

# COMMUNITY WORKSHOP

## Pedestrian and Bicycle Access Planning at US 101 / East Blithedale Ave. – Tiburon Blvd. Interchange



# EVOLUTION OF THE INTERCHANGE



# **STUDY PURPOSE**

- **Develop and evaluate potential measures that could be implemented over time to enhance access and circulation to the interchange area's 10 bus stops, walking paths and bicycle routes**
- **Short-term, medium-term and longer-range**
- **Any measures should not affect the interchange's vehicle capacity**
- **Study is focused on pedestrian and bicycle enhancements**

# **STAKEHOLDERS**

- **Transportation Authority of Marin**
- **Caltrans**
- **County of Marin**
- **City of Mill Valley**
- **Town of Tiburon**
- **Golden Gate Transit**
- **Marin Transit**
- **Local businesses**
- **Local schools**
- **Disabled persons**
- **Tourists**
- **Recreational users**
- **Bus riders**
- **Emergency responders**

# STUDY AREA

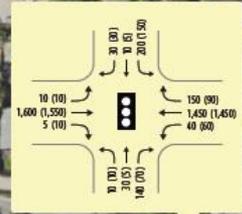


# **INITIAL ASSESSMENTS**

- **Reviewed infrastructure conditions**
- **Inventoried multi-modal amenities**
- **Observed user behaviors**
- **Researched reported collisions**
- **Surveyed bus riders**
- **Receiving feedback from community**
- **Identified 37 focus areas**



# Over 80,000 Vehicles Travel Through the Interchange Each Day

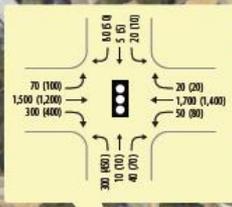


2,100 (1,800)

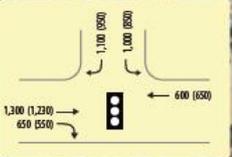
900 (1,100)

750 (400)

1,350 (1,050)

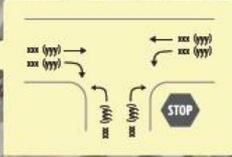
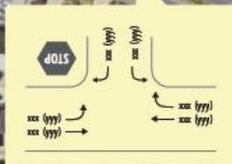


900 (750)



650 (550)

400 (600)



**LEGEND**

- xxx AM Peak Hour Traffic Volume
- (yyy) PM Peak Hour Traffic Volume
- Signalized Intersection
- STOP Stop Sign

Source: Mill Valley Pass Program 2014





Over 500 Hundred Riders a Day Use 10 Bus Stops



# Various Pedestrian and Bicyclist Signs & Markings



# 6 Pedestrian and 14 Bicyclist Reported Collisions in 10 Years



# Pedestrian Focus Areas



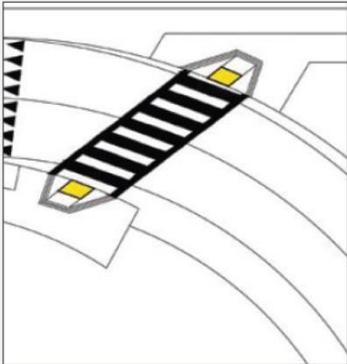
# Bicyclist Focus Areas



# PEDESTRIAN & BICYCLE MEASURES

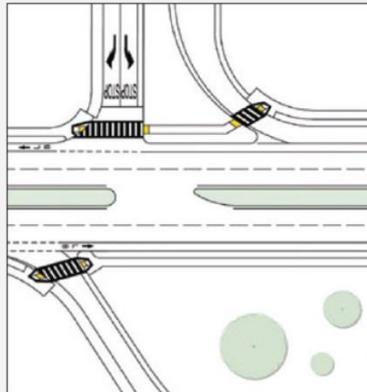
## Short-term Measures

Pedestrian and bicycle measures that can be implemented in the near-term at reasonable cost without affecting interchange vehicle capacity.



## Medium-term Measures

Pedestrian and bicycle measures that would require moderate traffic operations and/or geometric revisions to the interchange.

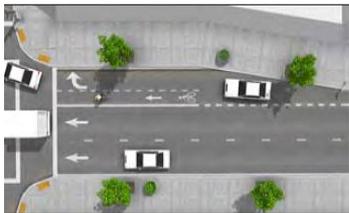
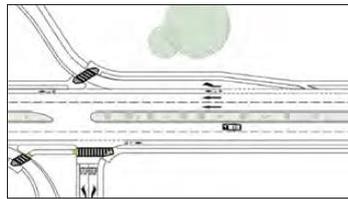


## Long-range Measures

Pedestrian and bicycle measures that would require substantial changes to the interchange, e.g., capacity enhancements per the PSR.



# PEDESTRIAN & BICYCLE MEASURES



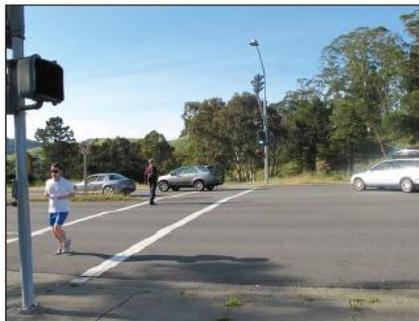
# FOCUS AREAS - EXAMPLES

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Crosswalk across Tiburon Boulevard is offset to west of off-ramp and pedestrians cross simultaneously with vehicles turning left from two lanes, outdated pedestrian and traffic signal equipment

- 2 reported pedestrian-related collisions
- Left-turning motorist sightlines can be obstructed by traffic signal controller and signs
- 150 vehicles turn left across crosswalk during morning peak hour
- 250 vehicles turn left across crosswalk during afternoon peak hour
- Intersection operates at level-of-service "B" during morning peak hour; "B" during afternoon
- Crosswalk is 72 feet long
- Curb ramps on both sides of crosswalk
- 5-foot sidewalks on north side of Tiburon Boulevard, and on south side to east of intersection
- Highway lighting at intersection's northwest and southwest corners
- No pedestrian countdown signals
- Pedestrian crossing phase serving crosswalk across Tiburon Boulevard initiates at same time as green light serving off-ramp traffic
- Combination of 8-inch and 12-inch, and incandescent and LED traffic signals
- Several 8-inch signal heads lack backplates



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Westbound motorists turning onto loop on-ramp to southbound US 101 weave across cyclists' path of travel, resulting in conflicts

- 1 reported bicycle-related collision
- Design speed of entrance to southbound loop on-ramp is 21 mph
- Motorists have approximately 100 feet of sight distance before entering on-ramp from eastbound Tiburon Boulevard
- 750 vehicles turn right onto loop on-ramp during morning peak hour
- 400 vehicles turn right onto loop on-ramp during afternoon peak hour
- No separated bicycle facilities exist
- Downgrade along cyclist's westbound path of travel is approximately 4 percent
- A bicycle parking rack exists near the on-ramp's entrance from Tiburon Boulevard
- No bicycle signs or pavement markings
- Highway lighting on north side of on-ramp and 150 east of on-ramp



# TASKS & SCHEDULE

<b>Existing conditions</b>	<b>Oct. – Dec. 2014</b>
<b>1<sup>st</sup> community workshop</b>	<b>January 2015</b>
<b>Develop options</b>	<b>February - March</b>
<b>2<sup>nd</sup> community workshop</b>	<b>April</b>
<b>Refine &amp; prioritize options</b>	<b>May – June</b>
<b>Present to stakeholders</b>	<b>July</b>
<b>Final report</b>	<b>August</b>

# BE PART OF THE PLANNING

- Provide input on focus areas
- Help identify additional concerns
- 3 “stations”:
  - Overview
  - Pedestrians & Transit
  - Bicyclists
- Fill out comment card

# **FOR ADDITIONAL INFORMATION:**

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