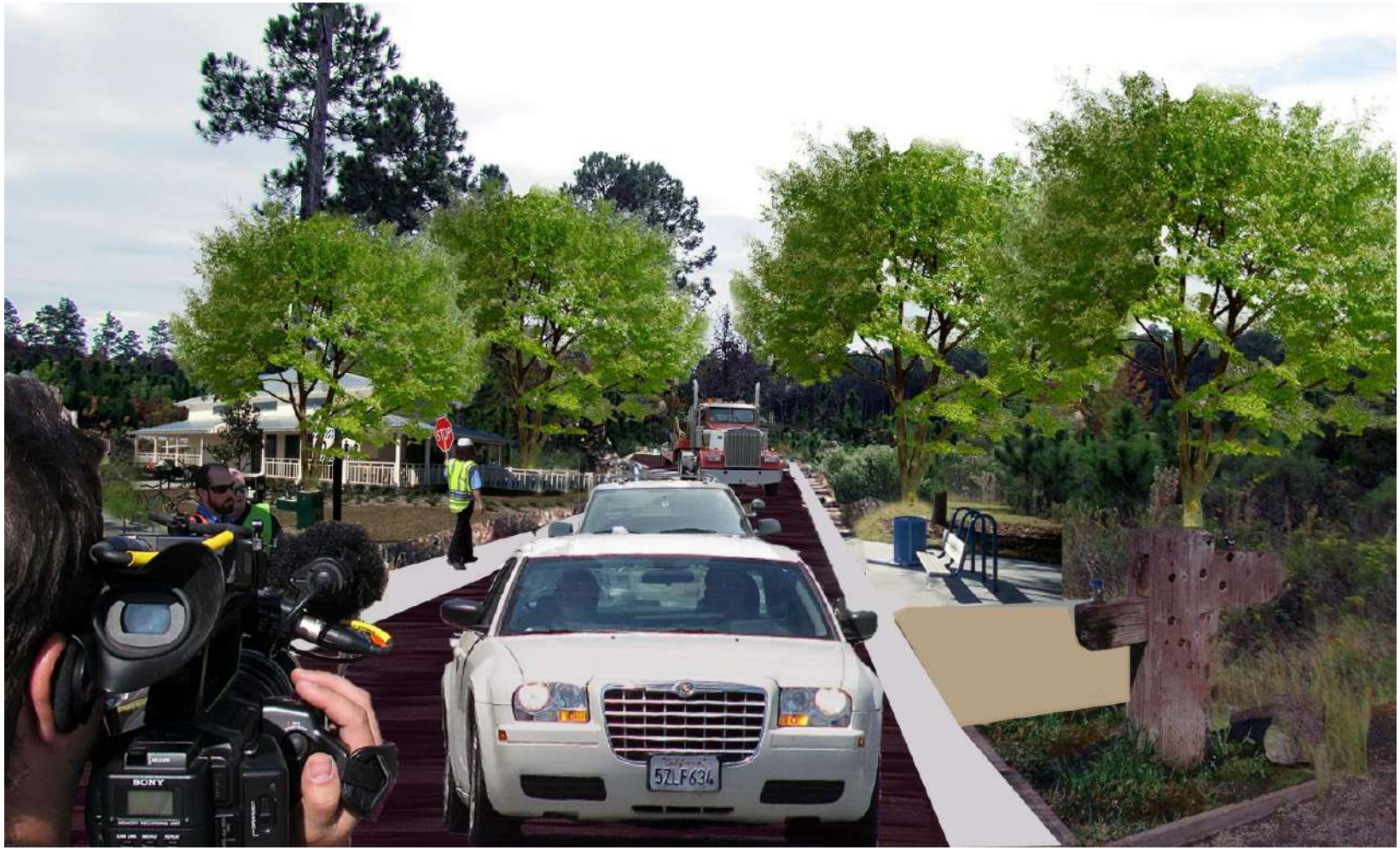

III. Next Steps

In progress:

- Complete striping of Po‘ipū Road at the Kōloa School and the Po‘ipū/Waikomo Road intersection, plans are to extend the bike lane and pedestrian walkway as far as possible.

- Po‘ipū Road “no parking” resolutions at Kiahuna Plantation Drive, Koa Kea entrance, and Keleka Road are in process of being presented at the County Council to be approved.

III. Next Steps

Short term (within 1 year):

- Complete striping of Waikomo Road pedestrian walkway.
- Apply for Safe Routes to School grants for sidewalk improvements in Koloa Town
- Revise directional signage at Kōloa Rd./Po'ipū Rd. intersection
- Striping revisions where feasible
- Develop request-for-proposal for design/engineering of Po'ipū Rd. corridor
- Bus shelter – 1 to start

III. Next Steps

Mid-term to Long-term:

- Consultants to complete PS&E – Plans, Specifications and Estimates, which includes the NEPA - environmental needs for Hawaii Dept. of Transportation check list to get project approved on the Statewide Transportation Improvement Program (STIP) for funding.
- Program the Construction on the STIP
- Detail plan for on-going maintenance
- Bus shelters will be installed as funding is available.

IV. Acknowledgements

We would like to extend a special Mahalo to all who participated in the Po‘ipū Community Design Workshop. The commitment demonstrated by the individuals and organizations is evidence that improving the walkability and livability of the community through a better built environment is a priority.

County of Kaua‘i Department of Public Works & Department of Planning
Get Fit Kauai
Kaua‘i’s Built Environment Task Force
Kōloa Fire Station Team
Po‘ipū Beach Resort Association
Kōloa School and Community Association
Hawaiian Cultural Group
Landowners
Property Owners
Po‘ipū and Kōloa Residents

What Do We Want to Protect & Preserve?

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