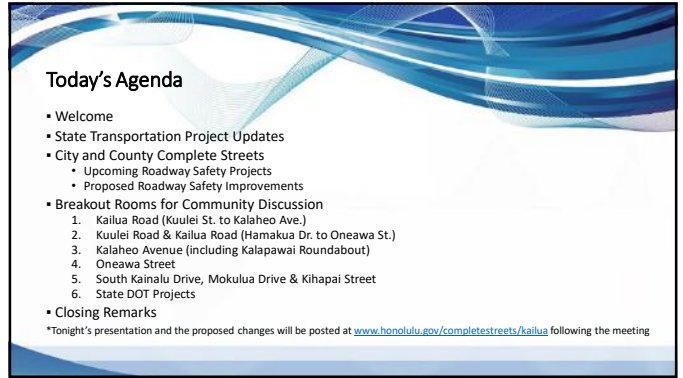
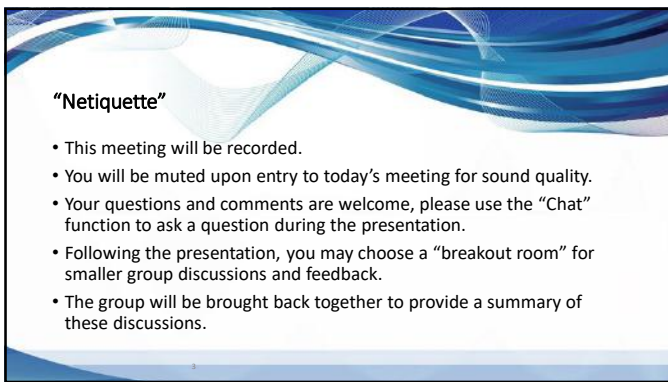




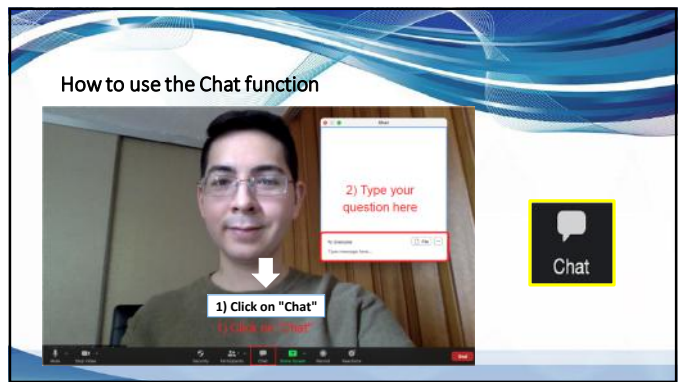
1



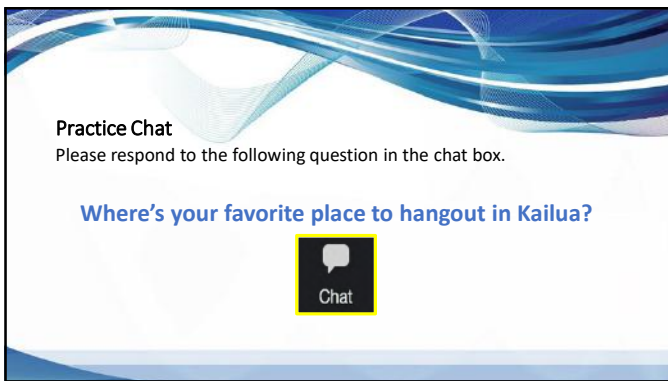
2



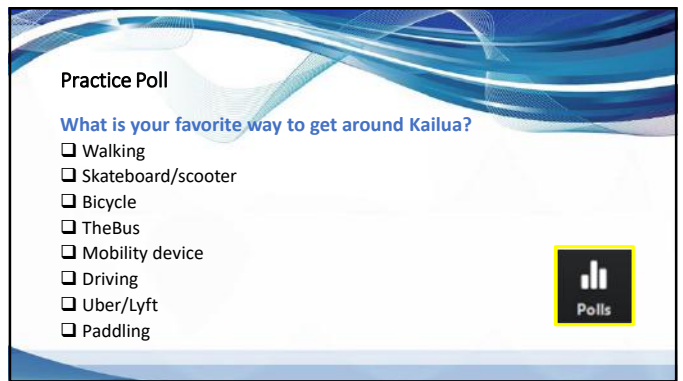
3



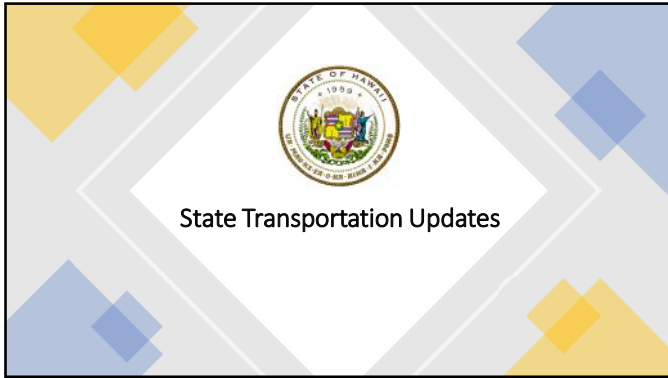
4



5



6



7



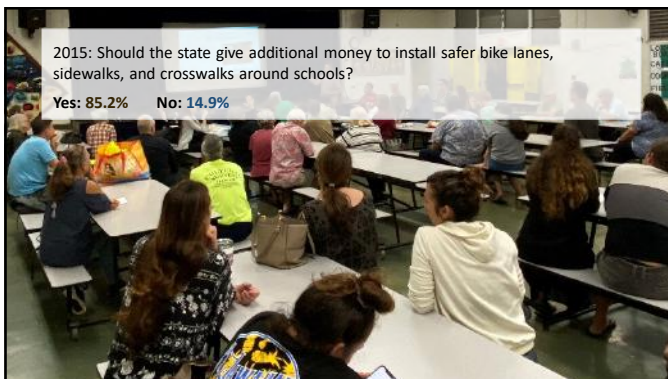
8



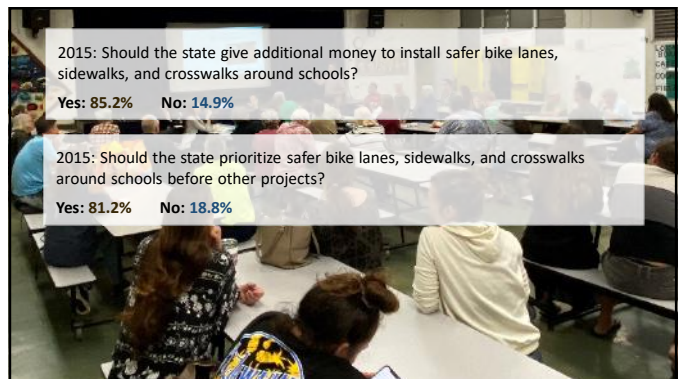
9



10



11



12

2015: Should the state give additional money to install safer bike lanes, sidewalks, and crosswalks around schools?
Yes: 85.2% No: 14.9%

2015: Should the state prioritize safer bike lanes, sidewalks, and crosswalks around schools before other projects?
Yes: 81.2% No: 18.8%

2021: Which should be the higher priority: projects that reduce injuries and fatalities for students walking and biking to school, or projects to better accommodate cars on Kailua roads?
Students: 59% Balance between both: 37% Cars: 4%

13

What's Been Happening

72% of voters passed a charter amendment that eventually led to the City and County of Honolulu establishing a complete streets program

State of Hawaii established complete streets and vision zero programs to reduce fatalities to zero

SB1402 modernizes Hawaii transportation

- Everyone pays, everyone should benefit
- Separate cars, bikes, pedestrians
- Prioritize safe routes to schools
- Vision zero

14

TRADITIONAL APPROACH
 Traffic deaths are **INEVITABLE**
 PERFECT human behavior
 Prevent **COLLISIONS**
INDIVIDUAL responsibility
 Saving lives is **EXPENSIVE**

VISION ZERO
 Traffic deaths are **PREVENTABLE**
 Integrate **HUMAN FAILING** in approach
 Prevent **FATAL AND SEVERE CRASHES**
SYSTEMS approach
 Saving lives is **NOT EXPENSIVE**

vs

How Helsinki and Oslo cut pedestrian deaths to zero
 After years of committed action, neither city recorded a single pedestrian fatality in 2019

Vision Zero! Norwegian Capital Completely Quashes Road Deaths
 Oslo aims to eliminate all pedestrian fatalities by 2028 and U.S. cities can learn from its example.
 By Andrew Rossiter - June 3, 2020

15

Highlights of Legislative Appropriations:

- 2014: \$14,000,000 for Pali Highway upgrades
- 2016: \$480,000 to help redesign the Kalapawai roundabout
- 2016: \$1,500,000 for Kalaniana'ole Highway improvements
- 2016: \$2,000,000 to improve safe routes to Kailua schools
- 2020: \$1,300,000 to improve safety on Kailua streets
- 2020: \$3,500,000 for Likiepke Highway upgrades
- 2021: \$5,200,000 for Pali Highway upgrades

16

BREAKING NEWS
BOYS WERE RIDING THEIR BICYCLE
 STRUCK BY SUV

DWIGHT KAU

17

01

City and County Complete Streets Update

Kailua
 COMPLETESTREETS

18

Complete Streets Law (ROH 14-33)

Every transportation facility or project, whether new construction, reconstruction, or maintenance, is an opportunity to implement complete streets policy and principles.

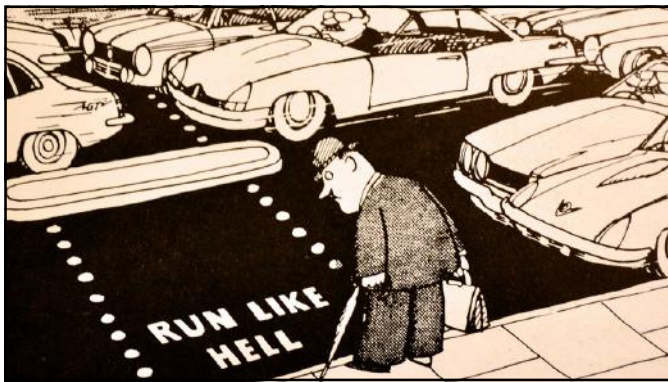
1. **Improve safety**
2. Apply **context-sensitive** solutions
3. Protect + promote **accessibility** and **mobility** for all
4. Balance the needs and comfort of **all modes** and users
5. Encourage consistent use of **national industry best practices**
6. Improve **energy efficiency** in travel and **mitigate emissions**
7. Encourage **opportunities** for physical activity
8. Recognize Complete Streets as a **long-term investment**
9. Build **partnerships** with stakeholders + organizations statewide
10. Incorporate **trees and landscaping**

Kailua
COMPLETESTREETS

19



20



21

Speed Kills

HIT BY A VEHICLE TRAVELING AT:	HIT BY A VEHICLE TRAVELING AT:	HIT BY A VEHICLE TRAVELING AT:
20 MPH	30 MPH	45 MPH
9 out of 10 pedestrians survive	6 out of 10 pedestrians survive	Only 1 out of 10 pedestrians survive

Kailua
COMPLETESTREETS

22

The Danger in Designing for Peak-Hour Traffic

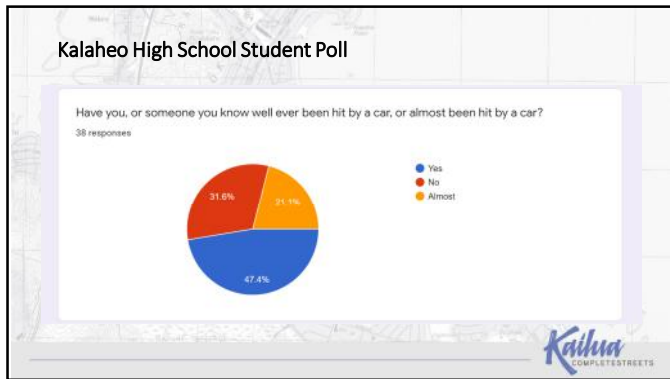
Kailua
COMPLETESTREETS

23

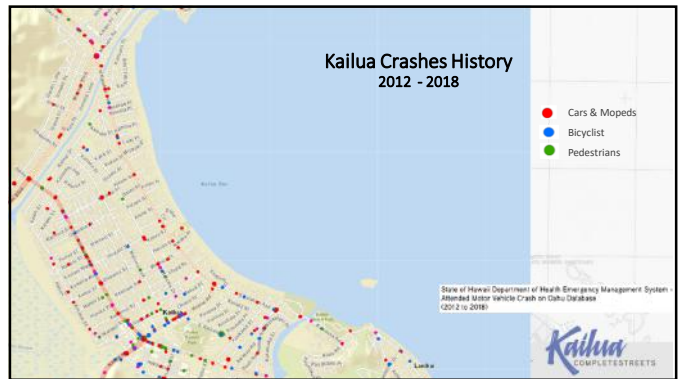
Oahu has the Nation's Worst Senior Pedestrian Fatality Rate

Kailua
COMPLETESTREETS

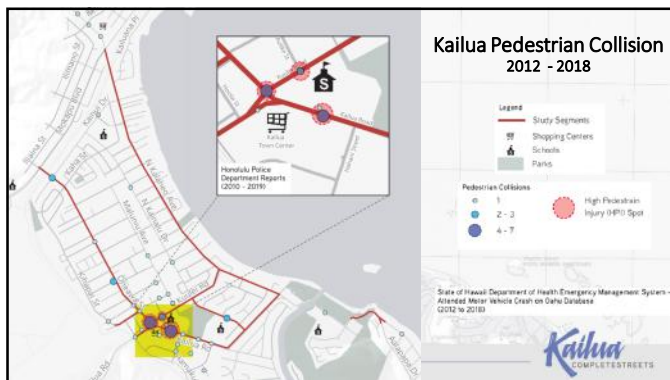
24



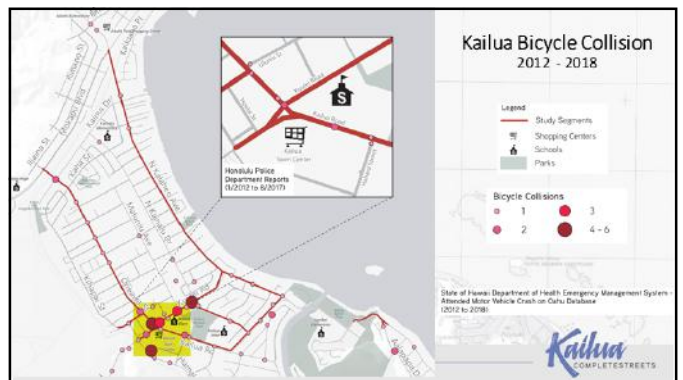
25



26



27



28

Polling Question 1

Which street(s) do you find most challenging to cross on foot?

- Oneawa Street
- Kailua Road
- Kalaheo Avenue
- Kuulei Road
- Other (note in the chat)

Kailua COMPLETESTREETS

29

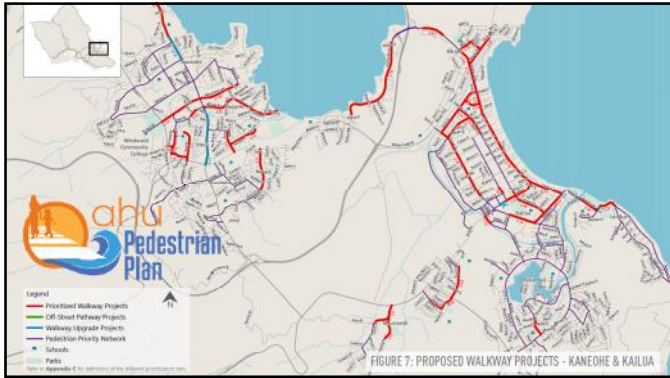
Polling Question 2

Which street(s) do you find most challenging when riding a bike?

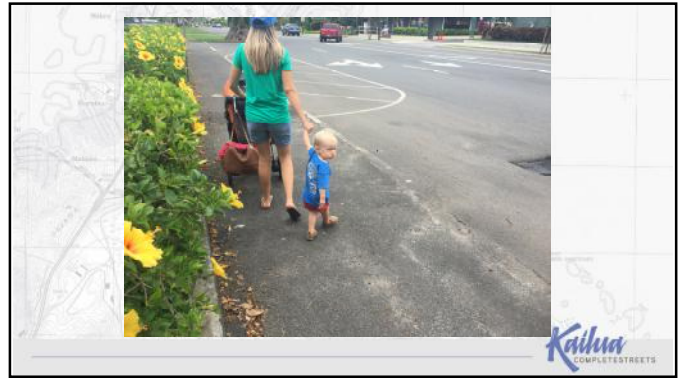
- Kailua Road
- Kuulei Road
- Oneawa Street
- Kalaheo Avenue
- Mokolua Drive
- Other

Kailua COMPLETESTREETS

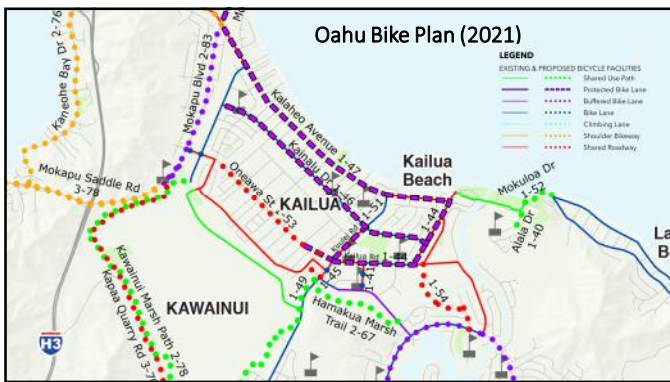
30



31



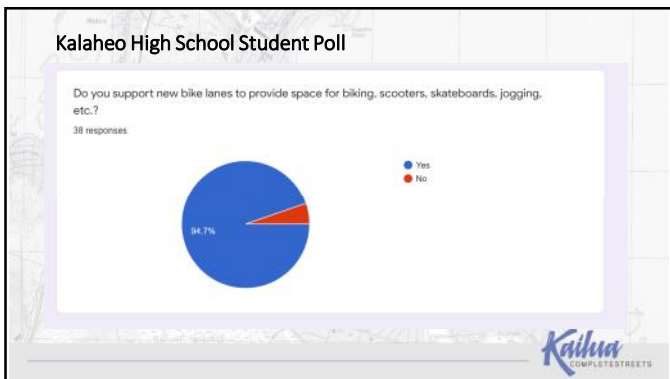
32



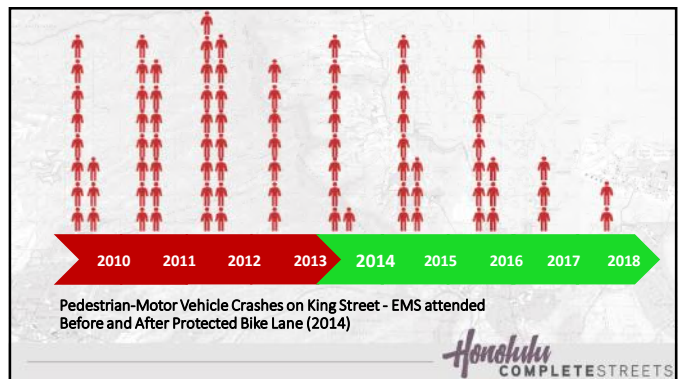
33



34



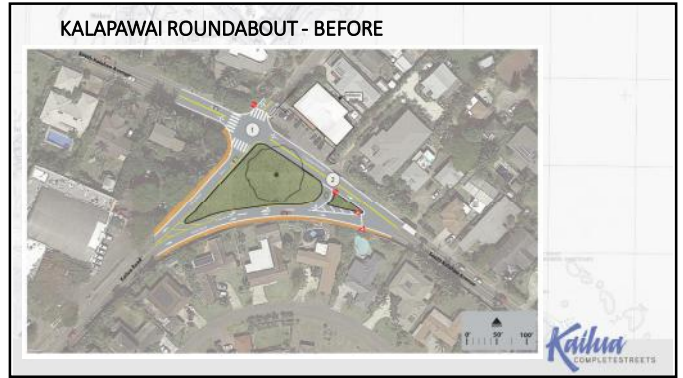
35



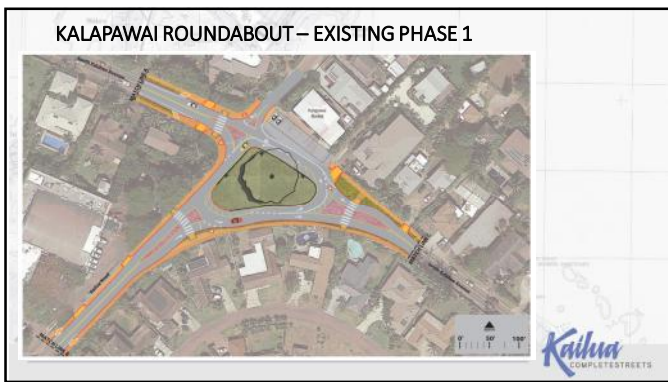
36



37



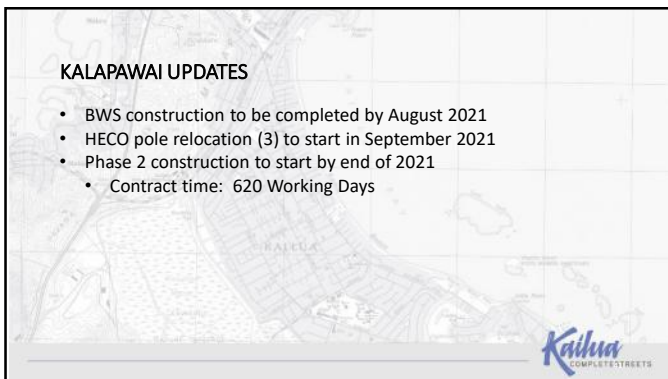
38



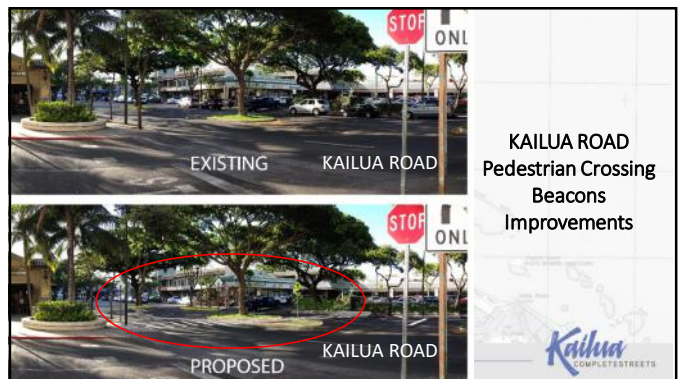
39



40




41




42

Pedestrian Crossing Beacon




- Pedestrian activated push button
- Strobe flashing lights
- Also known as a rectangular rapid flashing beacon (RRFB)
- DTS to start in June 2021
- Contract time: 150 Calendar Days




43

Aulike St./Kuulei Rd. Intersection Signalization



- High pedestrian-injury location
- New traffic signal to be installed
- Construction anticipated to start in 2022



44

02 Proposed Concepts






45

We Need Your Feedback

- Tonight we will present preliminary concepts developed in response to public concerns and ideas
- Prioritize improvements and funding
- Limited ROW (no land acquisition), competing interest, need to find balance
- Most improvements will be implemented in conjunction with future repaving projects
- Some opportunity for more immediate interventions



46

What Informed the Proposed Concepts?


- Crash Analysis
- Traffic Engineering Models
- School Observations
- Pop-Up at Kailua Farmer's Market
- Community Walk Audit
- In-person Community Meeting (2018)
- Business Survey
- Street Cross-Section Survey
- Business Outreach
- Stakeholder Meetings




47

Stakeholder Meetings

- Kailua Elementary School
- Kainalu Elementary School
- Ka'ohao Charter School
- Kailua Intermediate School
- Kalaheo High School
- St. Anthony's School
- Kailua elected officials
- Kailua Neighborhood Board
- Honolulu Police Department
- Honolulu Fire Department
- Emergency Medical Services
- State Department of Transportation
- State Department of Health
- Blue Zones Project
- Hawaii Bicycling League
- Alexander and Baldwin
- Kailua Urban Design Task Force
- Kailua Chamber of Commerce
- Department of Parks & Recreation
- Department of Planning & Permitting
- AARP



48

What Did We Hear?

COMMENTS HEARD

- "We often bike along Kuulei Road on the sidewalk; (it's) not safe to bike on Kuulei Road."
First Community Meeting
- "North Kalaheo is popular for runners, consider prioritizing pedestrian improvements."
KUOTF
- "Install flashing beacons at pedestrian crossings."
"I Love Kailua" Town Party
- "People ride (bicycles) on the wrong side of the road (Kailua Road)."
Pop-up Booth
- "Improve the pedestrian crossing at Hahani Street"
Community Meeting

49

Quick Build Improvements

Papii Road

North King Street

50

Interim Repaving + Restriping Treatments

- Lane changes
- Intersection/crossing upgrades
- Parking treatments
- Low-cost walkways + bicycle facilities

Protected Walkway Kailua & Kalaheo, Kailua	Protected Bikeway Sovi's St., Hanalei	Interim Roundabout Managers & Hoopa, Waipahu
Back-in Angled Parking & Lane Lines Uluka St., Aiea	Curb Extensions King & Jernberg, Mo'orea	

51

Full Right-of-Way Reconstruction

- Higher quality materials for intersection and crossing improvements
- New or upgraded sidewalks
- Landscaping + green infrastructure
- Signal upgrades + ADA accommodations
- Curb ramps + ADA accommodations

Bikeway Protection Washington, DC	Sidewalks, Medians & Raised Crossings Kalaheo St., Waipahu
Single-lane Roundabout Lili'u'e, Kauai County	Landscaping & Street Trees Kailua Rd., Kailua

52

Stormwater Quality + Street Trees

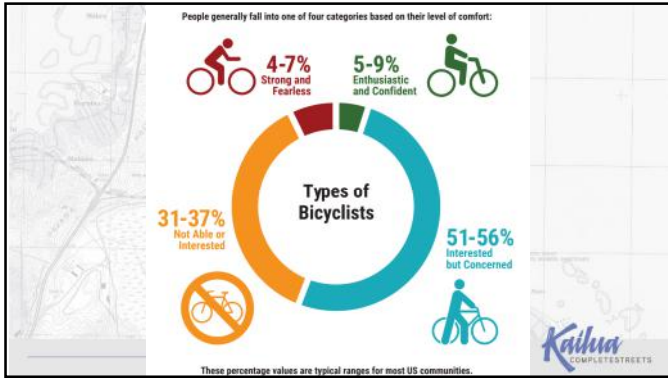
New trees on Oneawa Street	Permeable paver blocks installed in Chinatown curb extensions	Waipahu Transit Center tree root support structure installation
----------------------------	---	---

53

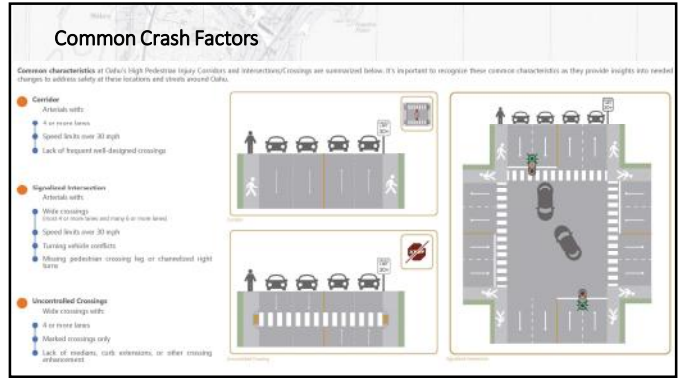
Two-Way Protected Bikeway/Shared-Use Paths

Low profile curb	Delineator posts on South Street
------------------	----------------------------------

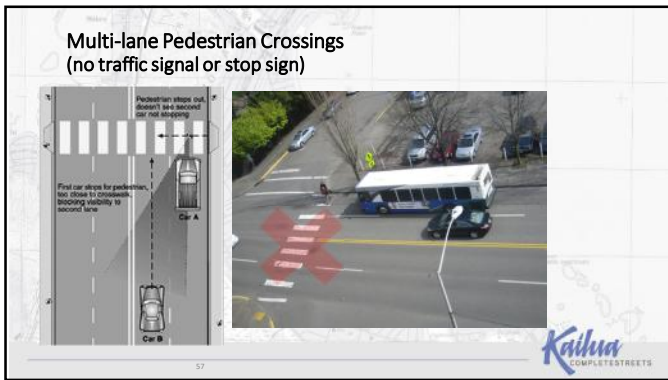
54



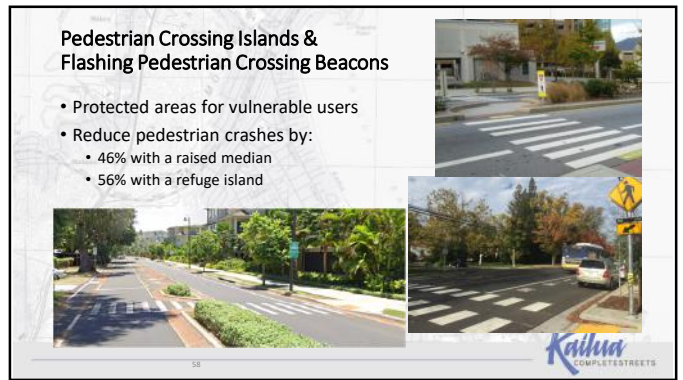
55



56



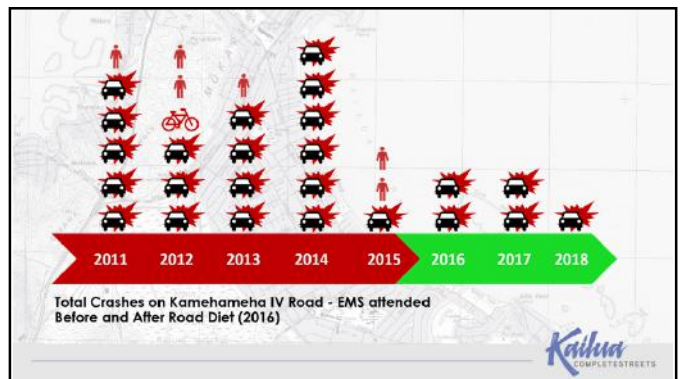
57



58



59



60

Curb Extensions







- Protected areas for vulnerable users
- Reduce all crashes by 30%

Kailua
COMPLETESTREETS

61

All-Way Pedestrian-Only Phase






- Benefits include:
 - 34% reduction in pedestrian crashes
 - No conflicts between turning vehicles and pedestrians
 - Especially effective at smaller intersections

Kailua
COMPLETESTREETS

62

Roundabouts



- Benefits:
 - 78% reduction in severe crashes with signal to roundabout conversion
 - Reduced vehicle delay
 - Less idling and braking
 - Moderated speeds
 - Safer pedestrian crossings
 - Community gateway feature

Kamakana/Hinakea Street, Ewa Beach, HI

Kailua
COMPLETESTREETS

63

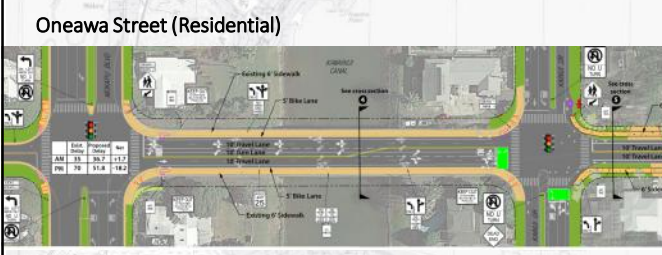
Oneawa Street



Kailua
COMPLETESTREETS

64

Oneawa Street (Residential)



- Retain turn lanes exiting Kailua.
- Provide high school students bike lanes to Kalaheo High School.
- Sidewalk continues past Kaimui Drive.

Kailua
COMPLETESTREETS

65

Oneawa Street (Residential)




- Within the school zone provide sidewalks for pedestrian safety.
- Bike lane extended to Kaha Street.
- Transit stop upgrades.

Kailua
COMPLETESTREETS

66

Polling Question 6

Do you support new pedestrian crossing islands to keep the uncontrolled marked crosswalks on the multi-lane section of Oneawa Street?

- Like it
- Mostly like, but needs some adjustments
- Don't care
- Do not like

Kailua
COMPLETESTREETS

73

Kailua Bike Network and Superblock

Kailua
COMPLETESTREETS

74

Kailua Road

1. Pedestrian crossing beacon at crosswalk fronting Whole Foods.
2. Maintain 2 travel lanes in each direction.
3. Provide a two-way protected bike lane on the makai side.
4. Improve driveway sight distance and vehicular safety by removing 12 on-street parking spaces.
5. Consider extending the median to limit turning vehicle conflicts.

Kailua
COMPLETESTREETS

75

Kailua Road

1. Pedestrian scramble at Hahani Street intersection.
2. Separate pedestrian and vehicular movements.
3. Extend sidewalk on makai side.
4. Maintain travel and turn lanes in existing configuration.
5. Bus boarding across the two-way protected bikeway.
6. Two-way protected bikeway/shared-use path on Kailua (makai), S Kainalu, & Kuulei.

Kailua
COMPLETESTREETS

76

Hahani Street Pedestrian Counts	AM Peak Hour	PM Peak Hour
Weekday	91	165
Weekend	308	687

Kailua
COMPLETESTREETS

77

Polling Question 7

How do you like the proposed sidewalk and path improvements along Kailua Road?

- Like it
- Ok, but needs some adjustments
- Don't care
- Do not like

Kailua
COMPLETESTREETS

78

Polling Question 8

How do you feel about the changes proposed for the Kailua Road/Hahani Street intersection?

- Like it
- Ok, but needs some adjustments
- Don't care
- Do not like

Polls

Kailua COMPLETESTREETS

79

Kailua Road

- Larger island to accommodate pedestrians and bicyclists
- Continuous two-way shared-use path to Kalaheo Avenue

Kailua COMPLETESTREETS

80

Kuulei Road

Kailua COMPLETESTREETS

81

Kuulei Road

Long Crosswalk

No Bike Lanes

Missing Sidewalks

Kailua COMPLETESTREETS

82

Kuulei Road

- Safe routes to school corridor (Kailua Elementary School)
- Shorter pedestrian crossings
- Protected two-way bikeway on school side
- Bus stop relocated and improved bus boarding
- Parking retained
- Signalization of Aulike Street
- 3-lane cross section makai of Aulike Street
- Retained capacity at the signal

Kailua COMPLETESTREETS

83

Kuulei Road

- 4 lanes to 3 lanes to reduce potential conflicts.
- Sidewalk on north side to continue to Kainalu Drive.
- Shorter pedestrian crossings.
- Parking retained.

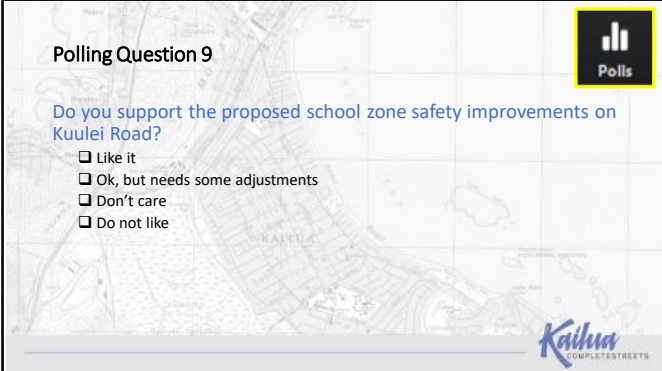
Kailua COMPLETESTREETS

84

Polling Question 9

Do you support the proposed school zone safety improvements on Kuulei Road?

- Like it
- Ok, but needs some adjustments
- Don't care
- Do not like



Kailua
COMPLETESTREETS

85

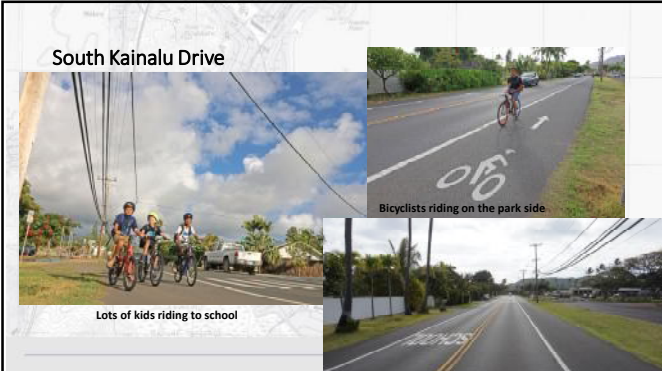
South Kainalu Drive



Kailua
COMPLETESTREETS

86

South Kainalu Drive



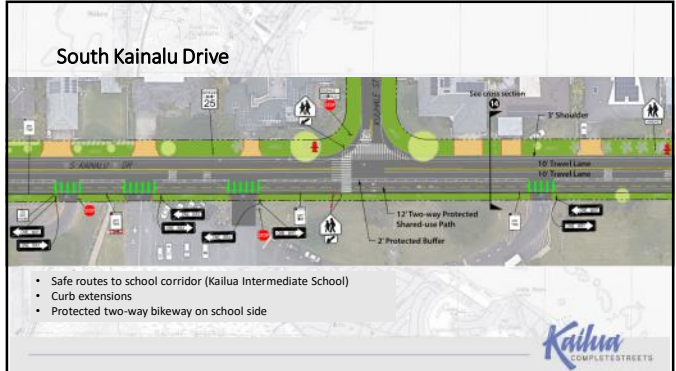
Bicyclists riding on the park side

Lots of kids riding to school

Kailua
COMPLETESTREETS

87

South Kainalu Drive



- Safe routes to school corridor (Kailua Intermediate School)
- Curb extensions
- Protected two-way bikeway on school side

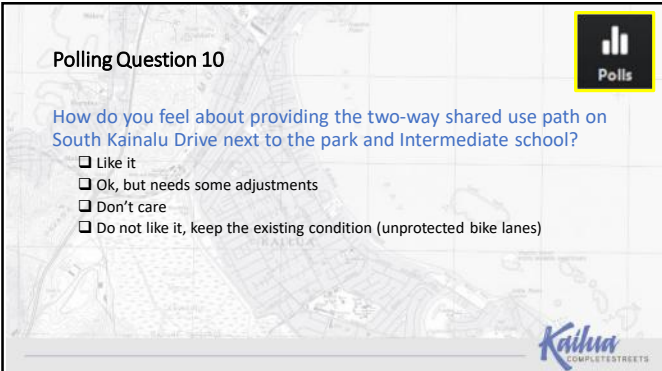
Kailua
COMPLETESTREETS

88

Polling Question 10

How do you feel about providing the two-way shared use path on South Kainalu Drive next to the park and Intermediate school?

- Like it
- Ok, but needs some adjustments
- Don't care
- Do not like it, keep the existing condition (unprotected bike lanes)



Kailua
COMPLETESTREETS

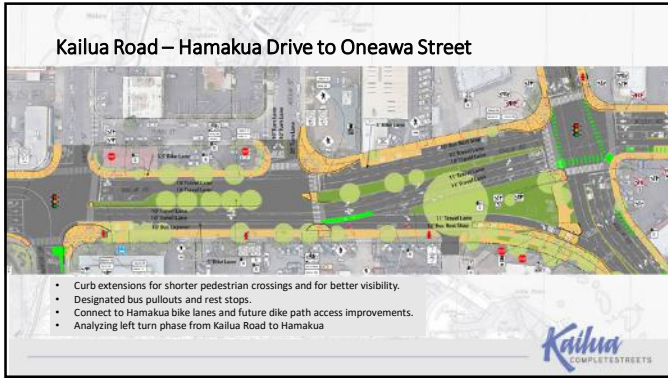
89

Kailua Road – Hamakua Drive to Oneawa Street



Kailua
COMPLETESTREETS

90



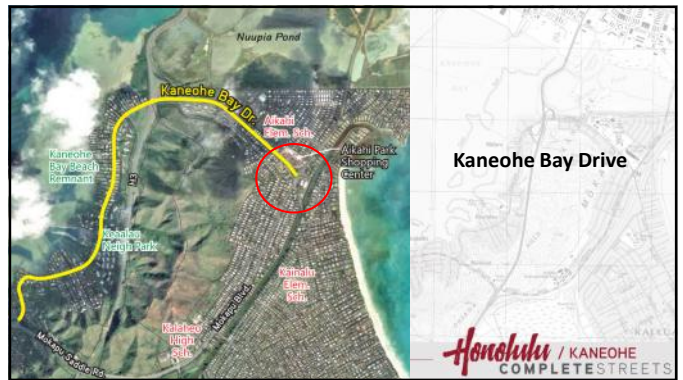
91



92



93



94



95



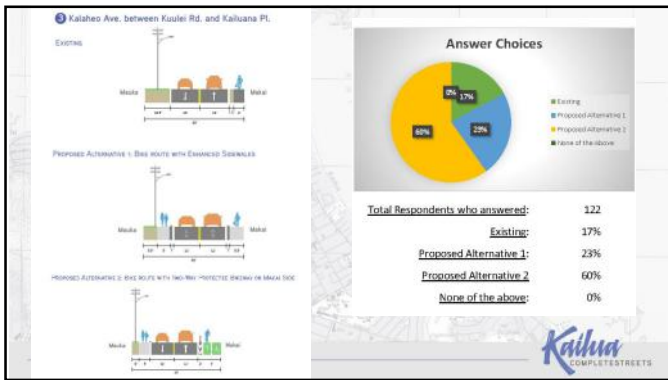
96



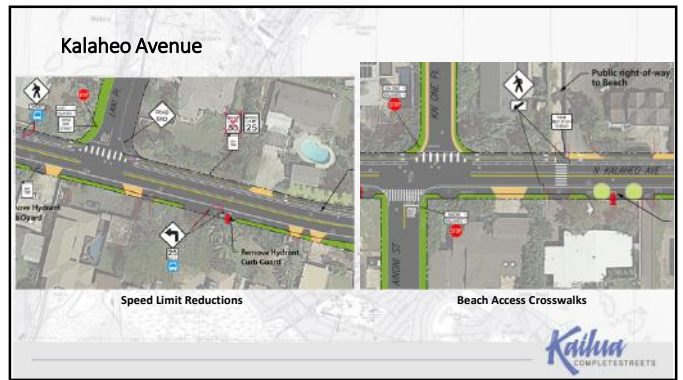
97



98



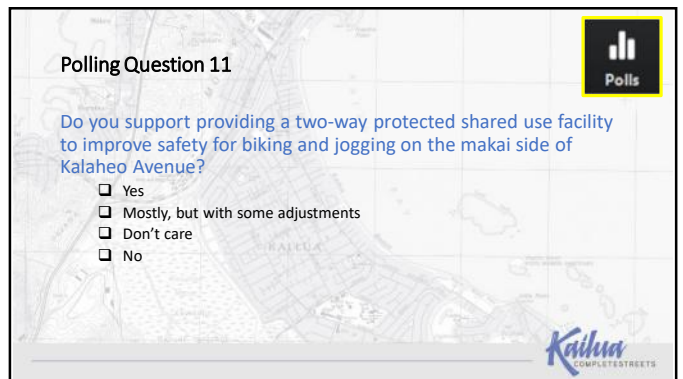
99



100



101

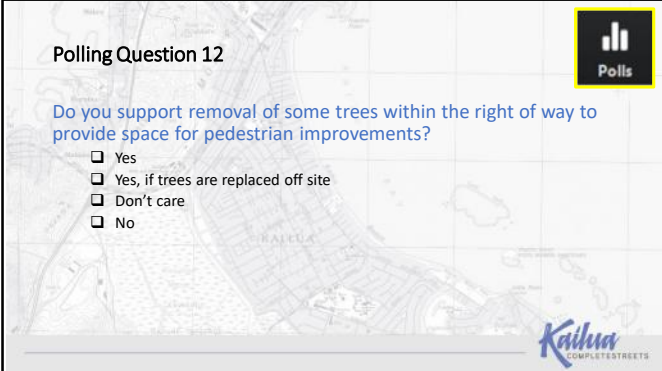


102

Polling Question 12

Do you support removal of some trees within the right of way to provide space for pedestrian improvements?

- Yes
- Yes, if trees are replaced off site
- Don't care
- No



Polis

Kailua
COMPLETESTREETS

103

Mokulua Drive



Kailua
COMPLETESTREETS

104

Mokulua Drive



- Widen the shared-use path as much as possible (8' or more in most places)
- Provide a bike crossing to Aalapa Drive

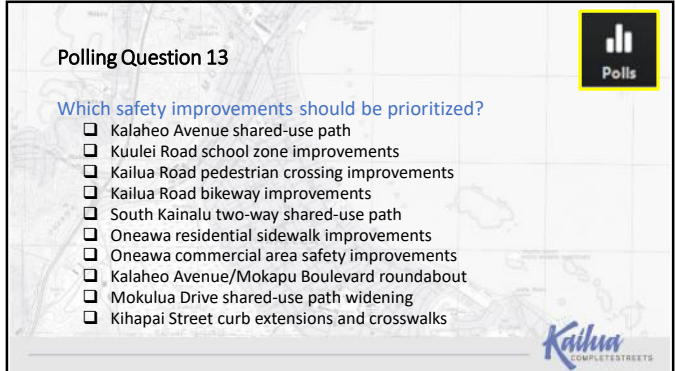
Kailua
COMPLETESTREETS

105

Polling Question 13

Which safety improvements should be prioritized?

- Kalaheo Avenue shared-use path
- Kuulei Road school zone improvements
- Kailua Road pedestrian crossing improvements
- Kailua Road bikeway improvements
- South Kainalu two-way shared-use path
- Oneawa residential sidewalk improvements
- Oneawa commercial area safety improvements
- Kalaheo Avenue/Mokapu Boulevard roundabout
- Mokulua Drive shared-use path widening
- Kihapai Street curb extensions and crosswalks



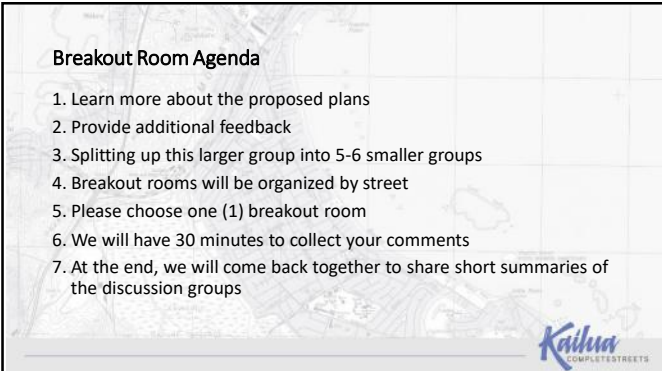
Polis

Kailua
COMPLETESTREETS

106

Breakout Room Agenda

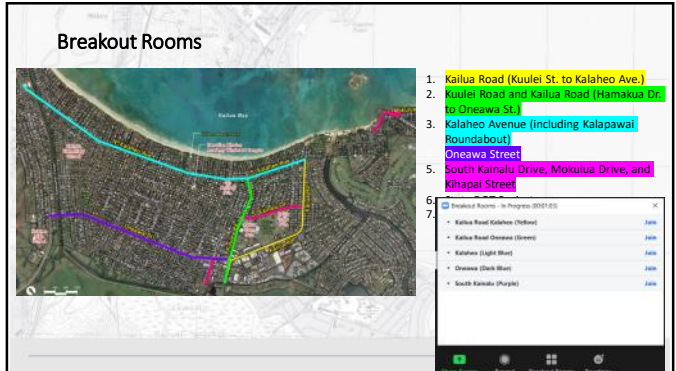
1. Learn more about the proposed plans
2. Provide additional feedback
3. Splitting up this larger group into 5-6 smaller groups
4. Breakout rooms will be organized by street
5. Please choose one (1) breakout room
6. We will have 30 minutes to collect your comments
7. At the end, we will come back together to share short summaries of the discussion groups



Kailua
COMPLETESTREETS

107

Breakout Rooms



1. Kailua Road (Kuulei St. to Kalaheo Ave.)
2. Kuulei Road and Kailua Road (Hamakua Dr. to Oneawa St.)
3. Kalaheo Avenue (including Kalapawai Roundabout) Oneawa Street
5. South Kainalu Drive, Mokulua Drive, and Kihapai Street

Breakout Rooms - In Progress (2021-05)	
Kailua Road (Kalaheo) (Green)	Join
Kailua Road (Oneawa) (Green)	Join
Kalaheo (Light Blue)	Join
Oneawa (Dark Blue)	Join
South Kailua (Purple)	Join

Kailua
COMPLETESTREETS

108

Closing Remarks

1. Plans will be posted to the website after this meeting.
2. A recording of this meeting will also be posted to the website.
3. Please submit your comments on the plans by **June 30** to kailuacompletestreets@bchdesign.com.

Kailua
COMPLETESTREETS

109

MAHALO!

ASK | LEARN | SHARE | CONNECT

Email us your comments at:
kailuacompletestreets@bchdesign.com

Visit the website at:
<http://www.Honolulu.gov/completestreets/kailua>

Sign up for the mailing list
Get Involved!

 <https://www.facebook.com/hnlcompletestreets/>

 @hnl.completestreets

Kailua
COMPLETESTREETS

110