

BAYSIDE DRIVE IMPROVEMENT PROJECT CONCEPT LAYOUT REVIEW



FEBRUARY 8, 2017

Meeting Goals



- **Include Community Representatives**
- **Distinguish “Fact” from “Fiction”**
- **Discuss project concepts and details**
- **Create consensus to move project forward**

Represented Communities

- Promontory Bay
- Linda Isle
- Harbor Island
- Beacon Bay
- Bayside Coves
- Promontory Point
- Balboa Island
- Irvine Company
- Other Community Members



Project Status

- Concept options prepared and refined through public outreach, data collection and observations
- After Council/Community Review - Council requested Staff to proceed with project Design of Two-Lane Concept with Roundabout (11/22/16) with:
 - Review of alternative configurations at request of Linda Isle – Presented to Board
 - Additional outreach to Balboa Island
- Small Group Community Meeting (2/8/17)



Base Level Improvement Needs

- Pavement Rehabilitation
- Curb/Sidewalk Repair
- Traffic Signal Rehabilitation
- Traffic Signage Cleanup



Project Needs

Resident Comments



- **Speed/Accident Reduction**
- **Complete Pedestrian/Bicycle Missing Links**
- **Maintain Neighborhood/Shopping Center Access**
- **Reduce Urban feel/Beautification needed**

Items and Features Most Agree With

- Repave Street and Maintain infrastructure
- Need Speed/Incident Reduction
- Need Sidewalk Extension (North Side)
- Need Bike Lane Gap Closure (South Side)
- Include Raised Landscape Medians
- Are ok with Decorative/Flush medians (maintain access with median feel)



Data

COUNTS (August 2014)

- 13,400 vehicles (24 hour period)
- 20 Pedestrians (PM Peak Hour)
- 58 Cyclists (AM Peak Hour)

Current SPEED LIMIT

- Coast Hwy to Promontory E – 40mph (85% = 45)
- Promontory E to Jamboree/Marine – 35mph (85% = 39)



Accident History 2012-2016

Primary Collision Factor	Number	Injuries
Speeding	10	3
Impaired Driver	6	5
Unsafe Turn	4	2
Failure to Stop	3	4
Failure to Yield Right of Way	2	2
Wrong Way (Cyclist)	2	3
TOTAL	27	19

- **Reported Incidents**
- **9 Involved Cyclists**
- **2 Involved Pedestrians**



Accident History

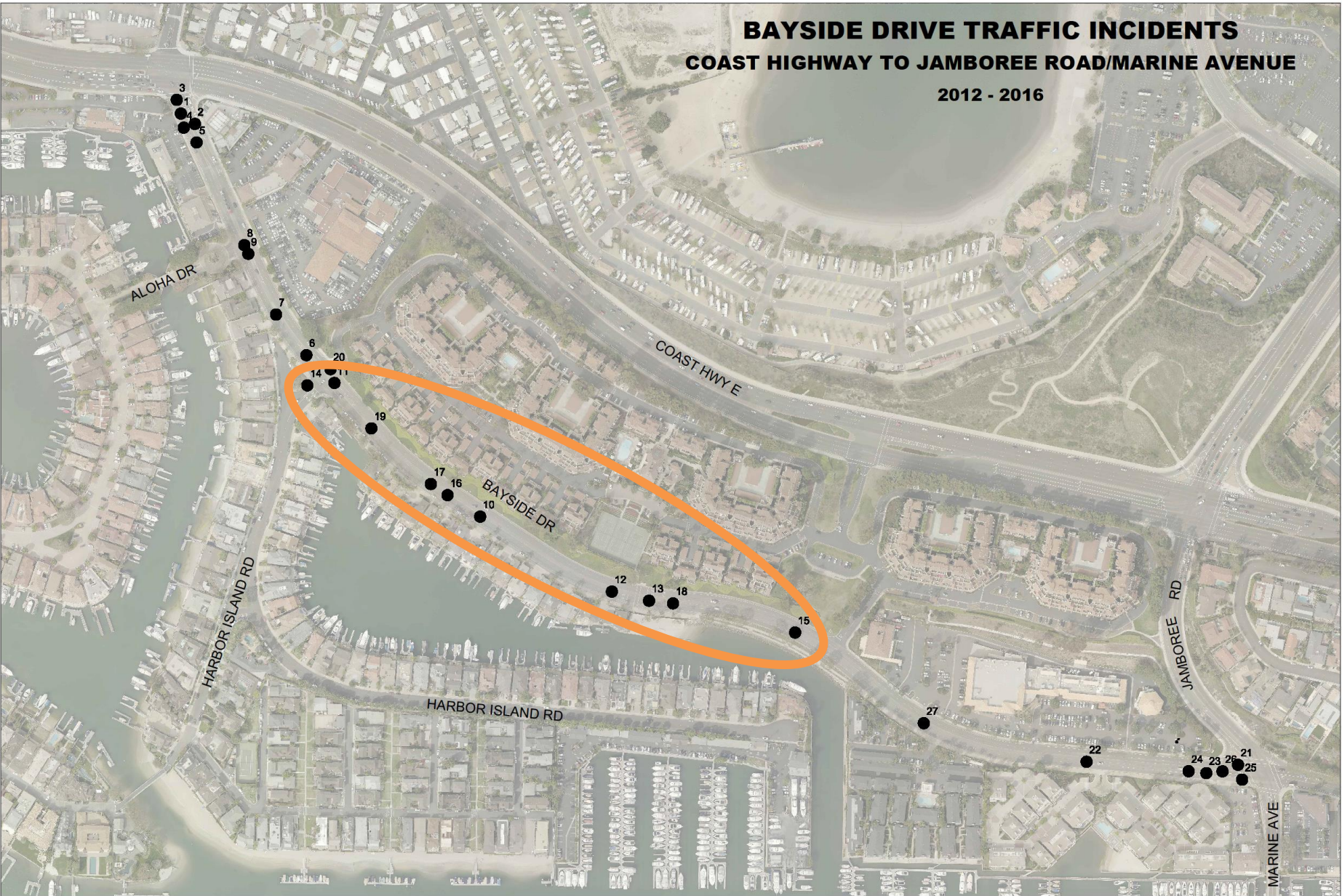
Focus Area: Harbor Island to Promontory Dr. East

- ***11 Reported Incidents – 2012 - 2016***
- **2 vehicles left the road and collided with parked cars and homes**
- **5 involved cyclists. 1 involved pedestrian.**
- **Residents note more unreported incidents.**



BAYSIDE DRIVE TRAFFIC INCIDENTS COAST HIGHWAY TO JAMBOREE ROAD/MARINE AVENUE

2012 - 2016



Design Alternatives

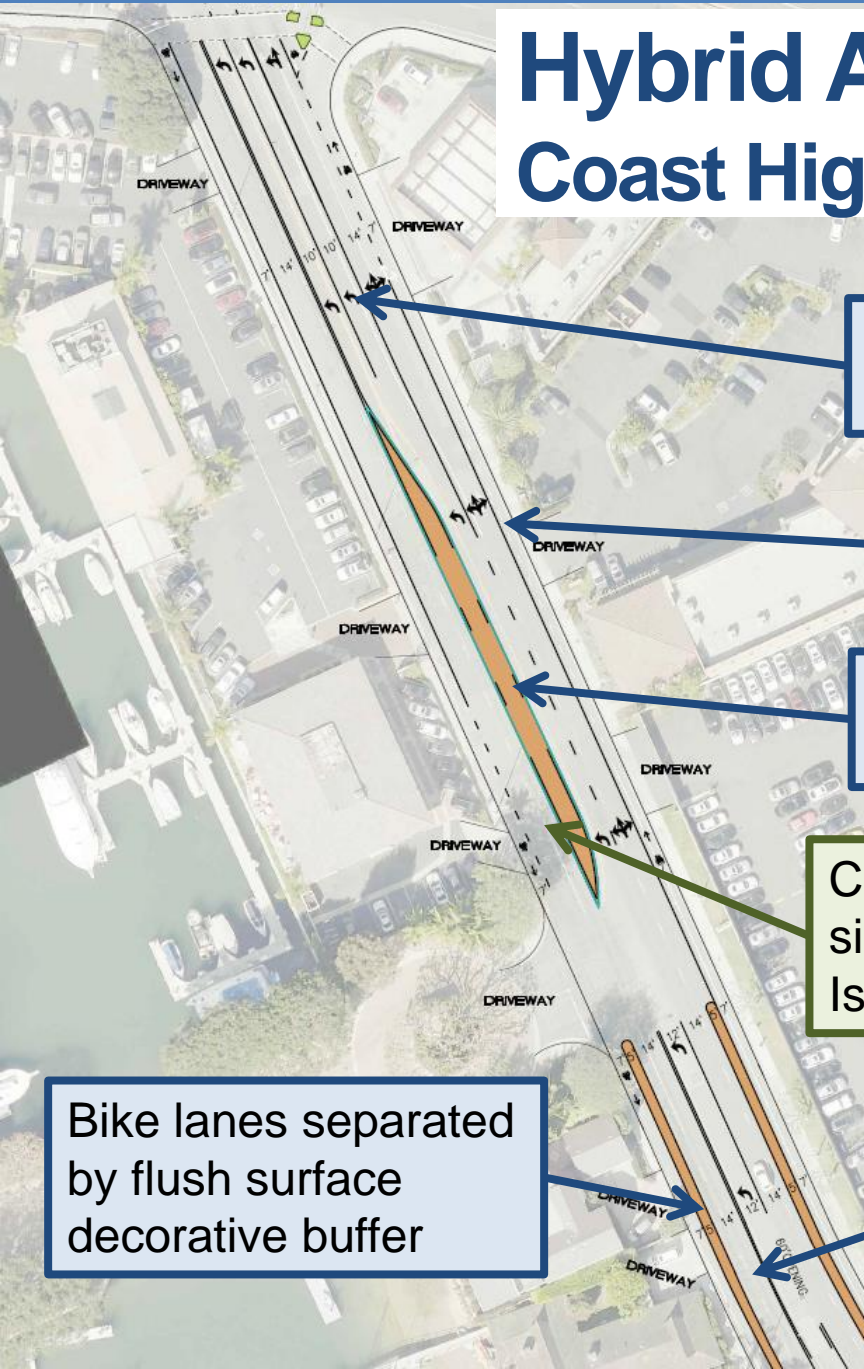
Three Geometric Alternatives presented to Council

- No Change to current configuration
- Reduced Width – Four Lane Roadway (Minor Traffic Calming)
- Two/Four Lane Hybrid Roadway with Roundabout (Moderate Traffic Calming)



Hybrid Alternative

Coast Highway to Harbor Island Drive



Maintain northbound lane geometry and capacity at Coast Hwy

Extend bike lane to intersection

Add flush surface colored pavement in median to maintain access to driveways

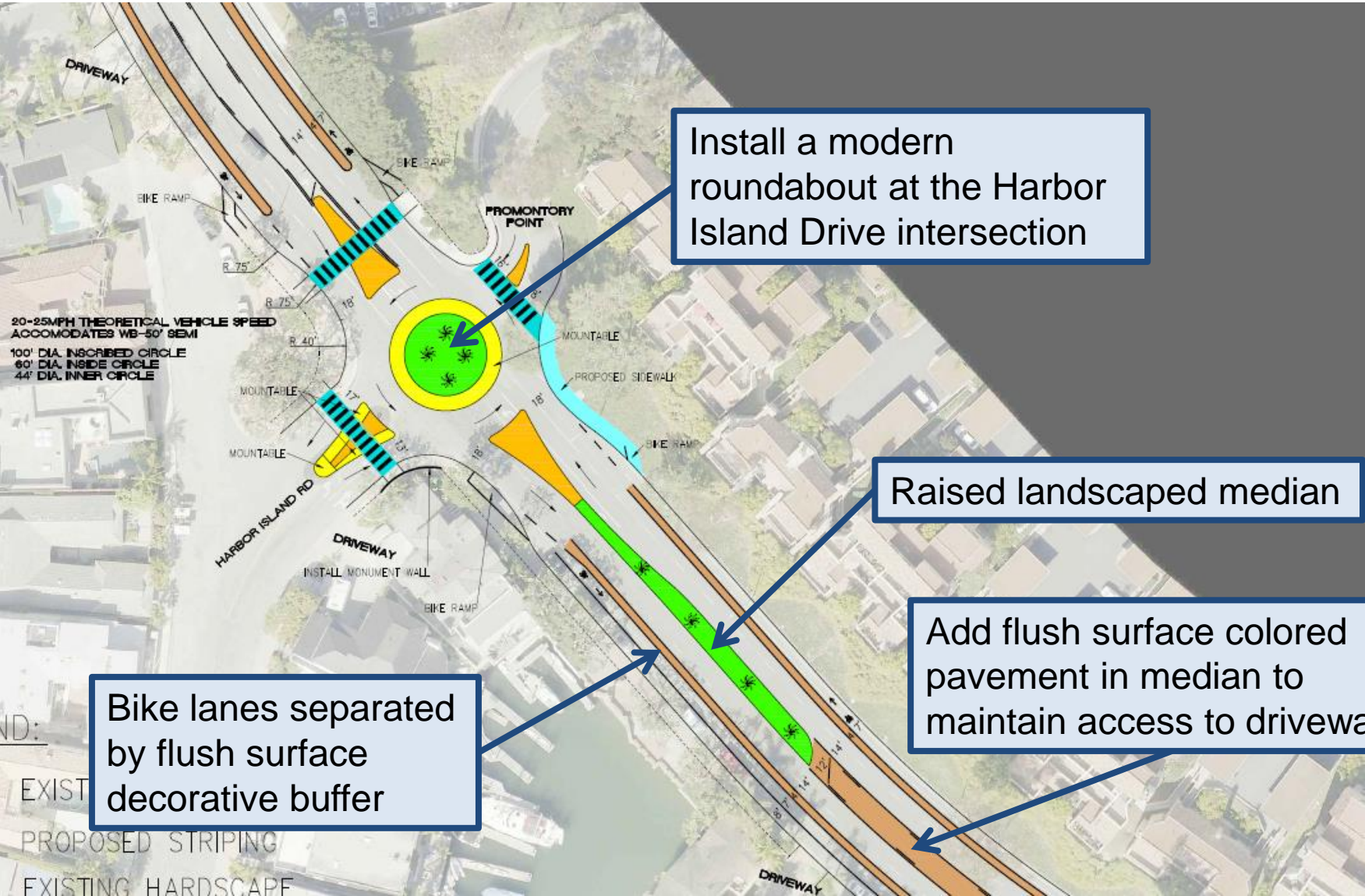
Considering Design alternatives to single lane from Coast Hwy to Linda Isle entry (Lina Isle request)

Bike lanes separated by flush surface decorative buffer

One lane in each direction from Linda Isle entry to the Pedestrian Signal

Hybrid Alternative

Harbor Island Drive to Pedestrian Signal



Install a modern roundabout at the Harbor Island Drive intersection

Raised landscaped median

Add flush surface colored pavement in median to maintain access to driveways

Bike lanes separated by flush surface decorative buffer

Hybrid Alternative

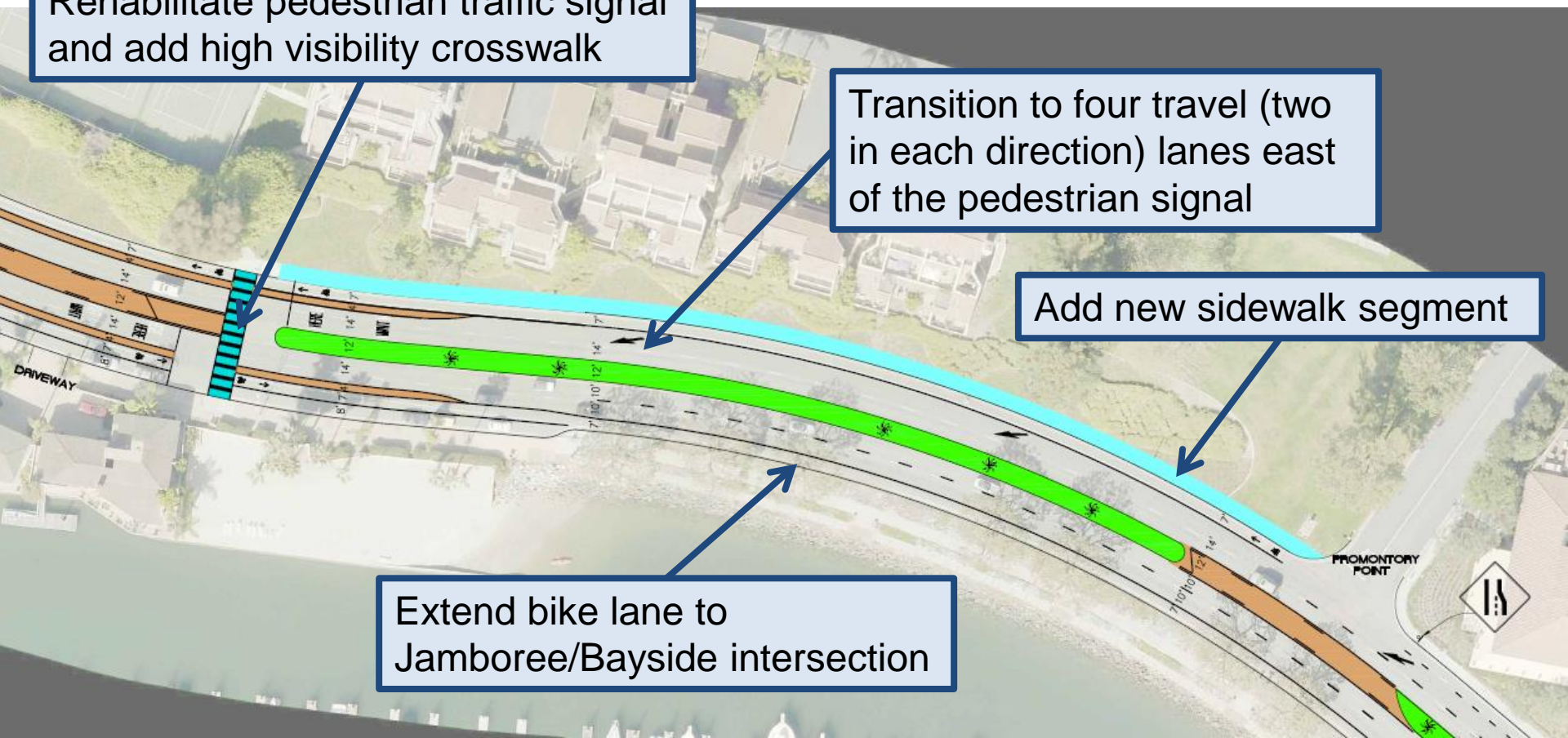
Harbor Island Drive to Pedestrian Signal

Rehabilitate pedestrian traffic signal and add high visibility crosswalk

Transition to four travel (two in each direction) lanes east of the pedestrian signal

Add new sidewalk segment

Extend bike lane to Jamboree/Bayside intersection



Why Consider Lane Reduction



- Reduce “racing” and speeding
- Provide more separation between moving motor vehicles and pedestrians, cyclists and homes
- Reduce exposure to turning vehicles

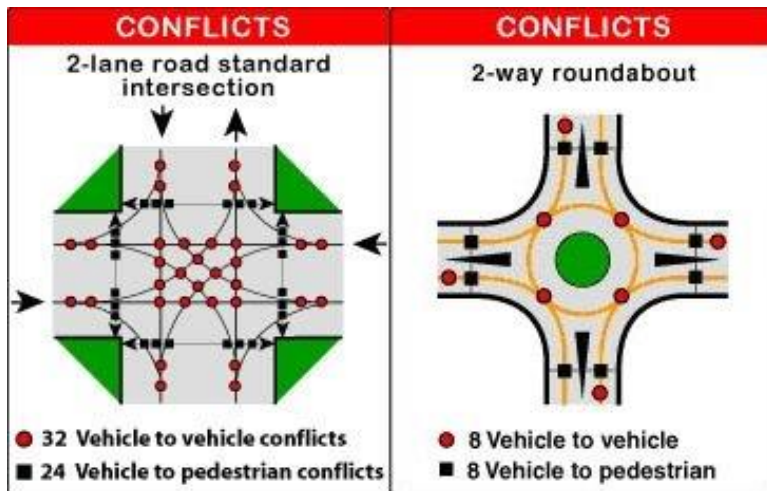
Lane Reduction Analysis

Segment	Peak Hour Veh/hr	Existing Utilization (4 Lane)	2 Lane Capacity Veh/hr/lane	Utilization (%)	2 Lane LOS
Bayside – Coast Hwy to Harbor Island	1,100	17%	3,200	34%	A
Bayside – Harbor Island to Ped Signal	1,000	16%	3,200	31%	A

- **With a reduction from four to two lanes, the Level of Service on Bayside Drive is predicted to remain at “A” with summer volumes.**
- ***No restriction to Emergency Vehicles***

Why Consider Roundabout

- Proven to reduce speeds and calm traffic
- Reduction of incidents/severity
- Facilitate intersection turning movements while maintaining a continuous flow of traffic
- Becoming common in Orange County neighborhoods



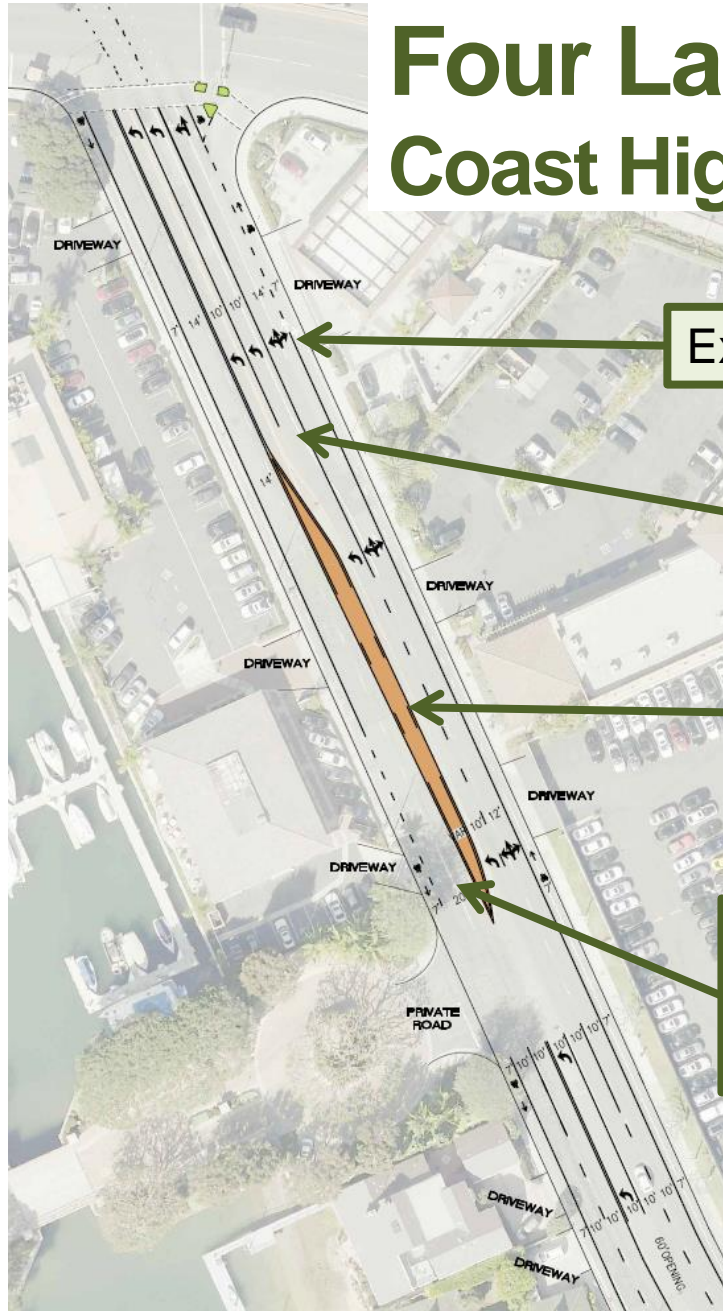
Roundabout Analysis

Roundabout expected to operate efficiently:

- **Per Federal Highway Administration, single lane roundabouts can handle up to 25,000 ADT
(*Bayside Drive Summer ADT = 13,400*)**
- **Highway Capacity Manual analysis predicted Level of Service “A” for proposed roundabout design**



Four Lane Alternative Coast Highway to Harbor Island Drive



Extend bike lane to intersection

Maintain northbound vehicle lane geometry and capacity at Coast Hwy

Add flush surface colored pavement in median to maintain access to driveways

Considering Design alternatives to single lane from Coast Hwy to Linda Isle entry (Lina Isle request)

Four Lane Alternative

Pedestrian Signal to Jamboree Rd/Marine Ave

Add landscaped raised medians at strategic locations to allow for all current turning movements

Add flush surface colored pavement in median to maintain access to driveways

Rehabilitate Jamboree Rd/
Marine Ave traffic signal



Replacement of damaged sidewalk

Maintain all lanes and add
bike lane storage pocket

Conceptual Cost Summary

Two Lane with Roundabout	Reduced-width Four Lane	No Change
\$2,200,000	\$1,800,000	\$1,200,00



Feedback



- Residents fronting Bayside Drive showed strong support of Hybrid Plan with the roundabout
- Roadway would benefit from beautification/residential feel
- Residents like bicycle and pedestrian improvements
- Majority of HOAs noted concerns for the Hybrid plan:
 - Concern of potential congestion caused by reduction from four-lane to two-lane facility
 - Concern with roundabout operation. Driver experience
- Concern with adjacent north end auto dealership/restaurant operation
- Linda Isle association requested roadway remain unchanged

Other Considerations



More Enforcement

- Enforcement is a key component of all alternatives, but is part of the solution, not the sole solution

Speed Bumps

- Speed bumps are effective at reducing vehicle speeds but also reduce response time for emergency vehicles. May cause loss of control and cause vehicle damage on non local roadways.

Stop Sign/Traffic Signal at Harbor Island

- Harbor Island Drive intersection does not meet required warrants for Stop sign or Traffic Signal installation. Additionally, installation of either would do little to rectify speed issues and may have other unintended consequences.

Questions & Comments



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